



Government of West Bengal
Local Self-Government & Panchayats Department

Commission for Legislation on Town and Country Planning

Report

December 1962

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REPORT OF THE
COMMISSION FOR LEGISLATION ON
TOWN AND COUNTRY PLANNING

FOREWORD

To

The Hon'ble Sri Shaila Kumar Mukherjee,
Minister of Local Self-government and Panchayats,
Government of West Bengal.

Calcutta, the 28th December, 1962

Sir,

The Commission, appointed by the department of Local Self-government and Panchayats of which you are the Minister in-charge, was asked to consider whether legislation is necessary to control the use of land in West Bengal and, if so, what form such legislation should take. We have finished our work within the time promised and are now submitting the Report for your consideration. In doing so, we want to add one or two words in explanation which could not for obvious reasons be incorporated into the text of the Report.

When the Commission was appointed by a notification dated 5th October 1961, it had a membership of nine, including a chairman appointed by name, seven other members appointed by their designation, and one other member to be nominated by the Calcutta Corporation, which ultimately selected its Commissioner to represent it in the Commission. Since then there have been one addition and two changes in the membership. The additional member was Sri D. N. Gupta, B.E., M.I.E., M.T.P.I. (Lond.) who was appointed on 8th February 1962. The two changes were due to the fact that Sri A. K. Roy, Chief Engineer (Municipal Development) left West Bengal in December 1961 to join a higher post in Uttar Pradesh, and Sri P. C. Majumdar, I.A.S. (Retd.), Commissioner of the Calcutta Corporation, retired in July 1962 on the expiry of his term. Sri A. K. Roy's place was taken by Sri R. C. Roy who succeeded him as Chief Engineer (Municipal Development), and Sri S. B. Roy, I.A.S. who was appointed Commissioner of the Calcutta Corporation, was also appointed a member of the Commission in place of Sri P. C. Majumdar. Unfortunately, on account of the heavy pressure of work in his newly assumed responsibility, it was not possible for

Sri S. B. Roy to attend any of the meetings of the Commission and take part in its deliberations ; and he has regretfully asked to be excused from signing the Report in the framing of which he could not have a hand. The Report, therefore, bears the signature of nine members instead of ten.

The first meeting of the Commission was held on 16th December 1961 in which the scope of its work was considered and the subjects to be dealt with were decided in broad outline. In nine subsequent meetings the questionnaire and the different aspects of the problems at issue were taken up and discussed. The general procedure was to focus attention on these different aspects on the basis of a draft memorandum placed by the chairman for the consideration of the members which was approved subject to such additions and alterations as the members thought necessary. The final meeting was held on 21st December 1962 in which the 'Conclusions and Recommendations' were considered in detail and approved. The Report is unanimous both as regards the analysis of the existing condition and as regards recommendations for future action.

In our introductory chapter we have acknowledged our debt to those who have rendered us help from the outside. Here we want to record our particular appreciation of the assistance we received from our staff. The work of our Secretary & convenor, Sri A. C. Chatterjee, W.B.J.C.S. in running the office, preparing the agenda and proceedings of meetings; and acting as a general liaison officer between the Commission and all outside organisations and institutions (including the different departments of government) has been wholly admirable. Sri Nani Gopal Roy Chowdhury was indispensable for extra-mural work as well as in the Accounts Section. But the highest meed of praise must go to the stenographer, Sri Sadhan Chandra Chatterjee, but for whose extraordinary efficiency and ungrudging willingness for hard work the Report could not have been finished within time. The entire brunt of typing and re-typing the chapters of the Report which underwent several revisions and much of the ordinary routine correspondence of the office fell on his shoulders and to his cheerful acceptance and faithful discharge of responsibility for a job that had to be done the Commission must bear testimony.

COMMISSION FOR LEGISLATION ON TOWN AND COUNTRY PLANNING
REPORT

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CHAPTER I

Introductory

1.1. In this introductory chapter we set down some of the difficulties under which the Commission worked and acknowledge some of our debts. The difficulties are mentioned without any intention to use them as an excuse for the deficiencies of the Report; the debts are acknowledged to express our gratitude.

1.2. Although the Commission was set up by Government Notification No. 11451/LSG. 1A-4/11 dated 5th October 1961 it could not settle down to serious work till the beginning of January 1962. For unavoidable reasons, the Secretary and Convenor could not join till 27th November 1961, the full complement of its meagre staff could not be recruited till 1st January 1962, and the search for suitable office accommodation proved abortive for a long time till the kindly generosity of the Chairman of the Police Commission, then about to wind up, enabled it to share three of their smaller office rooms from 1st December 1961, and to step into their shoes after the Police Commission was dissolved by 31st December 1961. The Commission seems to have had, quite early in its life, a foretaste of one of the problems which justified its appointment—the demand for space, especially office space, outrunning its supply in the big metropolitan city.

1.3. Absence of books and other relevant literature was another great handicap. When the Commission started work it had practically no materials to work with, no books it could lay its hands on, no hint as to where the relevant literature could be found. Some of the members had their own personal copies of a number of important books bearing on town and country planning and they were made freely available for use, but obviously they constituted only a small fraction of the grounds that had to be covered. Prof. Dotson of the Ford Foundation team of Consultants to the Calcutta Metropolitan Planning Organisation lent some of his books and journals relating to English town planning law and the American case law on planning. The National Library, the U.S.I.S. Library, and the British Council Library were drawn upon but only the last had something to offer—some books dealing with the latest position of the English Town and Country Planning Law. The Legislative Assembly Library which its Secretary generously placed at our disposal and promised to supplement by new purchases if necessary did not have many books we could make use of. The West Bengal Secretariat Library supplied only source materials relating to the physical, demographic and economic conditions of the state but little else. The fine collection of books of the Calcutta Improvement Trust came in handy but some of the books had dated and replacement by recent editions not yet undertaken or completed. We could not naturally derive much help from the teaching institutions as a long term loan of important books meant denying their use to the students and the teachers.

1.4. We tried to purchase books locally but failed, for on such a technical subject as town planning which has a limited appeal for the general reader, booksellers did not stock copies but only indented them on request. The British Information Services, New Delhi, sent us some of the reports and publications of H.M.S.O. that were available in stock but for the more important ones they had to place orders in England and get them from there by second-class air-mail. Some more books were independently indented for from U.K. and U.S.A. but their arrival was long delayed. The different

state governments were also somewhat tardy in sending us their relevant statutes which we asked them to supply on payment immediately on assumption of office. They came in dribblets, sometimes after more than one reminder, and the last to arrive was towards the end of April 1962.

1.5. In the absence of books and other literature the Commission was slightly handicapped in preparing its questionnaire but it was completed by 16th February 1962, and despatched in the 3rd week of March 1962 to 574 persons and organisations with a request to send their reply by 31st May. Some replies came within that date but most did not and time had to be extended in many cases to 31st July 1962 or even later and stray replies continued to come even up to the middle of October. Among the 80 replies received some were quite elaborate and informative but the rest were perfunctory and a few quite disappointing. We were particularly disappointed in not receiving any replies from some of the bigger and more responsible organisations on whose opinion and help we greatly counted—organisations which were all directly concerned with town or regional planning in some form or other. The Commission cannot help feeling that its task would have been greatly facilitated and its recommendations gained greater authority and weight if it had the advantage of the considered views of the organisations above referred to.

1.6. It should be obvious that the Report is based on a fairly extensive reading of materials which had to be collected within a short time and sorted out without any outside help such as that of a statistician, a research assistant or a demographer. The burden fell entirely on the Commission, most of whose members had their normal duties to attend to. In the course of such reading extensive notes were kept, sometimes in summary form and sometimes in the author's own language, some of which must have found their way into the Report. One cannot be sure that all the borrowings have been acknowledged and verbatim reproduction of sentences or passages all put within quotation marks though a conscientious attempt has been made to do the same. In case there is any inadvertent omission we hereby acknowledge our debt to all the books and publications we have laid under contribution whether in agreement or dissent and offer our apologies for what may appear to be borrowing without consent.

1.7. We want also to acknowledge our debt to Prof. N. N. Chatterjee, Head of the Department of Geology, Calcutta University, for helping us with materials in connection with the section on the geology of West Bengal and to Prof. Arun Kumar Roy of the Presidency College, Calcutta, for going over the draft and suggesting a few corrections in that section. To Prof. A. B. Chatterjee, also of the Presidency College, we are indebted for suggesting a few additions in the section on geography. There has however been so much revising since they saw our original draft that it would be unfair to make them responsible for any facts or opinion that these sections may contain.

1.8. Another pleasant task is to acknowledge the help which all government departments rendered by supplying facts and information that were wanted—the Directorates of Agriculture, Forests, Fisheries, Industries and Land Records, the Land and Land Revenue Department, the Superintendent of Census, the State Statistical Bureau, the Department of Food and Civil Supplies and others. To Prof. N. K. Bose, Regional Director of the Anthropological Survey of India, we are indebted for lending us from his library several volumes of the Geographical Review of India which we wanted for reference. We are also indebted to Mr. Milton Kaplan of the Ford Foundation team of Consultants for sparing time for more than one informal discussion, and to Sri A. N. Bose, formerly Deputy Director of Industries (Statistics) and now attached to the Calcutta Metropolitan Planning Organisation, for offering help whenever we asked for it in collecting and analysing industrial statistics.

CHAPTER II

Terms of reference and scope of enquiry

2.1. The notification of 5th October 1961 which set up the Commission was slightly amended at a later stage but there was no substantial change in the terms of reference which now stand as follows :-

“Whereas Government, deeming it expedient in view of the density of the population in the State and, in consequence, of the competing claims for the use of land, and further considering it to be incumbent upon the State to secure the best use for such land as also to ensure that the land shall not be put to such use that it would not be available for full and profitable utilisation in the future, as for instance, by the construction of buildings on coal bearing land which may hamper the working of the coal mines in future or necessitate forced evacuation of the residents, believe it has become necessary for Government to regulate and co-ordinate the use of all lands within the State,

Government do therefore constitute a Commission of the persons named below to recommend suitable legislation for the aforementioned purposes.”

2.2. The language is as clear as an official document of this type can possibly be, but the following further analysis will bring out its full implications: (1) Government think that there is a great density of population in the State of West Bengal leading to considerable pressure on its limited land area. (2) This comparative scarcity has led to competing demands being made for the same pieces or parcels of land for use for different purposes. (3) Such competition may not result in the land being put to its best possible use, considered not merely from the point of view of the present needs of society but of the future potentialities of the land itself.¹ (4) The state has a duty to see that all lands are put to the best possible use. (5) Complete “laissez faire” is unlikely to promote this best possible use in all cases, witness the manner in which coal bearing lands were allowed to be dotted with numerous surface constructions which now pose a difficult choice between leaving the mines unworked or evicting the residents at considerable cost and harassment. (6) The state should avoid such contingencies by so regulating the current use of every parcel of land and co-ordinating the uses of different parcels that nothing stands in the way of their best possible or most profitable utilisation now or in the future. (7) But co-ordination and regulation imply some control of private rights of property and this can only be done if government are clothed with sufficient legal authority. (8) Government, therefore, want the Commission to suggest the lines on which such legislation should be framed.

2.3. Taking the terms of reference literally the Commission could have greatly simplified its task by not re-examining the assumptions underlying the notification. It could have at once taken on trust the existence of population density and pressure on land as a fact which did not admit of any dispute, could have assumed that competition generally had a tendency to transfer land to the hands of people likely to use it in a way which is prejudicial to the general interest, and could have accepted without further questioning that the state had a right, by arming itself with new powers of regulation and control, to take a hand in the matter and prevent private interest from getting the better of public welfare. All that would have been necessary in that case would be to examine the remedies applied with varying degrees of success in different countries and see how much of them might apply to our own state with such modifications as experience and local

conditions would suggest. The Commission did not follow this course for two reasons. First, it felt that without a fresh examination of facts and conditions that obtain in this state it would be inadvisable to suggest a remedy. Secondly, it thought, rightly or wrongly, that in spite of its positive wording the notification really concealed a question—in fact, not one but a number of questions. In other words, the assertion that there was density was merely another way of asking the Commission to consider whether there was density, how severe it was, what were its causes and how it should be dealt with. The assertion that competition may not lead to the best possible use of land also implied a question as to whether it really did so and naturally led to an examination of the views of the opposite school of thought which denied its factual validity. The highly ambiguous words “best possible use” or “most profitable utilisation” also needed clarification. What was the best possible use and by what yardstick was it to be judged? Has the word “profit” been used in the narrow economic sense or could it take into account general social welfare also? Does not the assertion that legislation is needed to empower the state to regulate and co-ordinate land use involve an examination of the question whether the state has the constitutional right to assume such powers and dictate the manner of land use?

2.4. The Commission thought that the ‘best possible’ or the ‘most profitable’ use of land was not confined to mere economic welfare but comprised general social welfare as well, and that if social welfare was the yardstick the following objectives were worthy of pursuit viz. (a) insuring a balanced economy where all the different branches of production—agriculture, industry, commerce etc.—have their appropriate place and function, (b) conserving the mineral and natural resources of the State, (c) preserving the beauty of the countryside and nature reserves, (d) ensuring the beauty of urban architecture and landscape and eliminating congestion, squalor and overcrowding, (e) providing efficient and economical means of communication for movement of goods and men, (f) in short “so ordering the use of land and the character and siting of buildings and communication routes as to secure the maximum practicable degree of economy, convenience and beauty”. * These are, in fact, the aims and objects of town and country planning and the Commission has interpreted its terms of reference to mean an enquiry into the question how much of the fundamental aims and objects of town and country planning can be adopted in the circumstances of this state and how they should be applied or enforced.

2.5. This has naturally slightly expanded the scope of the enquiry. As the Report stands it contains a discussion or description of (a) the “Land” of West Bengal in all its aspects, (b) its population and population trends together with its distribution between town and country, (c) the growth of urbanisation, its effects and remedies, (d) the constitutional and legal basis of planning, (e) planning law in England, (f) planning laws in different states of India and the Model Act suggested by the Ministry of Health, (g) the case for and the limits of planning, and (h) a suggested basis for planning legislation for West Bengal.

2.6. The last few words of the terms of reference may be interpreted in two ways. “To suggest suitable legislation for the aforementioned purpose”, may mean either that the Commission should frame the skeleton of a Bill or that it should suggest lines on which such Bill should be framed. After some initial hesitation we have accepted the second interpretation. A Bill like this is naturally the legislative framework in which certain social and economic objectives in relation to the use of land are embodied and sought to be achieved by the exercise of control, and such control has political implications in so far as it imposes restrictions on individual liberty. Even when there

* L. Keeble—Principles and Practices of Town and Country Planning, 2nd Edn., 1959, p. 9.

is agreement as to the necessity of control there may be difference of opinion about its scope and extent. The control may be loose or tight, may embrace only some aspects of land use leaving a large area of freedom to the individual or vice versa may be applied only to selected areas at first or to the whole country at once, may be under strong Central administration or democratised by being handed over to local authorities, and the content of control may differ in urban and rural areas. There are so many variations on the theme that it is hardly possible for the Commission to know beforehand whether its recommendations (or which portions of it) would be accepted by Government. If the recommendations are not accepted at all the work of framing a draft Bill would obviously be wasted. It is only after Government consider the recommendations of the Commission and decide how much of it they can accept that the question of framing a Bill can logically arise. The second reason, no less cogent, is that this composite Commission, most of whose members had perhaps specialist knowledge of different spheres of governmental activity in relation to land but few had training in law or legislation, was perhaps not the most suitable body to undertake the drafting of a Bill. While it is a cliché to say that planning is a team work (although even that is sometimes disputed) drafting of law is an individual job, once the Government decide on which lines they want to proceed.

CHAPTER III

The Land

3.1. After the partition of Bengal, whose boundary line even a British geographer was forced to call irrational, there were three additions to the territory of West Bengal. Cooch Behar merged on 1st January 1950, and Chandannagar on 2nd October 1954; and then, as a result of the re-organisation of states boundaries, a part of Purulia district and Islampur sub-division were added on 1st November 1956. The total area of West Bengal which in 1951 stood at 31,048 square miles is now 34,214 square miles and the total population is provisionally estimated by the 1961 census to be 34,967,634, giving a density of 1030 persons per square mile. Whether this density is high or not will depend upon whether the land is able to sustain the population without strain. A consideration of the nature of the land resources of this State must therefore be the first step in our investigation.

Geography

3.2. Having regard to its contour and morphology West Bengal falls into three broad physiographic divisions. The western bulge including the whole of Purulia and the contiguous parts of Midnapore, Burdwan, Bankura and Birbhum are extensions of the peninsular plateaus of Chhotanagpur. Darjeeling and the northern strip of Jalpaiguri, looking like a crudely shaped head on an elongated neck, are within the Himalayan and sub-Himalayan region. The rest are alluvial, recent or sub-recent, their geology being largely hidden under a thick cover of sediments mostly of recent origin, although the latest discovery of coal seams at Bogra (in East Pakistan) at a depth of about 8,000 ft. has lent indirect support to Blandford's view, expressed as early as 1819, that the coal-bearing Gondwana formations continue beneath the Gangetic alluvium and go up to the Himalayan regions of

Darjeeling and Sikkim. The west is a hilly, rugged, peneplained plateau gradually sloping towards the east. In the north lie the high mountains and sub-montane regions which end in the old alluvium of the Barind. The central and south-eastern region is flat and alluvial—a continuation of the great sedimentary Bengal basin which, though a projection of the Indo-Gangetic alluvial tract, is really a separate tectonic trough (formed by what must have been a great down-folded sag of the crustal rocks) sloping towards the south and gradually merging in the floor of the Bay of Bengal. The trough, which overlaps the boundary line between West and East Bengal, has been filled up by thick alluvial deposits brought into it by the Gangetic system of rivers, re-inforced by the Brahmaputra-Tista on the north and the Meghna on the east. The action of the rivers has resulted in making this part of West Bengal into what has been cryptically but irreverently described as “new mud, old mud and marsh”.

3.3. But within this broad framework the following further subdivision is possible : (I) The higher mountainous region ; (II) The sub-montane Terai, known as the Duars ; (III) The northern “Para-delta” of the Ganges-Tista Doab and the quasi-laterite of the Barind ; (IV) The western fringe containing the definitely non-alluvial outcrop of the peninsular rocks ; (V) The western Section containing (1) the largely laterite piedmont plain between the Hooghly and the western plateaus and (2) the Contai coastal plains ; and (VI) The Ganges delta proper, further subdivided into (i) moribund, (ii) mature and (iii) active sections. The geography of West Bengal can be better understood if each of these sub-regions is taken up in turn.*

3.4. I. The great Himalayas with their highly dissected plateaus and mountains rise rather abruptly from the plains of North Bengal, and attain very great heights within a short distance from the foothill areas. The hills overlooking the North Bengal plains with an average height of 3000 to 4000 ft. constitute the Outer Himalayas and dominate the greater portion of Darjeeling and the north-eastern fringe of Jalpaiguri. The middle ranges or the Lesser Himalayas, rising to a height from 12000 to 15000 ft., dominate Sikkim. The Great Himalayas or the innermost profile of very high mountain ranges are represented by the Kanchanjanga and its minions, visible on clear days even from the Siliguri plains. These, with the Singalia Range on the west, the Donkhyia Range on the east, and the Darjeeling Ridge with its average height of about 6000 ft., enclose the Sikkim basin. The characteristic transverse gorges are conspicuous but, unlike Kashmir, the valley courses are rather broad and do not usually show abrupt changes which may perhaps be attributable to the heavy rainfall (80"-160") this region enjoys.

3.5. Because of the high terrain, steep gradients, heavy rains and torrential streams, the region is extremely susceptible to soil erosion and landslides. Contour terracing for retention of water for agriculture and plantation and for preventing gullies and ravines has been found extremely useful.

3.6. II. In the northern portion of the region below the Himalayas over 2000 sq. miles of the Duars are still under forest with occasional clearings for tea plantations, the wooded plateaus at 1200-1500 ft. marking the transition to the mountains of Darjeeling, Sikkim and Bhutan. Below it much of the grass and reed jungle has been cleared for cultivation, the soil being naturally much coarser than further south, often sandy, and sometimes even gravelly. The region is conspicuous for the frequent changes of its river courses resulting in sudden floods and destruction of bridges and transport arteries. A high rainfall (80" to 140") and a mean annual temperature of 75° F makes it suitable for evergreen and deciduous forests with a large proportion of grass lands and bamboo groves.

* This and a part of what follows in this section is based on 'India and Pakistan' by O.H.K. Spate, Chap. XIX

3.7. III. The country between the Ganges-Padma and Tista-Jamuna is a vast plain falling from 300 ft. to 100 ft., scarred by innumerable river courses which are liable to disastrous floods from the melting of ice of the wide catchment area of the Himalayan mountains debouching through deep and narrow gorges on to the plains. In the midst of it lies the comparatively sparsely populated Barind, a large island of older quasi-laterite alluvium, containing much scrub and degraded remnant forest. West Bengal's share of this Doab is small and consists only of Cooch Behar, Malda and West Dinajpur, the larger part having gone to East Pakistan. It has a varied soil: old alluvium, clayey silts, sandy clays and loams being mixed in varying proportions and becoming finer and more fertile as one proceeds towards the Ganges.

3.8. IV. The Western Margin is a part of the peneplained Chhotanagpur plateaus extending inside the western districts of Birbhum, Purulia, Bankura and Midnapur while some inliers of the Gondwana basalts of Rajmahal penetrate into the northern part of Birbhum. Most of the older rocks are within a contour of 500 ft. but some hard old rocks (granites, gneisses, quartzites and basalts) rise to over 1000 ft. among whom Susunia and Beharinath hills appear as majestic monadnocks and are the most conspicuous. These high hills gradually merge with the higher slopes of the laterite zone of the piedmont plains of West Bengal. The Ganges cuts through the Rajmahal basalts in the northern part of the area and in early days provided the major route for invaders coming from Upper India.

3.9. The mean annual temperature varies from 77° F to 80° F in the hilly fringe where the mean annual rainfall is below 60". The soils are thin and poor with little or no profile developments. Scrub jungle predominates, interspersed with sal, mohua and palash trees, but thoughtless clearing in the interest of agriculture has destroyed a large part of it both here and in the upper Damodar Valley. Bamboo, sabai grass, lac, sal and mohua are the more important forest products. In this sub-region lies one of the richest coal deposits of India.

3.10. V. This sub-region, lying between the Bhagirathi and the Hooghly on one side and the outcrop of the solid peninsular rocks on the other, contains both a laterite and a littoral section, each with its own characteristics. The northern section, whose old name 'Radh' or 'Rarh' indicates an early recognition of its distinctive character, is an eastward sloping shelf of laterite or old alluvium, built up as well as scarred by the Ajoy, Barakar or Cossaye (Kansabati), Damodar and Rupnarayan and other rivers which drain the western plateaus and ultimately empty themselves into the lower reaches of the Hooghly. The slope is roughly from 500' above sea level in the west to about 15 or 20 feet on the Hooghly side. The mean annual temperature varies from 78° F to 80° F and rainfall from 56" to 60" though in the littoral section it is often as high as 70". The area was from the earliest times the path of advancing hordes from the peninsular west and an avenue of settlement which has resulted in what one geographer has described as "the arid tropical steppe succeeding the destroyed forest". In the uplands the soil is poor laterite or khoai. "The interfluvies grow poor short grass, some degraded forests or scrub and scattered wild palms which, with the rusted laterite in roadside cuttings, combine to present a landscape of drought and desolation relieved only by the countersunk paddy fields and valleys". Further east there is on the one side, a large area liable to disastrous floods through incompetent river training and insufficient provision of culverts in roads and railways that were built athwart the drainage, and on the other, the typical dead delta zone of the Hooghly where the shifting of the Damodar some 80 miles to the south and the loss of the head waters of the innumerable spill channels has left a trail of stagnant 'Beels' or marshes or almost dried up river beds

which may have some irrigational value but are fairly useless for drainage. The area is almost wholly monocultural, secondary crops including wheat and barley covering not more than 4-9 per cent of the cultivated area. Industrial development and urbanisation of the Hooghly side has however led to an increase in market gardening in the adjacent belt of land and potato cultivation is occupying a prominent place.

3.11. The littoral belt is only partly deltaic and contains, behind the old beach ridges, a vast hinterland of flat sandy or clayey loam, slightly saline in the coastal or tidal regions, with rice as the principal single crop.

3.12. VI. In the Ganges delta, as a result of partition, only a strip of 30 to 50 miles east of the river Bhagirathi falls in West Bengal. Its three-fold subdivisions are : (a) The moribund delta covering Nadia and the major part of Murshidabad where the off-takes of the old distributaries have been silted up, the rivers themselves flowing on old levees with hardly enough water even in flood to inundate the countryside, and with interfluvies which are ill-drained on account of the saucer sections ; (b) The mature delta which covers the northern half of 24-Parganas between the moribund delta and the Sundarbans and where the rivers are still sufficiently alive to deposit some silt over and beyond their banks although their increasing salinity is an indication of their gradual deterioration ; and (c) the active delta of the Sundarbans comprising the lower half of the 24-Parganas and reaching from 60 to 80 miles inland from the sea face. The entire deltaic area overlaps both West and East Bengal and has forests of considerable value though the richer and larger forest area whose Sundri trees supply useful constructional timber has gone to the latter. The moribund delta is mainly sandy loam with some areas of stiff clay. The Sundarbans are clayey with fresh sands along the sea face and of course strongly saline. Between these, in the mature delta, there is clayey loam in Beel areas, sand or sandy loam in the levees, and pure loam in the lower slopes.

Rivers

3.13. The vast alluvial plains of Bengal show the conspicuous part that her rivers have played in land building but those that lie in West Bengal are now shorn of much of the glory that once inspired a very distinguished member of the Judicial Committee of the Privy Council into describing them in an unforgettable passage of great literary distinction.* Many of them are dead, some are dying, while quite a few others only wake up into brief intermittent life during the short spell of the rainy season. From the point of view of their source of supply and continuity or discontinuity of the flow S. C. Majumdar has called them perennial, torrential or tidal. From the geographical point of view they are, however, better described as (1) the northern system, (2) the central system, (3) the western system, and (4) the southern tidal system. In addition to their role in land building, they are an important source of domestic water supply ; a natural, though a gradually dwindling, reservoir of fish ; a principal means of irrigation and drainage ; and before the partition of Bengal, a very considerable factor in inland

* "The streams in the Ganges delta are capricious and powerful. In the course of ages the land itself has been deposited by the river, which always carries a prodigious quantity of mud in suspension. The river comes down in flood with resistless force, and throughout its various branches is constantly eroding its banks and building them up again. It crawls or races through a shifting network of streams. Sometimes its course changes by imperceptible degrees ; sometime a broad channel will shift or a new one open in a single night. Slowly or fast it raises islands of substantial height standing above high water level and many square miles in extent." In physical fact the landowner enjoys his land by the precarious grace of the river, whose identity is so persistent, and whose character is so predominating as almost to amount to personality." Lord Sumner in *Sreenath Roy vs Dinabandhu Sen* 41 Indian Appeals 221.

navigation and transport. But for its rivers Bengal would not have been born ; without them functioning in full vigour it can hardly continue to live.

3.14. (I) The northern system is dominated by the Tista which rises in Sikkim, divides Darjeeling into two unequal sections, and after gathering the waters of the Great and the Little Rangit and taking Kalimpong and Jalpaiguri in its stride, skirts the western boundary of Cooch Behar and marches south east through different districts of East Pakistan to join Brahmaputra not far from its confluence with the Jamuna. Tista's allegiance to Brahmaputra is hardly 200 years old for Rennel's map (1764-1774) shows it as coming down straight south for a long distance and then fanning out into several distributaries (Punarbhaba, Atrai, Karatoya), all flowing into the Ganges over a wide stretch of nearly 150 miles. Other hill streams also take their rise in the upland valleys of Darjeeling, the most important being Mahanadi or Mahananda which begins as a small stream in the western section of Darjeeling, gathers the waters of Balason and several other streams on its south-western march, by-passes West Dinajpur with a pronounced leaning towards Bihar, and after dividing Malda into two almost equal halves falls into the Ganges below Nawabganj which is now a part of East Pakistan. Some geologists think that in the early stages of laying the foundation of North Bengal, whose original alluvial deposits of yellow clayey sand were later overlaid by the new strata of blue clay and sand brought in by the Ganges, Tista and her tributaries received considerable help from Kosi and Brahmaputra which then flowed much nearer this zone till tectonic or other changes made one alter its course far to the west and the other far to the east.

3.15. South of Darjeeling is Jalpaiguri traversed by Tista, Torsa and Jaldhaka in the middle and Kaljini, Raidek and Sankosh in the east. All of them pass into Cooch Behar and then either independently or as tributaries to other rivers ultimately enter East Pakistan and fall into Brahmaputra. The artificial wedge of East Pakistan between Jalpaiguri and West Dinajpur naturally does not deflect the courses of the rivers. The two important rivers of West Dinajpur and Malda are Mahananda and Punarbhaba. Atrai has considerable local importance for West Dinajpur before it passes into Rajsahi, and Kullik and Gomar are important tributaries. In Malda, Kalindri which joins Mahananda a little above English Bazar and Pagla which does so a little below it have similar local importance. The rivers of Malda and West Dinajpur running from north to south are dominated by the Ganges, just as in the northern section from Jalpaiguri to Cooch Behar Tista's conspicuous role has passed under the dominant influence of the Brahmaputra.

3.16. (II) The importance of the Ganges to the formation and well-being of West Bengal has been thus described in a widely used text-book, "The cardinal factor in the later history of the delta has been the eastward shift of the Ganges waters from the main outlet along the western margins--Bhagirathi-Hooghly--to the present main course of the Padma-Meghna, with such streams as Ichhamati, Jalangi, Mathabhanga, Gorai representing intermediate (but not necessarily successive) positions of the most important channel. Whether this is mainly due to alluviation at the heads of the successive main spillways, to tectonic change, to shifts in the balance of the Delta due to changes of course elsewhere, or to a secular swing to the east are questions which admit of large and inconclusive debate..... It is at least clear that the Bhagirathi, or one of its several branches (Hooghly, Saraswati, Adi Ganga or 'Tolly's Nullah') was the most important distributary in the 17th. century but had been silting up at least since 1770, when the Damodar, which helped to keep it clear, shifted its mouth 80 miles to the south. The lower reaches of this river, the Hooghly proper, retain their vitality, being fed by streams from the peninsula such as the Damodar and the Rupnarayan***. From all this follows the well-known contrast between the decayed West scarred with the silted or stagnant beels--the "disjecta membra" of dead rivers--

and the active East with all the secondary consequences, of which the prevalence of malaria and the absence of fertilising silt in the west are the most important" * of the three main streams in which the main channel of the Ganges had branched near Tribeni—Jamuna, Saraswati and Bhagirathi—the first two are dead and the last only survives through blood (water ?) transfusions from the western rivers in the middle and lower regions. On the east, Bhairab is stagnant or dead, and what Jalangi and Churni can bring to the Bhagirathi is so inadequate that Bhagirathi's connection with the parent river is almost lost in the sands during the dry season. To the far east, Ichhamati follows a zig-zag course forming for a good length the boundary between East and West Bengal till it merges into one of the tidal rivers of the south.

3.17. (III) The western rivers have their rise in the peninsular plateaus of Bihar and belong to a different river regime. They run more or less from west to east, each independent of the other, through wide alluvium-filled troughs, the land being high in the western fringes and gradually flat and level towards the east and the south-east. The hills being nowhere high enough to retain the moisture through freezing and then ration it out in the dry season through the melting of the snows, the rivers are torrential, not perennial, as they depend wholly upon the seasonal rainfall. To name the more important of them from north to south, Bansoli, Brahmani, and Dwarka are small rivers cutting Birbhum and Murshidabad transversely before they join one another and fall into the Bhagirathi, but in the economy of the district Mayurakshi or Mor had greater significance which has now been greatly accentuated by the construction of the Dam. Ajoy, for many miles the boundary line between Birbhum and Burdwan, falls into the Bhagirathi near Katwa, its pristine glory greatly dimmed by heavy silting which causes sudden floods in the height of the monsoons followed by a long spell of dry sand bed. Burdwan is demarcated on three sides by Ajoy, Barakar and Damodar of which Barakar touches its western fringe for a short length but Ajoy and Damodar cover a good three-fourths of its northern and southern boundaries. Damodar, formed by the fan-shaped tributaries originating in the western plateaus with re-inforcement from Barakar near the Bengal-Bihar border flows east-southeast almost in a straight line for a considerable distance, swerves inside the district with Burdwan town on the left, and about 10 miles further down makes a sharp right-angled turn southwards through Hooghly and Howrah to meet Bhagirathi near Falta after a journey of about 80 miles from the point where it broke away. Purulia and Bankura are served by Darukeswar and Kansabati, the latter as well as Silai (or Silabati) passing through Midnapur as well. Darukeswar (or Dhalkishore) meanders through Burdwan and Hooghly and becomes the mighty Rupnarayan which falls into Bhagirathi about 4 miles below Falta opposite Geonkhali; but Rupnarayan's apparently wide stretch from Kolaghat or a little above it is a little deceptive for it is very shallow and full of sandbanks so that even flat-bottomed river steamers have difficulty in going up-stream except at high tide. Shilai is a comparatively small stream in Bankura but by the time it reaches Ghatal and before it falls into Rupnarayan it becomes an important means of inland transport and communication. Of much greater importance is Kansabati or Cossye which goes through Purulia, Bankura and Midnapur and with water received from several smaller streams, meanders east and south-east till it joins Haldia river a little above the estuary. Among other rivers the most important is Subarnarekha, a wide flowing river both ends of which are outside West Bengal, though a section passes through the south of the district of Midnapur.

3.18. The penepained land formations of this sector is due to the detritus carried by these rivers from the peninsular rocks but for reasons to be explained presently,

* O. H. K. Spate, *Op. cit.*, pp. 528, 527

they are subject to heavy torrential freshets or floods in the rains followed by a long dry period when their only usefulness lies in providing an inexhaustible supply of sand for sand-stowing the worked-out mines. As means of navigation the torrential rivers are useless even for country craft except in the lower reaches where the draught is good and the current not too strong or erratic.

3.19. (IV) The last river system consists of the tidal and estuarian rivers. "The outstanding physical fact about the 24-Parganas Sundarbans is that the land area is unstable and the water courses shifting and ill-defined. Apart from the boundary rivers viz., the Hooghly, the Ichhamati, the Kalindi and Raimangal, there are several major channels flowing through the middle of the area. These are the Bartala, the Saptamukhi, the Thakuran, the Matla, the Bidya, the Gosaba, the Haroagong, the Kultigong, and the Kalagachhia. The general direction of all these main channels is from north to south. These are inter-connected by a number of natural cross channels which are of great importance from the point of view of consolidation of land in the area." Bidyadhari and Piali, once important outlets of Calcutta's sewage and storm-water, are on their last legs so that "the drainage congestion is steadily creeping up to the limits of the Metropolitan area." Ichhamati is in the upper reaches but its continuations viz, the Jamuna and the Kalindi merge in, and in the lower reaches are indistinguishable from, the tidal rivers. The importance of the tidal rivers lies in their two way action in building up the land of the lower delta. The initial impetus no doubt comes from the millions of tons of alluvium transported every year by the strong current of the Ganges flood and brought down to its mouth. Checked by contact with the sea, the silt drops down into the bottom and forms shoals which gradually raise their heads as 'Chars', while the rivers, slowed down in their motion, spill over their banks to flood a much wider area over which they deposit more silt before branching out into innumerable streams to reach a slowly and imperceptibly receding sea. But all the silt is not deposited at the bottom even when the sea is reached and a considerable quantity remains in suspension. This the tides bring back by the reverse process. The flow tides, moving rapidly up, carry an enormous amount of silt into the upland low-lying areas and the ebb tides complete the process of land building by depositing it into the bottom because they are unable to retain the same quantity in suspension due to the longer time taken in reaching the sea and the inevitable slowing down of its motion in retreat. Floods and tides are thus the two great delta builders, the latter having the additional advantage of occurring every day while the first is only seasonal. For Bengal two other favourable factors are the gigantic Himalayas which can produce an inexhaustible quantity of detritus and the funnel-like shape of the Bay of Bengal which increases the volume and the velocity of the tides as well as the width of its range. According to experts, if the spill areas were not reduced by premature embanking the process of land building in deltaic Bengal would have been quicker.*

3.20. All this is a strong argument for the supreme need of maintaining the rivers of West Bengal in full health and vigour and resurrecting those that are dead or dying. Whatever freaks Nature may play in changing their course over the centuries (of which the three major examples are the Ganges deserting the Bhagirathi for the Padma, Tista deserting the Ganges for Brahmaputra, and Damodar leaving the Bhagirathi to meet her again eighty miles south) nothing should be done by man to hasten the process of decay. Yet S. C. Majumdar had no difficulty in showing that in two ways at least human interference is responsible for the decay of many of the rivers of

* 'Rivers of the Bengal Delta' by S. C. Majumdar, Calcutta University Press.

West Bengal by sacrificing long term benefit for the prospect of some short term advantage. The first is the extension of agriculture at the cost of the forest and grass lands of the catchment and upland areas and the second is the raising of embankments to prevent river from spilling over and flooding the countryside.

3.21 Rivers are sustained by rainfall in the catchment basin. Seasonal rainfall means high flood in one season followed by a thin trickle during the rest of the year unless the surface run off can be controlled by absorption and retention of the rain water as sub-soil water, feeding the innumerable springs and wells from which rivers draw their sustenance when nature withdraws her supply. The more water is lost as run off the less is available for underground storage and the greater is the risk of the river being reduced to a chain of water holes in the dry season and a muddy turbid torrent in the wet. Surface run off increases when the gradient is steep or when, with the removal or reduction of vegetable cover, there are no longer any obstacles to impede the flow of water and no roots of trees and plants to keep the soil open and porous for the water to seep through. Grass and herbaceous plants with long branching tenuous roots and deep-rooted forest trees have always been the most efficient means of absorption of water. Forests have the additional advantage of being able to cushion the force of the heaviest downpours on the leaves of their trees and make the water reach the ground as gentle sprays, soaking the surface layers and penetrating slowly into the lower levels of the soil. Unfortunately both the major catchment areas of the central and the western river systems and the major part of that of the northern system lie beyond the border of West Bengal and are not amenable to its control. Both in the high Himalayas where the Gangetic system has its source and in the Chhotanagpur plateau whence the western rivers flow, indiscriminate deforestation and grazing as well as extension of cultivation has ignored this fundamental truth and brought in the usual Nemesis of soil erosion, flood, and the silting up of the river bed. A pamphlet published by the D. V. C. has shown how in the upper Damodar Valley area in Bihar deforestation, over-grazing, deliberate burning of the undergrowth to collect 'mohua', and upland cultivation in slopes (not terraces) has led to gullying and impoverishment of the soil, increased flood damage, and aggravated the chance of the silting up of the reservoir lakes within which the water is held.* As for the source of the Ganges, S. C. Majumdar quotes the opinion of Lord Haily, one of the ablest of British civilians who came to India, severely criticising in his monumental 'African Survey' the supineness of the central and provincial governments in dealing with such thoughtless extension of agriculture and grazing at the expense of forest, bush and grass. Grazing is doubly harmful because, apart from its effect in removing grass, the trampling of the soil reduces it into a thick layer of dust easily blown away by the wind or washed away by any downpour of the slightest magnitude. The result is that storm-water, no longer checked by the forest and bush and flowing rapidly over impervious rock which has been exposed by the removal of the top soil, flows down gullies and hill sides, swelling what had hitherto been feeble trickles into rushing torrents heavily charged with silt. The surplus silt which is more than the water can carry in suspension drops into the bottom and its cumulative effect over the years is to raise the level of the river bed and increase the risk of flood.

3.22. What one human error creates, another completes. On a long view this flooding, if unchecked, would have raised the level of the surrounding land and made it

* 'Forestry Development and Soil Conservation in the Upper Damodar Valley' by Dr. R.M. Gorrie, D.Sc., pp.10-15. Published by the D.V.C.

more fertile even though it might cause some temporary loss through destruction of crops and houses. But long views are rare, especially if the period stretches over a span longer than an individual's life or the life of a generation. Palliatives in the nature of embankments are more easily acceptable to avert immediate disaster, and they have been largely resorted to, bringing in their train all the ill effects of incompetent interference with nature without offering any permanent solution. The river is deprived of its spill area and the land of its fertilising silt which would have gradually raised it above flood level; the bed rises through the deposition of silt on a limited area; and soil erosion of the banks is aggravated by the swiftly flowing waters of the rivers within an artificially narrowed channel. But with all this, flood cannot be prevented altogether, for rats will burrow unseen into the banks and water will percolate through the holes, loosening and bursting the banks and causing floods which become all the more destructive because of the violence of the discharge. The evil of flooding lies not so much in the volume of water that comes in as in the depth and violence of the flow. As has been found in East Bengal, the gradual and unimpeded spread of water over a vast area has been useful for raising the land and increasing its fertility, apart from its effect on sanitation which it improves by washing away filth and destroying the mosquito larvæ which breed in still water. We cannot, of course, control the elemental forces such as the seasonal rainfall or the melting of the snow, nor hold in leash the natural forces which raise the spill area through fluvial action with consequent reduction of its flood absorption capacity. But it is possible to control factors artificially created by man viz. excessive run off from catchment basins by reckless deforestation, curtailment of the spill area by raising embankments, and chokage of the spill channels through neglect or deliberate filling.

Forest

3.23. The role of forests as protectors of soil and water, two of the most important things for life on this planet, has just been mentioned. Their further role for a variety of industrial uses (paper manufacture, match-wood, ply-wood, furniture, black-boards, particle-boards etc.) or as the direct or indirect source of drugs, medicinal materials, resins, lac, honey and wax, as well as for fuel wood are hardly less important. As potential Nature Reserves or Wild Life Sanctuaries they may be said to have recently added a new dimension to their already manifold functions.*

3.24. Forests occupy roughly 454⁸ sq. miles (2910.7 thousand acres) or 13.4 per cent of the total land area of West Bengal.† There are three fairly well demarcated forest zones in north, west and south—the large central area consisting of West Dinajpur, Malda, Murshidabad, Nadia, Hooghly and Howrah being practically barren of forests and accounting, between them, for not more than 17.7 sq. miles out of the total mentioned above. The tropical valley fresh water swamp forest which occurs in Malda and West Dinajpur is autochthonous but of no great significance either in extent or value.

3.25. In the northern zone, Darjeeling has 492.6 sq. miles of forests and Jalpaiguri 663.7, the only other district of this region, Cooch Behar, trailing far behind with a paltry 17.1 sq. miles of savannas on its northern fringe and on the banks as well as to

*The individual outturn of a few important items of forest produce of the state in the year 1958-59 is given in the Techno-Economic Survey 1962 (P.IV 16) as follows :-

Timber	7,214,000	cft.
Fire-wood	448,000	Tons
Charcoal	4,000	Tons
Katha	44	Tons
Honey	220	Tons
Wax	36.8	Tons

†According to the statistics of the Agricultural Department the area is less and the percentage is only 12.08, but the Agriculture Department's statistics relate only to reserved and protected forests while the figures of the Forest Department comprise the total forest area of the state whether publicly or privately owned.

the east of its two rivers Torsa and Raidek. As is to be expected, Darjeling with 41.1 per cent of its area under forest in its peaks, ridges and valleys is even now the premier timber producing area in West Bengal in spite of systematic clearing over many decades for plantation and agriculture. There are conifers and rhododendrons in the high altitudes of the far western strip (above which the flora peters out into Alpine forest or scrub), with upper hill, middle hill, and lower hill forest trees (oak, walnut, birch, maples, laurels etc.) more or less evenly distributed across its northern half; while up to an altitude of 2500 ft. or a little beyond, a variety of 'Sal' grows occasionally on either side of the Tista but more particularly and thickly on the southern aspects or slopes of the ridges down below near the banks of Mahananda, Balason and Mechi, interspersed with riverain forests of Khair (*Acacia catechu*), Shisu, Simul and Savanna. Way down in Siliguri there are only two stretches of "Plain's Sal" forest. Jalpaiguri's 663.7 sq. miles are about 28 per cent of its area and distributed in unequal proportions from west to east over the whole of the district. By and large, the plain's Sal predominates in east, centre and west, the largest concentration being on the west of Tista, south of Buxa, and east of Jainti. They are a gregarious and dominant species, growing to great height and girth and yielding strong and durable, if somewhat rough, timber ideally suited for sleepers and constructional purposes. Among other types of forests are those described as riverain which grows on both sides of the Jaldhaka, Daina, Torsa and Raidek as they flow from north to south, and other forests of a miscellaneous kind growing in scattered patches here and there but mostly in wide belts on the fringe of the "plain's Sal" forest. Savannas occur in the lower reaches of the Torsa and along parts of rivers Jaldhaka and Sankosh.

3.26. In the western region lie the dry Sal forests of Midnapur, Bankura, Purulia, Burdwan and Birbhum with sprinklings of peasal, mohua and other trees—all mostly kept as coppiced fuel jungle which were formerly subjected to indiscriminate felling till the Private Forests Act of 1945 came to their rescue. Their importance lies in their extensiveness rather than in the value of individual trees and in their relative proximity to Calcutta and the industrial area. Of these districts the least important from the point of view of forest is Birbhum with its 52.9 sq. miles followed by Burdwan with 119.3 sq. miles. Birbhum has very few concentrated forest zones in one area but only scattered blocks which generally look like dots or blobs in the map spread with some amount of thickness in the south-western fringe but thinly along the river Mayurakshi in the middle and Ajoy in the south. Burdwan has a larger concentration in the middle regions, the laterite and infertile old alluvium of police stations Kanksa, Ausgram, and Faridpur having saved them from the wood-cutter's axe and the claims of expanding agriculture. Asansol has been almost denuded of forest within living memory, the thin vestigial belt of a few patches within the Airoy enclave being the only exception. In Bankura, Midnapur and Purulia the forest areas are 541.4, 650.5 and 340.3 sq. miles respectively, the increase of 93.87 and 141.71 sq. miles for the first two districts over the figures given in the 1951 Census Report being due not to more extended afforestation but to more accurate recent surveys carried out after the private forests passed into the hands of the government on estates acquisition. Bankura has over 20 per cent of its total area under forest evenly spread over the whole district, the south-eastern half of Bishnupur subdivision and an 8-mile radius round Bankura town being alone excepted. The largest concentrations are in the south-west near Ranibundh and in a wide belt of land running from north-east to south-west with occasional blank patches in between. Midnapur presents a striking contrast between its east and west, the first almost completely devoid of forest and the second almost as amply covered by it. A very

large part of Jhargram, a considerable portion of the Subarnarekha enclave, a fair area of the middle west and large tracts on both sides of the road-rail link between Midnapur and Bankura right up to its western boundary are under forest although, on account of the bare eastern half, its percentage to the total area of the whole district is only a little over 12. Casuarina plantation in the littoral region of Contai is a promising recent experiment designed to prevent erosion of the coast and act as a barrier to sands being driven inland by wind and damaging good agricultural land. Purulia is more favourably placed for forests owing to its proximity to the Chhotanagpur plateaus and having higher altitudes in many of its parts. In the south and the west and in one or two places in the north where the land is more undulating and high ridges raise their heads, forests occur in large blocks, while in the flat eastern belt adjoining Bankura scattered (but sometimes quite large) blocks of forest lands are found. In the central and northern plains forests are very sparse and the blocks are smaller.

The southern forests are in the deltaic Sunderban regions of the district of 24-Parganas and contain mangrove vegetation of poor growth and density in the saline west which is mostly used as fuel. The forests of 24-Parganas cover only 1652.6 sq. miles (inclusive of about 730 sq. miles of land-locked watery areas) of which all but 22.8 sq. miles are reserve forests. The Census Report of 1951 giving 1630 sq. miles as reserve forests was correct as far as it went but its further statement that an additional 1222 sq. miles were publicly owned forest in the hands of lessees was completely misleading as this large area, though originally forest land, had been handed over to Khasmahal and promptly reclaimed by the lessees for the purpose of cultivation a quarter of a century ago. To call it 'forest' was thenceforth a misnomer but the old classification had continued in the departmental records and was communicated to the Superintendent of Census without necessary correction when he asked for information for incorporation into his Report.

3.28. These forests and woodlands do not, of course, exhaust all the flora of the land. The countryside is in general far from treeless; villages, dispersed hamlets or separate homesteads carry their clumps of bamboo, the toddy palm, the Indian date, banyans, pipal, tamarinds and mangoes and a large variety of other trees. Wherever there is a nucleated village or hamlet it generally nestles under a green canopy of trees while fruit orchards varying in size from a few bighas to hundreds of acres are a common feature in some of the districts. In 1944-45, the only year when statistics were collected by plot to plot enumeration which are available to us from the printed publication 'Agricultural Statistics of Bengal', it appears that about 202 sq. miles of what is now West Bengal were growing the better variety of mangoes in Malda, Murshidabad and the Calcutta industrial region, exclusive of the smaller gardens which catered to domestic consumption instead of to the market. Bamboo too is an essential house-building material in rural areas growing almost in every village without much attention and lasting for generations. It is also an important raw material for the production of paper and The Raniganj Paper Mills have been experimenting in recent years with more systematic cultivation of bamboo and sabai grass on some upland areas formerly owned by the Bengal Coal Company. The total area under bamboo in different parts of West Bengal was estimated to be 227 sq. miles. *

* 'Bengal in Maps' by Dr. S. P. Chatterjee, P. 68-69

CHAPTER IV

Land (*continued*)

Agriculture

4.1. Since nearly 60 per cent of the land of West Bengal is cultivated this account will be incomplete unless something is said about its characteristics from the point of view of agriculture and related uses.

4.2. The total land area of this state is usually divided for the purpose of agricultural statistics into five classes: (1) area under forests; (2) area not available for cultivation; (3) other uncultivated land excluding current fallows; (4) current fallows; and (5) net area sown.

4.3. Category (1) includes all forest areas under the control of the Forest department. In category (2) are included land which are actually put to non-agricultural uses and land whose barrenness and poor quality stand in the way of their being put to agricultural use. The first group comprises all areas which are occupied by buildings, roads, railways, airfields, rivers, canals, 'beels' and other lands which are permanently put to uses other than agriculture; the second covers hills, mountains, deserts (if any) and all lands which cannot be brought under cultivation except at a prohibitive cost. Category (3) includes a wide variety, chief among which are (a) permanent pastures, village commons and other grazing grounds, (b) miscellaneous tree crops and groves not included in the net area sown, e.g. casuarina trees, thatching grass, bamboo bushes and trees for fuel which are not included under orchards, (c) cultivable waste which are suitable for cultivation but are either not cultivated or abandoned after a few years' trial and left in that condition for more than one year, and (d) other fallow lands which on account of diverse reasons (e.g. poverty, malaria, inadequacy of water, river silting, soil erosion etc.) are left uncultivated. Category (4) comprises those arable lands which are kept fallow in any particular season or year as an insurance against soil exhaustion, and category (5) is the actual net cropped area in the year. The last two, together with a portion of category (3) which can be recovered for the purpose of agriculture, comprise the total arable land of the state, though for calculating the probable yield of any particular year only the last category is relevant. The total geographical area of West Bengal and the areas under each of the five categories mentioned above will appear from the following table :-

Figures supplied by the Director
of Agriculture for 1958-59
(in '000 acres)

Total geographical area of West Bengal --- 21,874

(excluding 23.1 thousand acres
within East Pakistan enclave)

Category 1. Forest	---	---	2,646.1
Category 2. Area not available for cultivation	---	---	3,203
Category 3. Uncultivated land excluding current fallows	---	---	1,714.5
Category 4. Current fallows	---	---	1,381
Category 5. Net area sown	---	---	12,929.4

4.4. It appears from the figures that 59.1 per cent of the total geographical area of the state is under the plough which is 15 per cent more than the all-India average. The principal reason for this high rate of utilisation is the excessive pressure of population on the land, and the nature of the topography, helped by high seasonal rainfall. But in spite of this and a fertile alluvial soil the state has only 2125.7 thousand acres or 16.4 per cent of the net sown area under double cropping which, if not worse than the all-India average, is considerably below the 30 per cent of Punjab and Madras. One reason for such low intensity is the inadequacy of irrigational facilities which does not off-set the water scarcity in the winter months when the lands generally lie fallow. Another factor is the relative productivity of the soil and the availability or non-availability of secondary means of livelihood for the agricultural population. Double cropping is a more common practice where the secondary means of livelihood are scarce and the yield rate is lower. Districts such as Nadia, with higher rates of double cropping, and to a certain extent Malda, Murshidabad and Bankura, are also districts where crop yields are lower and secondary means of livelihood much more limited.

4.5. Of the net area sown, about 87.1 per cent is under food crops, rice accounting for 72 per cent, pulses and other rabi crops 12 per cent, and cereals other than rice (wheat, barley, maize etc.) a bare 3 per cent. * Aman is the principal paddy crop, grown under deep water conditions in low lying areas which can hold water till about October, and the acreage under it is over six times that of Aus. Aus, yielding less but at the same time requiring less careful nurturing than Aman and far less water, grows mainly in a belt extending from the north of English Bazar in Malda to near Calcutta with the Bhagirathi as the western boundary of the region. About fifty per cent of the Aus paddy of the state grows in this belt—while the rest is grown in the red-earth region of W. Dinajpur and in the higher lands of the western part of the state. Boro or marsh paddy occupying less than one per cent of the total paddy area is a negligible factor in West Bengal, trailing far behind even Aus and grown mostly in the margin of the flood plains of the Mahananda and the low lying areas of Ghatal and Khanakul on the border of Silai.† The predominance of food crops in the agricultural economy of the state shows a lack of diversity in crop production, the continued food scarcity and the low yield rate leaving her little choice, though certain commercial crops such as sugarcane, jute, tobacco and tea are superior to paddy in terms of the value of output per acre.

4.6. Next in importance to paddy is jute, an important cash crop and an essential raw material for the various jute mills, though East Pakistan is still a considerable source of supply. Together with inferior 'mesta' whose acreage is small, jute covered a little less than 6 per cent of the total cultivated area in 1960-61 though it was over 8 per cent only two years earlier. Oil seeds, grown largely to provide a vegetable cooking medium, cover about 2.18 per cent while miscellaneous crops (tea, potatoes, sugarcane and tobacco) accounted for 3.1 per cent in 1960-61. A little less than half of this last was under tea while potatoes covered a little over one-third. During the last decade potato cultivation has made enormous strides and advanced by much more than fifty per cent, the increased demand from the industrial belt of Hooghly and Howrah having greatly stimulated its cultivation in the hinterland. Market gardening and horticulture are widely practised wherever there is a market in the vicinity to absorb the produce.

* Statistical Handbook 1961, PP. 44, 45.

† Bengal in Maps by Dr. S. P. Chatterjee, PP. 70,72

4.7. Due to the predominance of paddy cultivation there are no distinctive crop regions within the state though there is a degree of specialisation in respect of commercial crops and some specialisation even in respect of minor food crops. Thus pulses are concentrated in the central part (Murshidabad and Nadia) ; jute in the Hooghly basin, Cooch Behar and Jalpaiguri ; oil-seeds in West Dinajpur, Malda, Murshidabad and Nadia ; tea in Darjeeling and Jalpaiguri ; and tobacco in Jalpaiguri and Cooch Behar. The southern part of Malda has a sizable acreage under mulberry trees (which require dry, friable and well drained soil) yielding a much richer harvest than in Murshidabad and Bankura where also sericulture is carried on on a somewhat reduced scale.

4.8. It has to be admitted however, that in agricultural productivity West Bengal's record is not as good as some other states of India. The following figures tell their own tale,

Table
of
Average yield in mds per acre of some of the principal crops in some
Indian states during the period from 1957-58 to 1960-61 *

	Rice	Wheat	Sugarcane (in gur)	Potato	Jute (in bales of 400 lb)	Mustard
1. West Bengal	11.24	7.39	49.81	105.76	2.76	3.86
2. Andhra Pradesh	13.52	2.66	74.10	49.00	....	....
3. Assam	10.28	7.21	38.10	50.73	3.13	4.66
4. Bihar	8.30	6.73	46.27	67.45	2.19	3.69
5. Kerala	11.45	....	44.10	....	....	....
6. Madhya Pradesh	8.30	6.96	28.58	110.63	....	3.78
7. Madras	16.05	7.56	78.39	81.37	....	....
8. Mysore	11.75	2.48	72.41	47.64	....	3.20
9. Orissa	7.72	6.46	36.45	28.89	3.28	4.34
10. Punjab	11.94	12.08	37.84	159.68	....	4.89
11. Uttar Pradesh	7.29	9.56	35.39	77.23	2.60	4.71
12. Rajasthan	8.19	9.67	24.23	31.41	....	3.40

4.9. Among the states for which information has been supplied only U.P., Assam, Bihar, Madhya Pradesh, Orissa and Rajasthan are behind West Bengal in rice yield while Madras, Andhra, Mysore, Punjab and Kerala are ahead of it, the performance of Madras being about fifty per cent better. Rice in any case is not the staple food of U.P. and Punjab but wheat is, and in wheat these two states and Rajasthan out-distance West Bengal by a comfortable margin. Punjab and Madhya Pradesh also lead West Bengal in potato while Assam and U.P. lead her in jute. The yields of such minor crops as oil seeds, jowar, tobacco etc. (not quoted above) are below the national average. In sugarcane, however, the position is not so bad in spite of the apparently higher yield of Andhra, Madras and Mysore, for sugarcane in West Bengal is only a 9 months' crop while in the states mentioned above it is an 18 months' crop so that if the dimension of time is taken into account West Bengal's sugarcane yield would compare favourably with that of these other states. It thus seems that so far as the yield from her soil is concerned West Bengal stands about midway among the states or slightly above it, though the well-known fertility of her soil should have

* Supplied by the Directorate of Agriculture, Govt. of West Bengal.

stood her in better stead. Compared to other countries of the world the record is even more dismal as will appear from the figures about the average yield rates (in mds per acre) in 1955-57 in respect of rice, wheat and potato in other countries.

Rice		Wheat		Potato	
1. Spain	63.06	1. Denmark	43.83	1. Netherlands	286.00
2. Italy	53.62	2. Netherlands	41.66	2. Belgium	269.72
3. Portugal	47.96	3. Belgium	37.88	3. Ireland	229.67
4. Japan	47.54	4. France	24.64	4. Germany	215.02
5. U. S. A.	38.10	5. Italy	19.75	5. U. K.	203.84
		6. Canada	15.85	6. Japan	156.19
		7. Japan	20.03		
		This Average is only			
		for Japan			
		(Average of 1951-55)			

(Figures supplied by the Directorate of Agriculture)

4.10. If it was only a question of comparatively low average output in relation to other states a plausible explanation might be found in the fact that in this densely populated state with the largest percentage of total area under cultivation the average yield was bound to come down with the extension of cultivation into less fertile lands while the more fortunate states with enough lands and to spare could confine themselves only to the better class lands with higher average yields. The vagaries of nature might also be responsible for unexpected variations, for in some years floods might account for a low average and in others, drought. Whatever the reason may be, there is no doubt that during the period from 1953-54 to 1957-58 there was a sharp, progressive and continued decline in the yield rate of the different crops within the state as the following figures will make clear.

Table*—(Yield in maunds per acre)

	1953-54	1954-55	1955-56	1956-57	1957-58
Rice	13.48	10.40	11.11	11.73	10.74
Wheat	7.86	8.68	7.63	3.44	6.25
Barley	7.62	8.17	7.33	4.58	4.45
Other cereals	6.62	5.85	6.09	6.22	6.13
Gram	8.49	9.46	7.98	6.77	5.79
Other Rabi pulses	5.86	5.83	5.18	4.27	4.27
Rape & Mustard	4.00	4.56	4.17	3.75	3.81
Linseed	2.89	2.81	3.34	1.68	2.86
Other oil seeds	5.86	5.83	5.18	4.27	4.27
Sugarcane (gur)	37.74	57.17	57.64	33.40	39.48
Jute (bales of 400 lbs each)	2.80	2.72	2.51	2.00	2.41
Potato	108.46	97.00	91.20	71.39	86.33
Tea (in pounds)	864.11	849.95	852.45	829.07	824.51
Tobacco	7.57	8.12	7.87	6.83	7.14

The average of the years 1957-58 to 1960-61, however, shows an improvement which, one hopes, should be maintained by better manuring, more irrigation and introduction of improved methods of agriculture.

* Statistical Abstract, West Bengal, 1958, p. 167.

4.11. The soil of West Bengal has been divided on the basis of its texture into six classes viz. sands, sandy loam, loamy sands, river silts or silt loams, clay loams or clays*, but further additions to the classification, according to the preponderance of these ingredients in different combinations (e.g. silty clay, loam, sandy clay loam, silty-clay loam etc.), have also been made in the latest soil classification reports prepared and published by the Agricultural Department. Pure sands occur mainly along the coast forming the coastal sand dunes while loamy sands prevail along the northern bank of the Ganges. Sandy loams occur in the alluvial plains in the north, though along the banks of the Tista silt or silt loams predominate. Elsewhere in the plains clay loam is the predominating type of soil, and clays with or without muck soils occur in swamps or alluvial lakes. The gravel and coarse sands washed down the hills and occurring along the foot of the Himalayas are poor ingredients for soil formation and agriculturally almost useless. Alluvial soils along the coast and especially in the Sundarban area show white efflorescences of sodium chloride as they are impregnated with this or other salt from tidal estuaries. The older alluvial deposits in the Barind region got partly laterised and gave rise to the younger red earth while the metamorphic and gneiss rocks of the western part of West Bengal got laterised and gave rise to the older red earth.

4.12. This, however, is only a general description which is not of much use unless it is supplemented by a further intensive field to field study in order to classify each kind of soil both according to its formation, morphology, and chemical composition and also its altitude, slope, water table, liability to inundation or waterlogging, and the particular deficiencies which might respond to manurial treatment. Such studies have been started since the early fifties but are still to be completed. From the Reports so far published fairly full information about Burdwan (excluding Asansol), Hooghly, Murshidabad and Nadia may be gathered but space does not permit setting them out in full or even in brief snippets with quotation of significant extracts. The soil of Burdwan is broadly classified in these Reports into laterite, red soil and alluvium, the latter again being further classified according as the alluvium is from the Ganges-Bhagirathi or from Damodar. Then there is a further subdivision of the alluvial formations according to altitude, profile and slope, distinguished severally as upland, flat land, low land or riverine. The areas where these different types of soil occur have been explained both by map and description and their chemical properties analysed. Experiments with the application of artificial fertilisers show generally that while a graded application of nitrogen is likely to increase the yield both of paddy grain and straw, that of phosphate in addition to nitrogen is uneconomic. This was the case with laterite or red soil or Damodar (alluvial) upland, or Damodar (alluvial) flat land, or Damodar (alluvial) riverine land, or Ganges (alluvial) flat land and Ganges (alluvial) riverine land. Only in the case where Damodar flat land is superimposed 10 ft. deep over the laterite formation has the application of phosphate proved economically successful by raising the yield more than in proportion to cost. In the case of jute which is grown only in the riverine tracts and flat lands of both the Ganges and the Damodar, the application of nitrogen in combination with potash is found to increase the yield.

4.13. In Hooghly only a small area in the western half of the police station of Goghat contains red soil and that too mostly with an admixture of alluvium. The rest is all alluvium either from the Ganges or from the Chotanagpur hills. Here

*Bengal in Maps by Dr. S. P. Chatterjee, p. 14.

also, whether the soil is in the uplands, flat lands, low lands or riverine areas the effect of fertilisers on paddy is not very different except that in the Ganges uplands the application of phosphate is not contra-indicated while in all other places it is.

4.14. The soil of Nadia is pure alluvium brought in by the Ganges and has been classified into (1) riverine, (2) flat and (3) low, each forming more or less a longitudinal belt cutting through the different police stations from north to south. In the riverine tract fine sand and silt fractions predominate throughout the depth, the profiles show accumulation of clay or lime in the sub-soil resulting from weathering and leaching, and the textures in the different layers are different. But the sub-soil has a good moisture-retentive capacity due to the presence of calcium carbonate in the profile and this is useful for the cultivation of deep rooted sugarcane. In the flat lands which are above inundation level there is a slight accumulation of clay in the sub-soil as a result of leaching from the surface horizon. The excellent permeability and water retention capacity of the subsoil layers make the area ideally suited for growing deep rooted crops like sugarcane and jute while its principal paddy crop is Aus in the Kharif season and pulses and barley in winter. The low lands are mostly the abandoned courses of rivers, showing by their zig-zags the swinging movements of the old rivers, and enclosed by high banks. The soil on the surface is clayey and offers great resistance to mechanical appliances so that it is very difficult even for bullock carts to move in this area during the rainy season. This is the great 'Kalantar' plain, nick-named 'the area of death', whose soil, rich in organic matter and other plant nutrients, goes under 3 to 5 ft. of water during the rains when Aman paddy is grown. Pulses and other rabi crops are grown in winter except where big cracks appear in summer when the top dries up into a hard mass like a thick crust over the soft moist stratum below.

4.15. In two police stations in Nadia the nitrogen content of the soil is very poor while in parts of twelve others it is poor and requires supplementing. The requirement of phosphates varies from place to place though extreme priority areas are few. The potassium content is sufficient for cereals but has to be supplemented where potatoes and coconuts are grown.

4.16. In Murshidabad which has also been subjected to a fairly detailed study by the Directorate of Agriculture the conclusion is that in parts of four police stations the nitrogen content of the soil is very poor and badly needs supplementing while in nine others it is poor and either organic manures or inorganic fertilisers should be added to make up the deficiency. Two police stations of the first category also lack phosphate.

4.17. It is desirable in order to increase the productivity of the soil to have such detailed studies for all the districts of West Bengal, and to observe the effect of the application of fertilisers on growth and yield. But as suggested by Sir John Russel* it has also to be seen whether the increased yield through artificial chemical fertilisers is obtained at the cost of the deterioration of caloric value or vitamin properties of the crops or of some permanent injury to the condition of the soil. That is a line of investigation which, as far as we know, has not yet been taken up in this country.

* Quoted by Dudley Stamp in his book 'Our Developing World' 1960. In Chapter VI, headlined 'The Pedological Paradox' he poses the question as follows: "Whilst the case for chemicalisation seemed proved on grounds of improved yield, there are other factors. Is there or is there not any effect on those very intangible but real questions, the 'taste' of food, and on its nutritive value? Secondly, if the structure of the soil so largely dependent on organic material is broken down, will not soil erosion become increasingly dangerous? But if mineral particles can be retained in the necessary proportions is there any need to conserve so-called good agricultural soil? Further, if chemical soil 'conditioners' can be developed will not costly conservation services be rendered obsolete? Obviously, the way ahead is far from clear at the moment, and it is worth while to study some of the implications" p.92.

4.18. The exiguity of extra cultivable land in West Bengal groaning under extremely heavy population pressure and the comparatively low yield from the land may be compensated to some extent by raising two or more crops in a year instead of one on the same piece of land. It is like adding a few extra storeys to an existing ground floor building which multiplies the units of accommodation many times over without encroaching on additional land along the ground. But just as intensive use of urban land by vertical construction requires strengthening of the base and of the outer walls to support the superstructure, (and also widening of the intervening space to allow sufficient day light and air) so does the once-cropped land require strengthening by proper manuring and irrigation in order to stand the strain of this exhausting and excessive farming. Ricardo's 'original and indestructible powers of the soil' are really not so indestructible as every ordinary cultivator knows who practises crop or land rotation, or grows leguminous plants to fix nitrogen or puts in organic or inorganic manure 'to put the soil in good heart' and save it from exhaustion. The question in all such cases is whether the extra yield and the price it will fetch will pay for the extra cost and effort involved in such intensive cultivation.

Fisheries

4.19. Among the Indian states West Bengal is the largest producer of fresh water fish though not of fresh water and sea fish taken together. An estimate supplied by the Fisheries Department to the National Council of Applied Economic Research during their techno-economic survey of West Bengal puts the annual figures for 1959 from different sources as follows :--

(1) Tanks, ponds and beels	...	...	50,000 tons
(2) Riverine	...	...	13,000 tons
(3) Estuarine	...	...	21,000 tons
(4) Marine	...	...	2,000 tons
Total			86,000 tons*

Approximately 29,490 tons were imported from other states of India and from East Pakistan but the total (115,000 tons) available for consumption was far too inadequate for the people of this state for whom fish constitutes an important element of the daily menu and the principal source of animal protein in their dietary.

4.20. Of the four sources of fisheries in West Bengal viz. riverine, estuarine, deep sea and fresh water, the first is dwindling because of the decaying rivers, the second is seasonal, the third is still experimental, and only the fourth is a somewhat reliable source if it can be properly nursed. Out of a total area of 0.5 million acres available for fishing in the rivers and their main branches in West Bengal about 0.4 million acres are exploited for this purpose in 24 Parganas, Nadia, Murshidabad and Midnapur and the catch assembled at six centres† for transport to Calcutta and other principal markets as well as for local consumption. With the decay of the rivers conditions are likely to go from bad to worse unless steps are promptly taken to complete the proposed barrages on the Ganges at Farakka and on the Cossye at Khatra to help keep more water in the rivers throughout the year. Most of the big rivers like Bhagirathi, Damodar and Rupnarayan

* The survey doubts the accuracy of these figures and thinks that on the basis of average yield per acre the first should be above 90,000 tons and the third about 16,700 tons. The total yield, according to it, should be nearer 122,000 tons than 86,000 tons as estimated by the Fisheries Department, but as both are the result of guess work, one guess is probably as good as another. Cf. Techno-Economic Survey of West Bengal, May 1962, chapter VI.

† Hasanabad, Hindaghat, Port Canning, Diamond Harbour, Kolaghat and Lalgola.

go practically dry during the summer months and have ceased to breed fish in their upper reaches. With the rains the swollen rivers do indeed encourage some Hilsa fish to swim upstream in the Bhagirathi as far as Berhampore, in Jalangi up to or above Krishnagar, and in Dwarukeswar as far as Bankura, but the reduced supply of upland waters which has been exacerbated by the construction of Dams, the increased salinity of the water, and the formation of sand bars have had a deleterious effect on this seasonal supply. The rivers that once kept about 8000 fishermen busy catching Hilsa from June to mid-October and supplied an important article of local dietary now present an almost deserted appearance. The Dams and the barrages which hold up the waters of the catchment area could probably be used for rearing fish but practically all the Dams constructed up till now lie beyond the state border. Some of the hill streams in the state are fished on a small scale but their effect on the total produce is not much.

4.21. The estuarine region comprises about 900 sq. miles of which more than two thirds are within the reserve forest area where fishing is permitted on license and on a restricted scale. Estuarine fishing is confined to four months from November to February but imprudent over-fishing, destruction of brood fish, and changes in topographical and ecological conditions have decreased their potentialities in recent years. An important variant of estuarine fishing are the 'Bhasa-Badha' fisheries—shallow artificially embanked watery areas constructed within the zone of marked tidal effect, which trap both fish seed and marketable fish at high tide without much effort on the part of the fishermen and are so lucrative that the state Fisheries Department have constructed a few extensive fisheries of this type on the Contai coast, south of the Junput Technological Laboratory, in order to see if the technique of catching and breeding can be improved. Selective culture of the more palatable varieties of fish in these fisheries may step up production as well as the return in terms of money, but as these fisheries must be set up within the tidal zone the scope of their extension beyond the 20,000 acres now covered by them is very limited.

4.22. The coast line stretches for about 40 miles but fishing operations are carried on only along 20 miles between Junput and Digha. The annual haul is about 1,800 tons of which about half is consumed locally while the rest is either cured or manufactured as fish meal and manure. The poor quality of much of the fish that are caught in the coastal area makes them useful only for export as sun-dried fish which has a limited market outside the State. Although the sea is an almost unlimited source, off-shore and deep-sea fishing has not yet proved attractive to private enterprise and capital while the effort of the public sector was avowedly exploratory and experimental. The difficulties inherent in the present conditions are the shallow foreshore, the uncertain and often stormy weather, the absence of berthing and servicing arrangements for the fishing vessels, and the distance of the market (Calcutta) by road or river. The dismal record of the two Danish trawlers operating since 1951 and the hardly less dismal record of the three Japanese bull-trawlers added in 1955 should cause some hard thinking about the potentialities of deep sea fishing as a public sector enterprise. "While the discovery of fishing grounds, the training in deep sea fishing given to Indian personnel, and the experience gained so far are items on the credit side, the overall low production and the high costs of catch, attributable largely to administrative reasons, appear on the debit".*

4.23. There remains fresh water fishing in confined areas like 'beels' or 'baors' and tanks of varying size and depth whose total surface area is more than a million acres

*Techno-Economic Survey of West Bengal 1962, p. V-24

and a half. The following table gives the district-wise distribution of acreage excluding Purulia and Cooch Behar for which reliable data are not yet available :—

Name of the district	Tank area (in thousand acres)	Beel area etc. (in thousand acres)	Total (in thousand acres)
24-Parganas	54. 5	157.4	211. 9
Nadia	7. 7	29.7	37. 4
Murshidabad	30. 5	78.0	108. 5
Burdwan	100. 7	50.5	151. 2
Birbhum	75. 2	35.7	110. 9
Bankura	75. 5	71.0	146. 5
Midnapore	110. 6	102.1	212. 7
Hooghly	48. 8	21.8	70. 6
Howrah	20. 2	12.0	32. 2
Jalpaiguri	2. 4	63.1	65. 5
Darjeeling	.14	6.2	6.34
Malda	16. 8	39.8	56. 6
West Dinajpur	33. 9	21.8	55. 7
	576.94	689.1	1266.04

With Cooch Behar and Purulia included, the total area is supposed to be about 1.62 million acres.

4.24. Midnapur and 24-Parganas hold the palm in acreage but the latter with its large beel area is a richer source because a few of its beels (commonly known as the northern and southern salt lakes) are fed by Calcutta's sewage which trebles their growth and because its estuaries are a good supplementary source, Burdwan, Murshidabad, Bankura and Birbhum have also a good acreage under water, and the large irrigation bunds that hold water by taking advantage of the sloping terrain are good breeders of fish because they are found congenial by the fishes of the Major Carp variety for breeding, whereas for smaller confined water areas such eggs and spawns have to be collected from riverine breeding grounds and carefully nursed and reared before being introduced into the tanks.

4.25. A very large proportion of the potential fresh water fisheries in West Bengal are in a derelict or semi-derelict condition and their decline is due to a variety of causes. The old faith that considered digging tanks and dedicating them to public use an act of virtue is gone; so also is the ability of an impoverished posterity, driven to towns to earn a livelihood, to spare the time and money to keep them from choking under an oppressive growth of rank vegetation and sedge. The decline could have been arrested or even averted if there were economic incentives to keep them in good trim i.e. if the tanks were a source of profit through pisciculture and sale of fish; but easy imports from what is now East Pakistan as well as from states across the border (Chilka, for example) led to years of neglect which made about two-fifths of the watery area practically useless for fishery. Multiple ownership was another handicap for nobody liked to take any trouble when the chances were that the spoils would have to be divided equally between active and passive partners. Deliberate culture or breeding of fish was therefore rare and the general reliance was on the fry and the fingerlings that automatically found their way into the beels and baors through connecting canals or into tanks through silts deliberately cut in the banks to allow their entry. But with the silting up of these canals and with their beds being deliberately given in lease to agriculturists on the eve of estates acquisition this source of supply of fish spawn or fry is gone. Sometimes large

areas under fisheries, such as a portion of the northern Salt Lakes have to be sacrificed to meet the needs of an expanding city anxious to house its ever-increasing population. *

Geology

4.26. We consider geology towards the end, not because it is the least important but because the technical terminology of this somewhat unfamiliar field of knowledge would have been a dry and unattractive introduction to the subject of our discussion. In fact, a knowledge of the geology of a place is important for a clear understanding of its geography, for, as Dudley Stamp has observed, the relief of the land is the outward and visible result of its underlying geological structure and of vast ages of evolution of surface forms, in the course of which the harder and the more resistant rocks tended to remain as upstanding masses of hills and mountains while the softer ones formed plains and valleys.† The predominant constituents of the soil are particles initially derived from the disintegration of these underlying rocks whose decomposed particles are, during one or more geological cycles of erosion and deposition through the action of sun, wind, water or ice, carried over considerable distances to become the breeding ground of plants and animal organisms, the latter themselves adding their own quota to the formation and enrichment of the soil. Geology affects plant growth and sub-soil drainage; in some places through clays which hold up water on the surface, in others through sands and sand-stones which permit it to seep slowly downwards, and in still others, through coarse sands and fissured rocks which cause it to be drained quickly away. Moreover, the geological structure controls the distribution of minerals which are, for West Bengal, one of the chief foundations of its industrial expansion and a principal determinant of the location of many of its industries. "In their mineral resources Nature has drawn her own distinction between the haves and the have-nots" and West Bengal is fortunate in that it comes under the more favoured category.

* Cf. the observations of the Techno-Economic Survey at page V-8 of the Report :--

"Included in the culture fisheries of the state are the very valuable sewage-fed fisheries in the North Salt Lake near Calcutta where the effluent of Calcutta sewage is made use of for manuring the fish ponds. Owing to its high manurial value this effluent brings about a rapid and large increase in fish food in the ponds. This results in a higher yield, and in some of the fisheries a return of about 2087.5 lbs (26 mds) an acre per annum is not uncommon. At present such fisheries give an annual yield of 4590 tons of fish from an area of about 10,000 acres (or 1028.16 lbs per acre). As a result of a scheme contemplated by the state government for the expansion of the city of Calcutta on the northern side it is feared that these lucrative fisheries will be greatly reduced in extent or even completely destroyed."

† L. Dudley Stamp--Applied Geography, 1961, p.14.

4.27. The stratigraphic succession* of the various geological formations in West Bengal together with their distribution will appear from the following table :—

<u>Geological Age</u>		<u>Formation and character</u>	<u>Occurrence</u>
Quaternary	Recent	Newer alluvium and soils	All districts
	Pleistocene or sub-recent	Older alluvium, with laterite gravel and moorum	Bankura, Birbhum, Burdwan, Midnapur, Purulia, Malda and West Dinajpur
Tertiary		Siwaliks and Tertiary sedimentary deposits (Sandstone, shale and lignite)	Darjeeling, Jalpaiguri and parts of Midnapur
Secondary	Jurassic	Upper and Lower Gondwanas (sandstone, shale, clayiron-stones and coal seams)	Burdwan, Birbhum, Bankura, Darjeeling & Jalpaiguri
	Triassic Permian and Upper Carboniferous		
Archaean		The Buxa, Darjeeling and Daling series	Darjeeling & Jalpaiguri
		Granites anorthosites and metamorphics (e.g. gneiss, schists, phyllites, slates, quartzites etc.)	Purulia, Bankura, Midnapur Birbhum & Burdwan

* Since it has not been possible to avoid the use of technical terms altogether, the following note may be of use to the layman though to a geologist it will appear to be not only elementary but incomplete.

Geologists generally recognise three kinds of rocks—igneous, sedimentary and metamorphic. Igneous rocks are those which were originally molten and have subsequently cooled down and solidified, either above ground through volcanic eruption (when they are called extrusive), or inside the interstices between strata or below a stratum (when they are called intrusive). Those that solidify comparatively near the surface are called dykes and sills according as they are discordant or concordant with the bed of the stratum. The igneous rocks are probably the oldest. Next come sedimentary rocks formed by sediments or fragments derived from older rocks and deposited in layers or strata usually under water (sea, river or lake) though wind-blown deposits on land surfaces are also seen. Metamorphic rocks are formed from igneous or sedimentary rocks through the action of heat and pressure which change their character so completely that they turn into a new kind of rock.

By examining the fossils of plants or animal organisms found in sedimentary rocks—since igneous rocks would contain no fossils and metamorphic rocks at most the crushed remains of some—geologists have reconstructed the main features of earth's geological history and distinguished four great eras or time divisions since life became important on the earth's surface. They are (1) The Palaeozoic or Primary era, (2) The Mesozoic or the Secondary era, (3) The Cenozoic or the Tertiary era and (4) The Quaternary which is again sub-divided into (a) the Pleistocene or sub-recent, and (b) the Holocene or recent. Periods earlier than Palaeozoic when there was apparently no life and no fossils could form are called Pre-Cambrian or Archaean. These eras are each sub-divided into many smaller periods with distinctive names and comprising millions of years of varying length.

Since most of the rocks are found under water or below the earth's surface their present position could only have been due to uplifting. There were periods marked by great mountain-building or orogenic movements when the earth's surface must have been constantly shaken by great earthquakes which not only raised the floor of the sea or ocean above the sea level but also folded, twisted and broke the sedimentary strata and erected them into great mountain chains. (A folding is a warping of the stratum due to upheavals or tremors which may take many forms e.g. monocline, anticline, syncline, isocline, recumbent etc). When the stress to which a rock was subjected exceeded its strength it gave way and got fractured or crumpled. If there was displacement of rocks on either side causing a gap and a separation between the two cracked portions it is called a "fault".

4.28. ARCHAEOAN—The oldest rocks in West Bengal are the Archaeans which occur in the western part of the state. They constitute the eastern continuation of the Archaean terrain of Chotonagpur and Singhbhum, bounding the alluvial area all along the western margin as well as on south-west, north-west and north. Their complex folding, crumpling and faulting are evidence of the great disturbance and deformation to which they had been subjected during their long evolutionary process. In the sub-Himalayan region the intensity of deformation of these and associated rocks was even greater with resultant thrust-faulting and complex fold zones. Two major rock groups constitute Archaean formations of this state, granites and metamorphics, whose general sequence in the western sector, so far established by different workers in the field, may be stated as follows :-

Intrusive basic rocks (dykes and sills)

Porphyrite granites

Pegmatites, granites and diorites, various basic and ultra-basic granulites and their variants such as gabbro, anorthosite, norite, charnockite, amphibolites etc.

Ortho-gneisses and schists; hornblende schists and gneisses, talc schists etc.; epidiorites

Para-gneisses and schists; Calc silicate rocks; Calc. schists and granulites para-amphibolites; Quartzites; Marbles; Sillimanite-gneisses; Phyllites; slates etc.

The ortho-gneisses are derived from the metamorphism of basic and ultra-basic igneous rocks while para-gneisses and schists owe their origin to sedimentary strata. The latter may be separated into two stratigraphic groups, the lower argillitic or clayey, and the upper calcareous, but the structural patterns of both are equally complex throughout the area.

4.29. In the north the dominant Archaean rocks are sedimentary in origin though a few granites appear here and there. These are the Daling, the Darjeeling and the Buxa series of which the second may be the highly metamorphosed lower part of the first while the third is considered by some to be of post-Archaean or palaeozoic age. These rock groups are composed mainly of schists, gneisses, phyllites, slates and quartzites of sedimentary origin, all exhibiting evidence of complex folding and faulting.

4.30. GONDWANA—Next to the Archaean, come the Gondwana series of the Secondary era formed by deposit of terrestrial sediments and containing many promising coal seams with intercalated sandstones, conglomerates, shales, clays and iron-stones. At present the Gondwana rocks are exposed in the Damodar Valley area in the district of Burdwan with extensions to northern Bankura and southern Birbhum, but recent investigations indicate an eastward dip with the possibility of an indefinite extension under a thick alluvial cover.

4.31. In the Ranigunj-Asansol area the Gondwanas occur in the following stratigraphic succession :—

Upper Gondwanas	Rajmahal traps and intertrappeans	
	Dubrajpur and Durgapur (?) beds	
	Probable unconformity or hiatus	
	Panchet series	
	Damuda series	Raniganj series (coal) Ironstone shales (barren of coal) Barakar series (coal)
	Talchir series	
Archaean	Unconformity	
	Metamorphics	and Granites

The upper Gondwanas which are quite well developed around the Rajmahal area extend a little into Birbhum in a group of hillocks and low plateaus. The lower Gondwanans of the Damodar Valley do not show any major crustal deformation except some faults of varying extensions and magnitude but those found in or around Bagrakot (Tista Valley) in north Bengal are highly folded and crumpled and are almost everywhere intruded by igneous rocks.

4.32. TERTIARY. Tertiaries come next and their most conspicuous examples are the Siwaliks which were built up by terrestrial sediments deposited in fresh water in the sub-Himalayan region of Darjeeling and Jalpaiguri. They constitute a zone of folded un-fossiliferous shales and sandstones successively over-ridden by Gondwanas, Buxas and Dalings. Deep tube-well drilling operations undertaken by the exploratory organisation of the Government of India and the exploratory oil drilling of the Indo Stanvac Project at Jalangi and Galsi have confirmed, what was surmised by previous Geo-physical surveys, that between the alluvial cover up to 4000 ft. and the basement (Archaean) rocks at a depth of 17,000 to 20,000 ft. there are marine Tertiary rocks which show only very low dips but no great structural disturbance. Durgapur beds are supposed by some to belong to Tertiary and not upper Gondwana stage.

4.33. QUATERNARY—(a) SUB-RECENT. In West Bengal proper and North Bengal, the existence of some elevated flood plains indicate the existence of pleistocene sediments deposited by the Ganges and the Brahmaputra systems. These are found in the elevated areas of Birbhum, Purulia, Bankura and Midnapur which flank the Rajmahal and Chotanagpur hills, and in the north in the Barind area of Malda and West Dinajpur. The sediments are pebbly sands and silts with considerable quantities of silicified wood fragments which retain traces of the effect of rolling probably occasioned by torrential stream transport. The laterite covering of Archaean rocks and the 'kankar', 'moorum' etc. covering the rocks of many areas are probably of pleistocene age.

(b) RECENT. The latest sedimentary formations in West Bengal are the recent river alluvium occurring in the Gangetic delta and in the flood plains of many of its tributaries. The deposits are mainly sands, silts and clay-beds with interbedded gravel and peat but whether they also include the gravelly red stone and laterite soil typical of many districts of West Bengal is more difficult to say.

Minerals

4.34. The mineral output of West Bengal is a little over 20% of the total mineral output (in value) of India (1957 figures) and derived principally from two regions: (1) Darjeeling and some parts of Jalpaiguri in the north and (2) Burdwan, Bankura, Birbhum, Midnapur and Purulia in the West. This comparative superiority is however based on two minerals—coal and fire clay, for the output of other minerals is insignificant. In coal the state's output in 1957 was 13.68 million tons, second only to 21.10 million tons of Bihar; and in fire clay its position was next to Bihar and Madhya Pradesh.

4.35. In the north, the lower Gondwana rocks underlying the foothills of the Himalayas from the western Duars to the extreme end of Jainti hills contain coal seams of irregular thickness which are often overlaid with sandstones and shales of both Damuda and Tertiary stage. The Tertiary sandstones also yield patches of lignite and brown coal which may not be too bad in quality but are incapable of being worked economically on account of their scattered distribution. Except at Bagrakot the yield from other seams are poor in quality, anthracitic in character, and difficult to work because of the softness of their texture which requires pillared support for the superincumbent rock during mining operations. Bagrakot deposits, discovered as early as 1890 by P. N. Bose and pronounced to contain 20 million tons of good quality coke, have more than justified the prediction of that great geologist.

4.36. Of the other minerals, iron can be extracted from three different sources in the Darjeeling hills—the tertiaries of Lohargarh, the Dalings, and the Buxa Duar area. Only the first and the third are workable at reasonable cost, but the absence of local demand for industrial use makes their mining and smelting an uneconomic proposition. Apart from iron, the Dalings of the western Duars contain extensive indications of copper while some copper is also found in the Jainti hills near Buxa. Enormous quantities of lime may be had from three sources viz. the dolomites of the Buxa series, the limestone beds of the Tertiaries, and Calc-Tufa, of which the first is more important both from the point of view of abundance of supply and from that of easy accessibility. The monsoons dislodge and bring down many large boulders to the base of the hills and the manufacturer can produce from them, without any extra cost of transport of raw materials, any quantity of lime of good tensile strength, commanding a ready market in the tea gardens and the western Duars. Kaolin has been reported from the Sakkam river area. Even within the town of Darjeeling, excavation for building purposes has revealed the existence of a white clayey substance which, after being freed from its impurities, may be a good substitute for Kaolin as a raw material for the production of high class pottery. The other minerals (graphite, lead, silver, zinc etc.) are of little economic importance.

4.37. The western regions contain the more important mineral resources and, together with the contiguous areas of Bihar and Orissa, have been rightly called the Ruhr of India. The known occurrences include coal, fire-clay, china-clay, limestone, ochre, wolfram, copper, iron ore, manganese, dolomite, arsenic, steatite, silica, moulding sand and sandstone which make a deceptively attractive list because only the first six are being commercially exploited. For the Archaeans containing rocks of different varieties the most important mineralising belt is the area forming the tri-junction of Bankura, Midnapur and Purulia where a particularly rich variety of pure magnetite (iron ore) occurs in Archaean quartzites and gneiss in north-west Bankura while magnetitic quartz veins have been reported from Purulia and Midnapur. Gold reported from quartz veins in Rautara and Ranibandh in Bankura has not proved economically workable. Traces of copper have been found to occur in different villages in Bankura. Quartz veins containing galena i.e. lead sulphide with a fairly high silver content have been found in Purulia.

Wolfram in association with other rocks occur in some quartz veins in Chhendapather in Bankura but their distribution is uneven and the mining sporadic. Magnesia-free limestone with a calculated reserve of 8 million tons* up to a depth of 100 ft. has been found in Jhalda in Purulia and three places in Bankura, sufficient to start a cement factory with gypsum obtained from Midnapur and Darjeeling. Other minerals which occur in small quantities in the Archaean rocks mixed up with other rocks are pyrite, arseno-pyrite (Midnapur and Purulia), Kyanite-sillimeneite-graphite (Purulia), mica (Midnapur, Bankura, Purulia) and china clay from the weathered granites and gneisses.

4.38 The lower Gondwanas are economically more important than the upper. The lowest strata, the Talchir, are exposed only over a few square miles east of Barakar and contain fine-bedded sandstones and shales which are not of much economic importance. The highest strata, the Panchets, occur in the vicinity of Asansol and contain clayey-sandy shales in the lower beds and soft micaceous sandstone in the upper. But the middle strata, the Damudas, with their three sub-divisions of Barakar, Ironstone shales, and Raniganj series, are the richest source of coal, iron and other important minerals in West Bengal,

4.39. The coal-bearing area covers about 600 sq. miles, the workable coal being found in the upper part of the Barakar seams and the lower part of Raniganj. The bulk of Barakar measures lie largely beyond the border of West Bengal but about 40 sq. miles containing some seven seams of "low volatile coal" in addition to massive coarse-grained sandstones and good quality fire-clay deposits of several feet of thickness. This fire-clay is almost inexhaustible in supply but its quarrying is hampered by the thick overburden of hard massive sandstone or grit. Above the Barakars are the ironstone shales with their main outcrop between the Barakar and Ajoy rivers covering an area of about 44 sq. miles. Their total thickness is from 1200 to 1400 ft. and recent estimates of reserve appear to be as much as 500 million tons.† But neither the quantity available nor the proportion of iron (which has been pronounced to be larger than what is contained in the ordinary ores in England) has prevented their decline. The discovery of high grade iron ore of Singhbhum-Keonjhar-Bonai regions has put them into the shade and made their future uncertain, and only the establishment of new industries based on iron at Durgapur and the neighbourhood or the discovery of deeper deposits under the alluvium can give them a new lease of life. Above the ironstone shales lie the Raniganj series, whose coal seams, about twelve in number, are the second richest in India and account for more than 30% of India's total coal output per year. They cover the entire western portion of Burdwan between the Ajoy and the Damodar and extend subterranean feelers under the two rivers into parts of southern Birbhum and northern Bankura. They have been divided into three classes, (1) Coking (Grade I), (2) non-coking (Grade I) and (3) non-coking (inferior) of which the first, either alone or in combination with Jharia coal, gives hard metallurgical coke of good quality highly useful in steel industries. The total reserve of this was estimated in 1951 at nearly 82 million tons up to a depth of 1000 ft. and 250 million tons up to a depth of 2000 ft. while the reserves estimated for the second variety for the same depths were 963.5 and 1370.75 million tons respectively. The third variety was supposed to be unlimited in reserve. A revised estimate made by the Geological Survey of India in 1953-54 for all varieties has raised the figure to 7456 million tons up to 1000 ft. and 13075 million tons up to 2000 ft. The Raniganj series also contains even-textured medium-grained sandstones of grey or greenish tints as well as good deposits of fire-clay.

4.40. The next layers in order of succession are the upper Gondwanas (Upper Panchet and Durgapur beds) and sub-recent and recent (laterite and alluvium) deposits.

* Techno-Economic Survey Report--p. VI.21.

†The Techno-Economic Survey Report gives the figure as 15 million tons

The Supra Panchets at Biharinath hills in Bankura and Durgapur contain strata which include ferruginous felspathic sandstone coloured yellow grey to red and Durgapur yields clay deposits of some economic importance suitable for the manufacture of bricks, tiles and potteries. Fireclay deposits of about 4 million tons suitable for the manufacture of stone-ware and sanitary-ware, lie within a depth of 20 ft. only in the Raniganj coalfields. If greater depth and larger areas are considered the deposits will be much larger.

4.41. In Bankura and Midnapur, south of the river Damodar, the rock groups are the same as above but the distribution is somewhat different. The Gondwana coal fields hardly extend beyond the Mejia and Biharinath hills in Bankura. The Archaean metamorphic rocks are limited to the western part of the districts and exhibit different characteristics from one district to another. In western Midnapur, embedded in the Archaean gneisses, are found different kinds of rock, compact and beautiful in appearance and soft and easy for carving, which are highly prized for the manufacture of basins, plates and utensils of various kinds. Decomposed gneisses form clayey beds below the level of the laterite some of which are suitable for pottery. In Bankura and Birbhum and especially in thanas Mejia and Muhammad Bazar, there are numerous small occurrences of china-clay which are capable of indefinite expansion in depth if mechanical means are employed and which may meet the requirements of the state's large porcelain industry now importing materials from outside, sometimes from as far-a-field as Gujarat and Kerala.

4.42. Very little economically important mineral deposit occurs in the Tertiary stage in this region. The exploratory oil drilling undertaken by the Indo-Stanvac project has not yet discovered any oil well, pocket or field. Some radio-active minerals—mainly monazite and allanite—have been reported from the pleistocene i.e. sub-recent sands of Purulia, and allanite also occurs in Bankura. In the recent alluvium small particles of gold associated with black sands were reported from some places though none of the occurrences are promising. Peat found in the sub-soil of Calcutta and the suburbs is locally dried for use as fuel.

4.43. Except for coal in Raniganj area the state's mineral wealth remains mostly undeveloped. In the context of possibilities of utilisation during the next decade it is expected that systematic mineral exploration in Bankura and Midnapur for wolfram, manganese and other metaliferrous minerals, in Purulia for limestone, and in Darjeeling for coal, copper and dolomitic limestone will give good results. For large-scale exploration coal holds the brightest prospect for the future.*** Fire-clay, china-clay, dolomite and limestone have also considerable expansion potentialities. Wolfram and manganese, two high-value minerals, would be of strategic importance to the regional economy if successful exploration and exploitation could be carried through*

Conclusion

4.44. The last word that needs emphasising is that the quantity and extent of land is absolutely fixed. There is no hope of any accretion to the land surface by recession of the sea within the secular period which is all that we are concerned with. "There is some debate whether the delta is still advancing seawards or whether it is losing by marine erosion more than it gains. Local erosion no doubt occurs but on the whole it would seem that accretion predominates."† But if, as the same author says, there is little difference between the general lie of the coast shown in Rennel's map of 1770

* Techno-Economic Survey Report 1962, pp. III 25-26.

† O H.K. Spate, Op. cit., p. 239

and by modern surveys, it will take eons to build up such land and make them habitable. No artificial reclamation is possible as in the Back Bay scheme except at a cost which staggers the imagination. The small reclamations that may be possible by filling up swamps or beels will only be at the expense of other uses such as fisheries or sub-marginal cultivation. The enlargement of the boundary of West Bengal by the addition of Purulia and Islampur or the merger of Chandannagar and Cooch Behar has produced a linguistically well-knit state but done nothing to relieve congestion and density as those areas were not sparsely populated by any reasonable standard when they came in. The special characteristic of land which differentiates it from all other commodities or goods is that its supply is absolutely inelastic.

CHAPTER V

Density and distribution of population

Preliminary

5.1. On the question of population the two aspects that primarily interest the demographer are present size and rate of growth, while density and distribution are regarded as the consequences of such growth or as factors affecting it. The economist is also interested in density but to him it is not a man-land ratio to be judged against a fixed or variable norm, but a function of the economic structure of the country and its ability to sustain the population of a particular size in a reasonable standard of health and comfort. The sustenance need not be derived from land alone; what is important is whether the quantity of food obtainable in the country either through indigenous production or through import in exchange of manufactured goods or services is adequate for a population of a particular size. The town and country planner's view of density goes a little beyond this, for he does not consider man merely as an animal to be fed, clothed and housed but one who has other hungers to be satisfied--the hunger for wide open spaces and 'the pleasures of the pathless woods', for amusements and recreations which require large areas to be laid out as national parks or wild life sanctuaries, for occasional escape into the quiet of the countryside which implies that there is a countryside to escape to, or, to use an expression which may sound somewhat incongruous in a highly sophisticated world, for 'communion with Nature'. Theoretically, if by some miracle man could get all his sustenance and food from the air and the sea* without having to delve and dig into the earth or breed animals or poultry, every inch of the land surface could possibly be peopled without risk to his food supply, but he would be a bold man who could say that such a milling crowd† would not constitute high density. Probably the economist is not wholly oblivious of this aspect of the question for, as a leading modern British economist says, such narrowly economic considerations as the ability of the country's economy to sustain the population with adequate food supply are not the only ones which have to be taken into account. "Although we are not seriously incommoded in peace time by the limited amount of agricultural land available in our island, we are incommoded by pressure of population in other ways. Great Britain can only support her present population of 50 millions people if at least half of these people will live in great cities, enjoying certain advantages (it is true) from being so close together, but in other ways being decidedly cramped".‡ But these questions, he admits, are not what economists had meant in the past by the problem of population.

5.2. The assumption that an increased rate of growth is always an evil is of course not correct. It is possible for a country to be under-populated in the sense of not having enough men to run its rudimentary economic system or develop that measure of specialised division of labour which is essential for industrial efficiency but which presupposes the existence of a large market for the disposal of its greatly increased output. But for India generally, and for West Bengal in particular, the

* A possibility suggested by one school of thought as stated by Dr. S. Chandrasekhara in his First lecture at the Calcutta Information Centre on June 1, 1962.

† J. R. Hicks-- The Social Framework, 3rd Edn. 1960, p. 99.

danger is one of over-population—the rate of growth and the size of population being too great to be maintained even at its present low standard owing to the difficulty of agriculture and industry to keep pace with this accelerated growth.

5.3. On this point some economists have expressed a view which is apparently not as pessimistic as that of demographers. Colin Clark says that in an industry or business where the law of increasing return prevails—and that includes most forms of large scale manufacture, transport, communication, banking, insurance etc.—the operations are carried on in such a way that if there is an increase in population and consequently an increase in the size of the market, the organisation becomes more economical and production per unit of labour increases instead of decreasing*. If he means that the more a country's population increases the better automatically will its economic position become, it would certainly be a fallacy—first, because it ignores the possibility that one of the economies which lead to increasing return may be through greater rationalisation of the productive process and the employment of less labour; and, secondly, because the size of the market depends not on population as such but on population which can generate a hitherto absent demand by increased income from employment in some productive enterprise. For a country which can feed itself (by production or trade) and is able to increase its equipment at a rapid rate from its own resources, the balance of advantage may well be on the side of a moderate increase in population; but a country whose average productivity is low and which can spare little productive power after satisfying the basic necessities of life for capital formation or the production of investment goods is involved in a vicious circle in that a larger supply of capital equipment will be needed to escape from the toils of over-population whereas it is too deeply caught in these toils to be able to produce that equipment for itself. The examples which Colin Clark cites are all from North America and West Europe, and towards the end of his article he makes it clear that his proposition applied to the more advanced countries where "once the earliest difficulties have been overcome, the law of increasing return comes into operation, and every further increase in population makes the industrialisation process more remunerative." It is the "earlier difficulties" in reaching the so called take-off stage that make all the difference to India and other under-developed countries for whom it is admitted that considerable capital resources are required, both for industrialisation and for extension or improvement of agriculture. This capital (estimated to be equivalent to at least four years' income per employee) it is extremely difficult for these countries to provide from internal savings alone.

5.4. It is probable that a part of the difference between the economist and the demographer stems from the different angles from which they look at the problem. One considers the economic condition of a particular country and finds from past experience as well as from present trends that there is no reason to be scared of the Malthusian bogie as long as the country's specialised skill is more profitably employed in manufacturing goods and rendering services which can be exported in exchange of food. The other takes the global view and finds that at a time when the stupendous growth rate of West European and North American countries during the past century is slackening its pace, Asia and Africa are showing signs of a tremendous upsurge so that within a matter of a few centuries all the habitable portions of the earth are likely to be filled to capacity and all cultivable land laid under the plough for whatever food can be wrested out of it. The theory of Malthus which was falsified when applied to

* Colin Clark.---"Population Growth and Living Standard"---article published in the International Labour Review 1983 and reprinted in "The Economics of Development" Ed. by Agarwala & Singh, p. 34.

individual countries because of improvements in industrialisation and transport will then come into its own when applied to the world as a whole. In fact, it is all the more likely to be correct now than when he made it because of the remarkable advances in medicine and public health which have so greatly reduced the possibility of catastrophic epidemics. Industrialisation is only a solution for a single country if there is no shortage of land elsewhere, that is, if there is no over-population in the world as a whole. "Whether there is such at present it is hard to say. Nevertheless, as Malthus correctly said, there must be a limit. The countries of Asia where population is now increasing so rapidly, are already very populous countries; a rapid rise in their population means a rapid rise in the human population of the world as a whole. Such a rise must in the end run into Malthusian dangers. We should face the fact, though it seems a cruel thing to say it, that it is just as well for the countries of Europe that Asia does not make a more rapid progress in this direction (i.e. industrialisation). The less successful these countries are towards industrialising, the more they will keep the danger to themselves."*

5.5. It is not unlikely therefore that part of the anxiety of the Western demographers at the tremendous population growth of recent years is due to a fear that the privileged position of the countries of the West, built up by unchecked increase during the last century and a half with the safety-valve provided by emigration into and occupation of the vacant places of the world, is likely to be challenged by the new population expansion which the Asiatic and African countries are about to experience. "It may well be that many of those who advocate population limitation in the oriental countries do so precisely because they do not like the idea either of emigration (i.e. of Asians) or of leaving markets open to oriental goods, or of giving capital assistance to weaker countries."† Colin Clark may be right in exposing what he calls the uncharitable motives of those who advise India to check her growth rate but it does not help us much in the formulation of policy. What happened in the last century and a half in the North American and West European countries cannot now be undone. As Dudley Stamp says, almost all available spaces in the world are already occupied. They are also closed to emigration from India. The industrially advanced countries which multiplied without much restraint during the last century will soon be facing problems of their own. North America, whose vast virgin land gave scope for almost unlimited expansion, will, within a few decades, if the present rate of growth continues, have to apply the brake and cry a halt. The West European countries which emigrated to distant lands and appeared to be there for keeps are uneasily poised before the rising tide of nationalism in erstwhile colonial countries and may soon be forced to come to terms with it by, if need be, further movements of population. India cannot emulate the example of the western countries by seeking salvation in emigration as has been suggested by Prof. Radha Kamal Mukherjee and a few others; it has to find all the space it needs within its own borders. To force the issue of Indian emigration into Australia or other countries would not only spark off international conflicts but would be completely futile in an age when Indians are losing ground even in countries like Ceylon, Burma, Malayasia and East Africa where they had long been settled and seemed safely entrenched. A world population which has already exceeded 3,000 millions in 1961 and, at its present net rate of increase at 1.7 per cent, is likely to double itself by 2000 A.D. is a problem not merely of the West but of the world of which India is a part. Even the sanguine calculations of Colin Clark did not place the world's capacity to feed a population above the 12,000 million mark. It is perfectly obvious

* J. R. Hicks---Op. cit., p. 58.

† Colin Clark---Op. cit., p. 53.

that to multiply at a fast rate merely because the West did so in the last century would be extremely unwise, however good it might be as a retort "tu quoque" to Western advocates of restraint.

5.6. The population trend of West Bengal therefore needs careful study in order to see whether it is expanding at a faster rate than is compatible with a rise in the standard of living, whether it is spreading itself out in a way which is creating new problems that demand a solution, and whether there are any possible counteracting forces that may, sooner or later, slow down or reverse the process. In projections which are near approximations to what is actually likely to happen the ordinary man as well as the land use planner is greatly interested because it provides the key to future plans not merely in the economic sphere but also in the allocation of the land resources of the state. But if a projection is "a statement of future trends which follow mathematically from certain explicitly stated quantitative assumptions" regardless of whether the assumptions turn out to be in accord with reality, it is merely an intellectual exercise in which he can hardly be even mildly interested. A population of 16 million people for metropolitan Calcutta in 1970 A.D. and 66 millions in 2000 A.D. when it is only 5.5 million in 1961 and the rate of growth during the preceding two decades did not exceed 1 million per decade, seems to him slightly fantastic. Even the demographer who made this projection does not say that such gigantic urban agglomerations will exist but merely that if other things foreseen probably occur this would also occur.*

Population size and rate of growth in West Bengal

5.7. In March 1961 West Bengal's population was provisionally estimated at 34,967,634, giving a crude density of 1030 persons per sq.m.† which is exceeded only by Kerala with a density of 1123 per sq.m. The two smallest states in India are thus also the most overcrowded. The contrast with the overall density of 386 per sq.m. for the whole of India or with that of the more fortunate states of the Indian Union is striking. Even those who come nearest viz. Bihar, Madras and Uttar Pradesh with densities of 691, 670 and 650 per sq.m. respectively are a considerable distance behind; while Punjab (430 per sq.m.), Andhra (339 per sq.m.), Maharashtra (331 per sq.m.) and Mysore (318 per sq.m.) have densities which are less than $\frac{1}{2}$ or $\frac{1}{3}$ of that of West Bengal. Rajasthan's density of 153 per sq.m. is the lowest in India and almost $\frac{1}{7}$ of that of West Bengal though it can be easily understood in the context of its arid deserts and the sparseness of its industries. Madhya Pradesh is only slightly above Rajasthan with a density of 189 per sq.m. while Orissa, Gujarat and Assam stand in between with densities of 293, 285 and 251 per sq. mile respectively. When in 1942 the Scott Committee were considering the rapid and haphazard growth of industrial and residential buildings which was threatening to ruin the English countryside they were staggered at what seemed to them to be the extraordinarily high density of 766 persons per sq. m. in England. What they would have thought of the density of West Bengal in 1961 is anybody's guess.

5.8. It is however not the present number, high though it is, which is so terrifying as the probability of a very much larger growth in the near future. The following figures

*Kingsley Davis—"Urbanisation in India"—Chapter I of "India's Urban Future" Ed. by Roy Turner, University of California Press, 1962.

† Sq. m means a square mile.

of the rate of population increase in West Bengal supplied by the present Superintendent of Census Operations are illuminating.

Year	Total population in West Bengal	Density	Percentage increase or decrease
1901	16,941,873	510	
1911	18,000,641	541	+ 6.2
1921	17,476,273	528	- 3
1931	18,899,118	569	+ 8
1941	23,231,821	703	+ 22.9
1951	26,382,386	799	+ 13.2
1961	34,967,634	1030	+ 32.9

5.9. It is interesting to consider these figures against the demographic picture of India as a whole. Talking about prepartition India, Kingsley Davis admits that India's vast increase was not too rapid when compared with countries further ahead in the Industrial Revolution. For about a century and a half from 1600 A.D. population remained almost stationary at 125 millions, registering a slight increase after 1750 and then slowly and gradually accelerating after 1870. Even so, her total increase between 1871 and 1941 did not exceed 52 per cent while during the same period Britain increased by 57 per cent, Japan by 120 per cent and U.S.A. by 230 per cent. The popular notion that it has been faster than most other eastern countries is entirely unwarranted. The global wave of growth in the western countries which have virtually completed their cycle and are approaching the stationary state again was the result of the industrial revolution, while India appears to be in the early stages of such revolution with plenty of potential growth ahead. Her population growth from 1870 to 1920 has been extremely sporadic in nature—decades of marked increase alternating with decades of slight increase when famine, floods and epidemics kept the growing population in check. After 1920 the effects of public health measures began to assert themselves with a gradual reduction in the rate of mortality, while the rate of birth remained more or less unaffected. Between 1921-1931 the increase was 10.6 per cent which appeared at that time to be a record, but it was followed in the next decade by a still further increase of 15 per cent. "It was the first time in India's known history that she experienced a rapid growth during two successive decades. At a time when the western nations were approaching demographic stability, India with its much larger population was just starting on a period of rapid and gigantic expansion. *** The rate of growth since 1921 (1.2 per cent per year) has not been phenomenal for modern times. In the United States population increased by 16 per cent during the decade 1920-30, a rate never equalled in India. But because of the massiveness of India's existing population even a moderate percentage increase means a huge absolute increment." *

5.10. These observations apply to West Bengal with even greater force because the swings of population movement have been sharper, more sudden, and, towards the later stages, more highly accelerated. Instead of a moderate increase during 1911-21 there was an actual decrease of about 3 per cent. The 8 per cent increase during 1921-31 was lower than the all-India average of 10.6 per cent. After that the pendulum swung to the other extreme and the all-India rate was left far behind. Even if the supposed increase of 22.9 per cent during 1931-41 is ascribed to inflation from political and communal motives there is no ambiguity about the 13 per cent

*Kingsley Davis—"Population in India and Pakistan", p. 28.

increase during 1941-51 and any reduction in 1931-41 figures to adjust the imbalance caused by deliberate inflation will automatically increase the percentage of the latter year so that the percentage increase of the two decades taken together will remain unaffected. Then came what can only be described as the population explosion of 1961—the unprecedented increase within a decade by 32.9 per cent. Instead of there being two successive decades of growth there have been four without a break—the last one being also the most decisive. The possible doubling of population in 58 years after 1947 which Kingsley Davis apprehended in one place and discounted in another actually took place in West Bengal in less than 40 years between 1921 and 1961. What promise of future increase does it indicate? How long can this region keep up this dangerous demographic pace and still support the population? Is the unprecedented increase of 1961, like the large increase in Great Britain after each of the two World Wars, only a flash in the pan, born of the robust optimism of newly won freedom as one witness has said, or is it likely to last and add many hundred millions more before slackening off the rate of growth? The answer to none of these questions is easy.

Natural Increase

5.11. There are only two possible ways in which the population of a country or state may increase; natural increase and migration. This is simple enough but the trouble starts as soon as one tries to probe into the causes. Leaving migration aside for the moment it is obvious that natural increase takes place by an excess of birth over death and the rate of growth is equal to the difference between the two rates. The width of the gap and the consequent increase in the growth rate may be due either to a marked increase in the birth rate or to a marked fall in the death rate or to a combination of the two. There is no doubt that in West Bengal, as in the rest of India, this gap has been widening for some time past and shows no sign of abatement. For India as a whole there may have been a slight fall in the birth rate in recent years though death rate must have fallen further still; but while the second is true of West Bengal there is some doubt as to whether the first is. In fact, the statistics of the Health Directorate given below show a slight increase in the birth rate and a remarkable fall in the death rate per thousand of people during the last twelve years* :-

	1948	1949	1950	1951	1952	1953
Birth rate	21.3	22.4	20.3	21.9	23.1	22.7
Death rate	18.1	17.4	16.7	13.0	10.8	10.2
Excess of birth over death	3.2	5.0	3.6	9.0	12.2	12.5

	1954	1955	1956	1957	1959	1960
Birth rate	23.0	25.5	25.2	22.4	25.0	22.5
Death rate	9.3	8.9	8.8	9.9	8.1	8.5
Excess of birth over death	13.8	16.6	16.4	12.5	16.9	14.0

5.12. These figures seem too good to be true. In Great Britain with its healthier climate, higher standard of life, and a greatly superior standard of public health administration the fall in the death rate was from 30 to 12 per thousand between 1780 and 1960 while birth rate fell from 35 to 15 per thousand between 1880 and 1930, rising again to 16 per thousand in the middle fifties. According to

*Statistical Abstract 1958; Statistical Handbook 1961.

Dr. S. Chandrasekhara the average birth rate for India was estimated to be 39 per thousand in 1941-50 and did not register any serious decline in later years, while the average death rate declined from 42.6 per thousand in 1900 to 21.6 in 1962.* In the face of this, a death rate varying from 10 to 8 per thousand in West Bengal during the last decade, which is widely divergent from the all-India average rate, seems incredible, particularly as a certain number of deaths must occur every year through old age and natural decay however high may be the standard of public health and sanitation to keep diseases in check. In fact, the vital statistics of India have always been considered as notoriously unreliable because of the agency of the rural police through which they are collected, and in his painstaking and careful study of the population problem of India and Pakistan Kingsley Davis came to the conclusion that the amount of under-registration of deaths exceeded 30 per cent at all times and occasionally rose even to 50 per cent, while the under-registration in the case of births seemed to be approximately 33 per cent.† But even if the vital statistics of birth and death cannot be taken at their face value they undoubtedly show a trend which is very probably in accord with facts. In West Bengal the birth rate during the last decade may have shown a slightly upward curve and death rate a downward curve though the slope of the decline in the case of the latter may not be as sharp as the departmental statistics would have us believe.

5.13. What are the causes of these high birth rates and on what does fertility depend? Frankly, "in spite of all the work that has been done on the subject, we do not altogether know". The limiting factors at the upper level are, of course, the number of potential mothers which is taken to include all women of the age group of 20 to 45 or 50 and the possible maximum of one child per year during the reproductive age, but there are other factors imposing further limitations. Seldom do women bear children to the full limit of their capacities and, according to Colin Clark, even the average Victorian family did not consist of more than six children though this is contrary to popular belief which would place it at almost double the figure. The unpredictable sterility of some people, the voluntary acceptance of celibacy by some men, and the occasional enforced spinsterhood of some women have so slight an effect on population as to be almost negligible; but the taboo on widow remarriage and the advancing age of marriage, both of boys and girls, for economic reasons may have something to do with the net result. According to Kingsley Davis, this institutional check through the banning of widow remarriage is the strongest single factor which has enabled Muslims to multiply faster than the Hindus. Apart from voluntary restraint, exercised either through artificial methods or otherwise, it is doubtful if there is any other means of keeping births within reasonable limits. Some demographers assert a little dogmatically that an agricultural economy always favours fertility while an industrial economy tends to keep it down and they prescribe rapid industrialisation as a remedy for excessive population growth. Though industrialisation does have some effect it is doubtful if the check occurs at all quickly or automatically.** In France, among a settled peasant population owning their own farms, the birth rate never exceeded 25 per thousand during the greater part of the 19th century because the parents did not want their farms to be fragmented after their death, leaving to each child an uneconomic holding on which to earn a bare subsistence; while the American agrarian population could increase as rapidly as it did in the pioneering days because the careers for the children provided themselves "out West" without any responsibility on the part of the parents. Agrarian life therefore had

*First lecture delivered at the Calcutta Information Centre on June 1, 1962.

†Kingsley Davis--*The population of India and Pakistan*", p. 34 & 69.

**J. R. Hicks--*Op. cit.*, p. 68. It. note.

one effect in one country and a different one in another. On the other hand, in the early years of the Industrial Revolution England experienced a rapid increase in population because children became wage-earners at an early age and it caused parents very little trouble to ensure that their children had as good a prospect in life as they themselves had. The first dip in the English birth rate was suspiciously contemporaneous with the early Factory Acts which closed the door of industrial employment to children below the age of 14. An agrarian or an industrial life does not therefore bring about any direct physiological change to augment or depress the fertility rate. Despite Spengler, city life does not automatically induce sterility but works more subtly and indirectly by bringing about a change in the psychology on the people which exercises a restraining influence on reckless propagation of the species. Even the strongest advocates of rapid industrialisation as a means of checking population growth can do no more than emphasise those elements of modernism which are most likely to depress fertility indirectly, such as, education, urbanisation, multifamily dwellings, commercial recreation and conspicuous consumption.* The high birth rate in rural areas (if it be a fact, though informed opinion is inclined to think that the rate is about equal in rural and urban areas) may well be due to the fact that children are helping hands to the cultivator from their young age and save the wages of hired labour; while in cities not only is the need (as well as the opportunity) of sublimation or sterilisation greater, but children, instead of being economically helpful, have to be brought up and fed till they are of age, thus diverting a part of the parents' income from personal consumption to the requirements of the nursery and the adolescent teen-ager. An increase in the standard of living may involve a decision among young married couples between having a baby and buying a baby car.

5.14. As against this tendency to increasing birth rate, the control of the death rate has been remarkably successful. Maternal mortality at child birth has been brought down through better ante-natal care and maternity service, and there is a considerable reduction in infant mortality. The factors which once caused an increase in death rate in the earlier centuries were wars, famines and epidemic diseases. War and brigandage, particularly internecine conflicts among innumerable kings, chiefs and feudal overlords, have long disappeared from the Indian scene.† Famines to which, owing to the geographical and climatic conditions of its agricultural economy dependent on seasonal and variable rainfall, India is so peculiarly susceptible have also been fewer and fewer because the conditioning factors which intensified the incidence of famine are amenable to control. These conditioning factors used to be the absence of a food surplus to tide over a bad time, an insufficient or non-existent transport system, commercial and profit-seeking capitalism which by making price dependent upon supply and demand exacerbated and underlined the shortage, absence of irrigation facilities of drainage, and a system of land tenure which afforded no incentive either to landlord or tenant for adoption of better farming methods, the first because he was quite content with what he got for practically little effort and had lost his sense of social obligation to save the land from deterioration, the second because the probable increase in tax demands would leave only a fraction of the extra yield in his hands. All these are being gradually remedied or brought under control. Though the great Bengal Famine of 1943 "is a sharp reminder of how precarious is the food supply and how easily even a slight economic and political dislocation can tip the scale and lead to mass-starvation", famines as a check to population growth may be presumed to be a thing of the past.

*Kingsley Davis--"Population of India and Pakistan", p. 229.

†This was written before the Sino-Indian war at NEFA and Ladak broke out.

5.15. Last come epidemics and other diseases where the success has been even more spectacular because of the use which it has been possible to make of the latest researches in medical science in the advanced countries of the world in addition to the researches made in this country. Many of the diseases which used to break out in the late 19th and early 20th century and take a heavy toll of human life can now be contained or made to yield to treatment, with the result that their virulence has subsided and the incidence of mortality kept within reasonable proportions. Plague which created havoc for some years after being introduced into India in 1896 has very largely disappeared "perhaps due to the acquisition of immunity by the rat", and occasional flare-ups can be vigorously tackled as was done in Calcutta in 1948-49. Small-pox and cholera, the two other fell diseases which account for heavy loss of life whenever they break out in epidemic form, have not the same happy sequel though the position has considerably improved. With education spreading more rapidly and mass vaccination replacing superstitious belief in the efficacy of a particular propitiatory form of worship the first may be brought under control very soon, but cholera may prove a harder nut to crack because of the administrative and budgetary difficulty of providing better environmental hygiene and protected water supply to rural as well as to urban areas. Kala-azar has virtually disappeared and D.D.T. may yet give the "coup de grace" to malaria in the worst affected districts. Other diseases like typhoid, dysentery and beriberi etc. had benefited not by the organisation of methods that prevent but by the invention of drugs that cure. The diseases that one hears of most are the diseases of malnutrition and advanced age, viz. T. B., coronary attacks and cancer, and the rate at which T.B. is spreading into villages, previously immune from it, is somewhat alarming. But "a reduction in mortality has repercussions on the entire bio-social situation", for a drastic decline in death would mean a drastic increase in population in an already densely settled region with the result that the one cheap short-cuts would become more expensive. Unless changes are soon made in the economic organisation and in the social institutions there would be a danger that famine, epidemic disease, and malnutrition would once again stalk the land and undo what a temporary miracle has done. A continued low death rate without a modern economy and civilised fertility is inconceivable.* It is because of this that in advocating family planning seriously Dr. S. Chandrasekhara went to the length of suggesting compulsory vasectomy for every father after the birth of his third child.† This may be too drastic a solution but of the need of planned parenthood in order to keep the natural increase within reasonable proportion there should not be any dispute. A dogmatic assertion that the oriental is too conservative or fatalistic to adopt restriction of child birth as a principle even when the benefit has been clearly explained is quite incorrect. The spectacular drop in birth rate in recent years in Japan (7 per thousand), due to a realisation on a national scale that the country has reached the maximum population it can support, should convince one that what has been done in Japan may be repeated in India.

5.16. There is a strong probability that mere biological increase would go on at a fairly fast rate in West Bengal in the next few decades unless family planning makes much greater headway than it has been able to do as yet. This possibility has been emphasised in one of the replies on the strength of the assumption that the bulge in the population pyramid is now moving into the age-groups which comprise the reproductive age for women so that there will be many more potential mothers than previously in the coming decades. When the population of a country is divided into age groups and arranged in slabs with the lowest age group forming the base and the

*Kingsley Davis--"Population of India and Pakistan", p. 61.

†Second lecture delivered at the Calcutta Information Centre, June 2, 1962.

next age-groups forming the successive tiers one above the other and with males and females arranged on either side of a central line, we get a diagram (sometimes called a fir-tree diagram) which looks something like a pyramid whose outer line may have occasional bulges or constrictions according as the size of population in any age-group is greater or smaller than would have been the case if the birth-rate and death-rate had been exactly uniform throughout the years. As time goes on these bulges (or constrictions) move upwards with the result that if at any time the bulge was larger below the age-group of 25, mere passage of time would bring it up and for nearly three decades there will be more women in the child-bearing age than was the case formerly, with the possibility of a larger rate of biological increase as long as this bulge does not move further up and goes beyond the age of reproduction. We have not got the census figures of 1961 arranged in age groups and cannot say whether the assumption of that witness is correct. The Census Report of 1951 which gives the age pyramid diagrams from 1901 to 1951 does not show any bulge during any of these years and it is not possible to deduce from them whether during the coming decades there will be any such bulge at the age groups 25-50. If there is, the possibility of a larger biological increase in the next few decades cannot be denied.

Migration

5.17. But apart from such increase, the problem of population in West Bengal is accentuated by another adventitious factor viz. migration. For the population of India as a whole, migration from outside is not a significant factor but for West Bengal it is very much so. No other state seems to be surrounded by so many states whose economy is unable to cope with their fast growing population and none offers so many attractions to job-hungry people from across the border or is so hospitable to their reception. An analysis of its causes will show that from the beginning and up to the middle forties they have been purely economic in character, but to this has now been added a political factor of stupendous importance—the birth of Pakistan and the partition of Bengal on the basis of religion—which is bound to be regarded in future as the Great Divide and the prelude to a new chapter in Indian history whose pages are still to be unrolled. Into the wisdom or the inevitability of this step we may not enter but the effect of partition has such a direct bearing on the population problem of this state that a passing reference to it cannot be avoided. The partition of the Punjab and the mass slaughter that followed it made at least one thing clear, viz. that an interchange of population was the only logical corollary to the division of India in so far as it affected that province. After that the probable volume of migration both ways was a matter of simple arithmetic. So far as Bengal was concerned, the containment of communal flare-ups in one or two districts and an inability or unwillingness to take a long view, born probably of wishful thinking, was responsible for the unpreparedness in which the central and the state governments were caught when the inevitable flood began to come in successive waves. The official figure of displaced persons up to the end of April 1962 has been given by the Department of Refugee Rehabilitation as 3,181,736 but the actual number who came away (including those who registered themselves as refugees and those who did not) must be very much larger. The figures given by the Chief Minister of West Bengal in the Council debate on 6th August 1962 are more likely to be in accord with facts than the departmental figures supplied to us. According to him, there were 13.5 million Hindus in East Bengal at the time of partition of whom 4.5 millions have come away leaving about 9 millions behind, and their number, according to the latest census of 1961, has now risen to 10 millions.* It would

* As reported in the Statesman, Calcutta edition, August 7, 1962.

be unrealistic to think that things have settled down. The recent flight of Santhals from Rajshahi is a rude reminder that such complacency is unwarranted. On this and a few other points we make no excuse for quoting a long extract from the written memorandum of a very senior officer of West Bengal of wide experience who is in direct touch with the problem and is therefore able to bring the actual position sharply into relief. "Immigration in recent years has been from West Pakistan, East Pakistan and Tibet. To some extent, illegal immigration of Muslims from East Pakistan has been taking place all the time. So far as West Pakistan and Tibet are concerned, it is not likely that there would be any further large-scale immigration. Attention has at last been focussed on illegal immigration of East Pakistani Muslims in view of its possible and eventual repercussions on the problems of the security of the country. It may be expected that such immigration would not be allowed in the future to take place on any considerable scale. An explosive situation persists, however, even after 15 years of partition and independence, in so far as the question of a possible avalanche of immigrants consisting of East Pakistan Hindus is concerned. There are still 9 millions of them on the other side of the border. They are being consistently pushed out as a matter of policy by the Pakistan Government who are afraid of Hindu-Muslim solidarity and linguistic and cultural ties of the population of East Pakistan with that of West Bengal. The history of the last 15 years can leave no doubt that if it suits the Pakistan Government, they will push out all the 9 million Hindus from East Pakistan. The Government of India may continue to follow a policy of discouraging their immigration into West Bengal and India, but the whip-hand in this matter is with Pakistan, which would certainly not care a whit for the administrative, economic or political difficulties of India in this matter. Any long-term planning of population in West Bengal should therefore take a realistic view of the situation and make emergency provisions to meet such an eventual avalanche of immigration if and when it bursts upon us. To blink at and ignore such an unpleasant possibility may end in endless human suffering and utter confusion which could bring about a disaster of the first magnitude." The desire of the Hindus of East Pakistan to seek asylum in India is perfectly legitimate. Nobody has a right to sign away the nationality of a citizen without his consent and without giving him an opportunity to elect the state he wants to belong to. Such a right of choice does not expire by efflux of time when no time limit was originally fixed and it would be a matter of lasting discredit if the right be now denied. The possibility of adding another 9 or 10 millions to this over-crowded state makes the problem of density very much more acute.

5.18. Apart, however, from this immigration whose primary cause is political, there is another inconspicuous stream of surreptitious or disguised immigration whose size or volume it is impossible to know because it does not advertise itself but is camouflaged as normal movement—we mean the immigration of Muslims from Pakistan which has been known to be going on for years across the border but which has been highlighted only recently in the Assembly debates and in the Chief Secretaries' Conference which took place early in August 1962. Whether the cause is political or economic it is difficult to say; probably it is a mixture of both. The size of such immigration into West Bengal is not large enough yet to have much repercussion on density, but if the thin end of the wedge becomes a precursor to a more massive, if insidious, penetration it may become the Achilles' heel when the security of the country is threatened from outside.

5.19. The other half of the immigrant population is driven into this state for economic causes and of this, barring a trickle from Nepal, Tibet and other states of the

outside world, the largest contribution has been from the states of the Indian Union. The census figures of 1961 are unfortunately not available at the time this is being written but the analysis given in the Census Report of 1951 is hardly likely to be distorted appreciably by anything that has happened during the last decade. What follows is mostly taken from that report except where a contrary opinion is expressed.*

5.20. Of the several questions that arise in this connection three are of fundamental importance—the state where the immigrants come from, the places where they go to, and the pull which attracts them here. Other incidental matters are their age groups, sex composition, educational standard and the kind of work they engage themselves in etc.

5.21. In 1951 the total number of such migrants to West Bengal was approximately 1.9 million and the number of emigrants from West Bengal .3 million. There is no way of ascertaining how many of these .3 million emigrants really belonged to West Bengal and spoke the Bengali language and how many were fortuitous in the sense that they were born to parents of other states who temporarily resided in this state on business and are now going away. It is quite likely that quite a sizable portion of these .3 million would answer to this latter description. Of the in-migrants the largest contingent (1.1 million) came from Bihar, followed very far behind by Uttar Pradesh (.3 million) and Orissa (.2 million), while Rajasthan, Madras (before separation of Andhra) and Punjab contributed modest totals of 56, 52 and 38 thousands respectively. The contribution of Madhya Pradesh and Madhya Bharat was not negligible but how far they would now redistribute themselves after states reorganisation, is not clear. Assam's share was about 20,000 but as about 23,000 emigrated to it from West Bengal the two states may be said to be more or less quits. The migrants therefore constituted about 7.6 per cent of the total population and of them as much as 5.5 per cent came from the adjacent states and 2.1 per cent came from remoter areas.

5.22. If the reception areas be divided into four zones (northern agricultural, western agricultural, plantation, and industrial) as was done in the Census Report of 1951 the sources of the most important streams of immigration and their destinations may be summarised as follows :—

(1) One small stream consisting mostly of tribals from Santhal Parganas and Purnea came to the northern agricultural zone and filled up the vacant and comparatively infertile land of the Barind area of Malda, West Dinajpur and Cooch Behar as well as the agricultural lands of Jalpaiguri and Darjeeling which the Khasmahal was anxious to settle as quickly as possible without waiting for the natural increase of the indigenous population to fill up the gap in course of time.

* The census definition of migration must be borne in mind to avoid confusion. The word has a geographical, not an ethnic or linguistic, significance. Anybody born outside the borders of this state, no matter whether the parents were Bengali-speaking and the birth place a fortuitous accident, would be a migrant in West Bengal. Per contra, nobody born within the state, regardless of whether the parents speak a language other than Bengali and are themselves a permanent resident of another state, would be a migrant in West Bengal. This is not perfectly satisfactory as it is contrary to the popular view of who should be considered to be a "son of the soil". Moreover, as D.V. Bogue and K.C. Zachariah say in their interesting paper "Urbanisation and Migration in India" which is Chapter II of 'India's Urban Future' 1962, published by the California University Press, statistics about the state of birth have a built-in bias towards under-stating the volume of movement, which probably means, although the authors do not explain it in so many words, that false declarations of the state of birth are frequently made from fear of discrimination. Dr. S. N. Sen, in his book 'The City of Calcutta', defines a migrant as one who came to Calcutta after 1934 but this seem, to stand on even slenderer foundation though he has given reasons as to why he chose that particular dead-line.

(2) Another stream, also mainly consisting of tribals from Santhal Parganas, Manbhum and Singhbhum in Bihar, and Mayurbhanja and Balasore in Orissa, came to the western agricultural zone of Birbhum, Bankura, Murshidabad and Midnapur, originally as agricultural labourers and then gradually rising to the status of share-croppers and even ryots, though the last was very difficult owing to the tenacity with which the agriculturist farmer clung to his tenant's rights even when his own human resources were unequal to the task of cultivating the land on his own. Some of these immigrants also went to work in the mines or related industries. In fact, it would be a mistake to suppose that all the migrants into the agricultural zones crowded into rural areas to engage themselves in agricultural activity, for about a third, including almost all who came from remoter states, went to towns to take up non-agricultural urban occupations.

(3) The plantation zone attracted the third stream which came from Chotanagpur, Madhya Pradesh and Assam to work in the tea gardens of Jalpaiguri, while Darjeeling drew most of its plantation labour from Nepal and Bhutan. The total number of migrants into this zone was 1.6 lakhs in 1951 of which as much as 1.3 lakhs was classed as rural, which is not surprising in view of the fact that tea plantation, however industrial it may be in its process of production, is based on agriculture and carried on in a rural setting. Into this zone has penetrated a sizable number of migrants from Rajasthan who started in small business and later blossomed into large land-owners through the intricate working of the money-lending profession.

(4) The last and the most important stream came from Western Bihar and Eastern Uttar Pradesh, Orissa, Rajasthan, Maharashtra, Gujarat, Punjab, Andhra Pradesh, Madras and other south Indian states to fill up the industrial and commercial zone of Burdwan, Hooghly, Howrah, 24-Parganas and Calcutta. The total number of migrants into this zone in 1951 was about 14.8 lakhs of which as much as 12.4 lakhs went to urban areas while even those who went to rural areas generally engaged themselves in urban pursuits by commuting daily to the industrial town in the vicinity. As was the case in the two agricultural zones, it was the adjacent states which largely contributed to whatever proportion went to rural areas for agricultural work, the remoter states exporting almost all their emigrants to urban areas or for urban employment.

5.23. Taking them according to their states of origin it may generally be said that migrants from Bihar are to be found all over the state among agricultural as well as non-agricultural population; migrants from Uttar Pradesh are to be found in industrial zones alone; migrants from Rajasthan are concentrated mostly in industrial and plantation zones with large landholding and proprietary interests in the latter, though the ubiquitous Marwari is found also in all districts where there is indigenous banking, pawning, mortgage and trade; migrants from Madras and Andhra are concentrated mainly in the industrial zones, the railway settlements, and the plantations; migrants from Punjab are to be found in industrial areas, railway colonies and wherever a sizable road transport service exists; migrants from Madhya Pradesh trekked to the plantations; and the rest are to be found primarily in Calcutta and Howrah.

5.24. One noticeable feature of this migration is that it is continuously on the increase. The percentage of migrants to the total population has risen consistently during the decades from 6.6 per cent in 1901 to 9.5 per cent in 1941 with only a very slight dip in 1931. The increase occurred all along the line (with the exception of Birbhum, Murshidabad and the North Bengal districts) and was not confined to the industrial zone. It rose to the abnormally high figure of 18.5 per cent in 1951 due to the

large influx of displaced persons from East Pakistan and, "prima facie," it is a shattering thought that about a fifth of the entire population of the state have come from outside. If, as we think, the displaced persons from East Pakistan have a moral claim to be considered the natural born citizens of this state a little less than a tenth of the population of the West Bengal may be said to have been augmented by migration from the neighbouring states. The consequences which flow from such enormous additions from outside are somewhat disquieting to contemplate. The immigrants do not represent a normal cross-section of society but are largely masculine in composition, have a preponderance of the age group of 15 to 54, and are mostly concentrated in urban areas. In 1951, while about 25 per cent of the total population of this state was urban and the rest rural, the proportion was almost completely reversed among migrants; for out of their total number, about 71.4 per cent—and, if only male migrants are considered, about 74.8 per cent—were settled in towns and cities. Among migrants, the age group from 15 to 54 constituted 79 per cent of the total while among the general population of the state that age group constituted only 57.4 per cent. If urban areas alone are considered the proportion of migrants in this age group rose to 85 per cent. A far greater proportion among the migrants thus belong to the employable age and are capable of earning their living than is the case with the natural born population. The disparity in the number of males and females is also striking. While among the natural born population the number of females for 1000 men was 920, that among the migrants was in the region of 430, varying slightly in urban and rural areas and among immigrants from adjacent and remoter states, each of the latter (i.e. rural areas and remoter states) having a slightly higher proportion of females than the former. But this relative preponderance of males and exiguity of females is gradually giving way and more and more women are now coming even from adjacent states into West Bengal. Comparing the total urbanward migration of persons of age 10 and above in 1941-1951 Messrs. Bogue and Zachariah say in the article already referred to that although on the whole more males moved into urban areas than females, the rate of increase of migration of females has, during this decade, exceeded that of males. "The largest difference is observed in West Bengal where the rate of females is higher than the correspondig male rate by as much as 10 per cent. The evidence suggests that the first phase of rapid rural to urban migration was predominantly masculine in composition, but now that channels and connections have been established it is coming to have a more balanced sex composition." Either way the situation is pregnant with danger. A predominantly masculine immigrant population, mostly in the prime of life, married but living away from their womenfolk, is exposed to temptations which may lead to neurosis and instability. At any rate, as they do not contemplate permanent residence in this state, their income is largely remitted home and lost to the state's capital forming assets. An increase in the rate of female immigration will no doubt provide them with a home life and reduce instability or neurosis but only at the risk of increasing urban congestion a great deal further.

5.25. As a result of this urban concentration of the immigrant population and the predominance of the 15-54 age group, a disproportionately large volume of non-agricultural occupation is held by them. In 1951, they filled 18.3 per cent of industrial jobs, 14.4 per cent of commercial jobs, 30.1 per cent of jobs in the transport industry and 11.5 per cent of the services and professions in West Bengal taken as a whole. In the industrial zone (Burdwan, Hooghly, Howrah, Calcutta and 24 Parganas) the proportion was higher still viz. 22, 17.2, 32.1 and 14.5 per cent respectively. For a group which constituted a little less than 8 per cent of the total population such a large hold on all available openings in non-agricultural occupation is remarkable. Their stranglehold in the Calcutta industrial area is much stronger and on the strength

of the figures given in Census Paper No. IV (1955) Messrs. Bogue and Zachariah say that as much as 63 per cent of the non-agricultural occupations of that region were held by migrants from other states, only 30 per cent by people born in the city, and the balance of 7 per cent by people born within the state but outside Calcutta. In a large number of industries and services as much as 75 per cent of the employees are migrants, manning not merely the jute and cotton mills, dairy farms, sanitary and plumbing work, food processing industries, leather works, brick kilns, transport services etc. but also doing the humbler jobs of porters, cobblers, milkmen, carters, boatmen, cooks, policemen, durwans, peons, sweepers, rickshaw pullers, thelawallahs etc. The problem created by these migrants is not, as the Census Report of 1951 says, their enjoyment of "quite a big share of the state's cream of amenities by way of municipal services, good roads, good houses, water, electricity, public health service, education, hospitals, sewerage and many other blessings peculiar to town life in India"* but the fact that by monopolising so many of the industrial jobs and services from beforehand and pushing forward the claims of their close relations or co-villagers whenever vacancies occur, they are forcing the people born in the state to take to the unproductive parasitic work of petty trade where they earn a precarious living (if they can) by filching the custom or clientele of a fellow trader who is almost as impecunious as he. Of the so-called cream of civic services mentioned in the Census Report of 1951 precious little is available to the slum dwellers or those who sleep on the pavements but they compete with and displace the natural born population from manual labour by living on a low standard and submitting to hardships which the natural born citizen cannot adjust himself to very easily. Far from enjoying the civic services it is probably more correct to say, as Bogue and Zachariah observe, that a disproportionately large number of migrants are working at a low status and on lower pay in unskilled labourers' jobs and that as population pressure increases the rural migrant to the larger cities is forced to bear hardships and undergo sufferings to a much greater extent than the villager who stays behind or the city dweller who is already there from before.

5.26. But however much one may sympathise with the hard conditions they put up with, such sub marginal living is a menace to the city's health in various ways and a stumbling block to the natural born citizen who wants to be absorbed in skilled or unskilled work. Whatever work they do they are a link between their native home and their place of work. Family and village ties are sufficiently strong to create an obligation upon the successful migrants to help sponsor new entrants into the city so that once a migrant gets a footing in any industry a channel is formally established for further inflow from his district of origin or from neighbouring districts with the result that after a time the bulk of the labour force, with the support of the union behind it, can resist infiltration from the natural born population of the state. This is the Nemesis which has overtaken a people whose potential entrepreneurial classes were lured by the prestige of land ownership and learned professions from the humdrum but infinitely more paying work of running businesses or industries and whose potential workers, so long as they could scratch a living out of land, did not like to exchange the comparative freedom and ease of sub-marginal rural life for the hard and monotonous work in mills and factories. It is perhaps neither possible nor desirable for any one of the states of the Indian Union to close the gates of employment to permanent residents of other states merely on the ground of their place of origin.†

* Census Report, 1951, West Bengal & Sikkim, Part IA, p. 311-12.

† The statement in this broad form is perhaps not correct. In a long and illuminating article on 'The Social and Cultural life of Calcutta' published in the Silver Jubilee volume of *The Geographical Review of India* (Dec 1958) Prof. Nirmal

But the question has a direct bearing on population for if the natural increase goes on and the flow of immigration continues unabated the time will soon come when there will be hardly any standing room for everybody in the habitable areas of this state. We reject the idea of a legislation banning such immigration and doubt whether such a legislation would be constitutionally valid, but two perfectly reasonable and legitimate steps may be taken. The employment in industries in all grades should be on merits unprejudiced by any bias against the sons of the soil and uninfluenced by insidious pressure of the existing labour force within any particular factory. Other things being equal, a strong case may even be made to give preference to the permanent inhabitants of the state because to do otherwise would be to increase the density of an already congested state. Secondly, immediate steps should be taken to industrialise the states whence these migrants come so that their outward flow may stop and some may actually be sucked back. The Census Report of 1951 says that industrial development in Uttar Pradesh has already led to a decline of immigration from that state. The demand often made to site some of the big Central Government offices and public sector industries in this overcrowded state seems unwise unless there is a reasonable assurance that the bulk of the jobs will be held by permanent residents of the state without bringing a fresh influx from outside.

Distribution of population

5.27. Owing to the uneven distribution of population over the surface of the land area it is necessary to have an idea not merely of the average density but also of how thickly or thinly the population is spread in different parts of the state. Topography and terrain, soil fertility or barrenness, bad drainage and the risk of flooding, industrial and commercial concentration etc. account for such varying density although there may be many other factors. Further changes depend upon whether the district has already reached the optimum population it can support or whether it still contains undeveloped areas which, on being opened up, afford room for expansion. Some idea of the varying density may be had from the following figures though a dot map, which we are unable to provide, would have made the impression much more graphic. The National Atlas Organisation has prepared Population Maps of Lower Bengal but they are based on the 1951 census and may not represent the correct position to day.

K. Bose has traced the genesis of two clauses in Art. 16 of the Constitution of India which permits the introduction of provincialism in services and employments in a state with the blessings of no less a person than Dr. Rajendra Prasad. Presiding at a Sub-committee set up by the Working Committee of the Indian National Congress in 1939 to consider the claims of the people of any particular province for a larger share in the public services and other facilities within the province he said in his Report that "it is neither possible nor wise to ignore these demands and it must be recognised that in regard to services and like matters the people of a province have a certain claim which cannot be overlooked". This found expression in clause (3) of Art. 16 which enabled Parliament to prescribe prior residence for an undefined period as a condition of eligibility to appointment under the state or local authority or under any other authority, and in clause (4) which enabled the state (not, be it noted, the Parliament) to reserve appointments and posts in favour of any backward classes of citizens which, in the opinion of the state, are not adequately represented in the services under the state. Prof. Bose concludes that this had ominous potentialities so far as the economic advancement of the country was concerned, and that if there is a growth of class antagonism or even competition for favoured treatment within the same economic class there was grave danger in the absence of a sufficiently expanding economy that these antagonisms would flow along 'communal' lines of one kind or another. (pp.33-35). By an irony of circumstances, the discrimination here is not in favour of the people of the state by the administration but against them by a combination of capital and labour both of which have their geographical roots elsewhere.

5.29. Obviously, density changes from district to district and from decade to decade and the Census Report of 1951 has shown such changes with a wealth of detail not merely for the districts as a whole but also separately for each police station within the district and for rural or urban areas. With the additional information supplied by the census of 1961 the present density as well as the change in the trend in the last decennial period will appear from the following figures :—

District	DENSITY (PERSONS PER SQ. MILE)			PERCENTAGE IN- CREASE IN DENSITY	
	Density per sq. mile 1951 census	Density per sq. m. calculated with 1951 population figs. of Districts having been recast accord- ing to the bounda- ries as in 1961	Density per sq. mile 1961 census	1901-51	1951-61
1	2a	2b	2c	3a	3b
Calcutta	73,858	67,886	73,642	176.7	8.5
Howrah	2,877	2,802	3,545	89.5	26.5
Hooghly	1,286	1,319	1,834	48.2	39.1
Murshidabad	828	834	1,113	29.7	33.5
24-Parganas	817	839	1,181	113.8	40.8
Burdwan	810	806	1,135	43.4	40.7
Nadia	759	756	1,131	48.1	49.7
Malda	674	652	850	55.3	30.3
Midnapur	639	638	825	20.4	29.2
Birbhum	612	607	823	17.6	35.5
West Dinajpur	520	477	645	57.8	35.2
Cooch Behar	507	520	791	18.4	51.9
Bankura	498	497	627	18.2	26.2
Jalpaiguri	385	379	564	67.8	48.7
Darjeeling	371	396	538	78.7	35.9
Purulia	---	---	563	---	---

5.29. Some of the districts (Birbhum, Bankura, Cooch Behar, Midnapur and Murshidabad) showed a rather slow rate of progress during the first half of this century though during the last decade three of them (Cooch Behar, Murshidabad and Birbhum) seem to be in a hurry to make up for lost time. Cooch Behar's abnormal increase must be due to the influx of refugees who seem to have moved "en masse" either into the border districts or into Calcutta and its purlieus. Calcutta seems on the verge of reaching saturation point, a paltry 9 per cent increase during the last decade being insignificant in comparison with the 85 per cent increase during 1931-41 and 21 per cent increase in the decade following. Howrah has mercifully shown a slight slackening off though it is difficult to say whether this has come to stay. In the table given above, the 1951 figures were arranged in descending order of density so that it could be seen at a glance what were the more overcrowded districts. The figures of 1961 show that that order has been more or less preserved subject to the exception of Murshidabad which has had to step down from the fourth place to the seventh and West Dinajpur which had to yield ground to Cooch Behar. Some of the districts which were low in the order of density (Darjeeling, Jalpaiguri and Cooch Behar) have shown quite extraordinary increase during the last decade but the industrial districts of 24-Parganas, Burdwan and Hooghly did even better; and in the case of 24-Parganas it should be

remembered that the vast and sparsely populated Sundarbans mask the very high density of the industrial areas of the district. The highest percentage increase after Cooch Behar was shown in the non-industrial district of Nadia which seems to exercise a peculiar attraction on the displaced Hindus of East Pakistan.

5.30. But as the Census Superintendent of 1951 said in his Report, the district average masks the extraordinary increase in density in comparatively small areas in preference to the bulk of the areas of the districts and these areas of extraordinarily rapid growth and high density show how selective a population is, when dislodged from traditional agriculture and squeezed out by pressure on land, in finding sustenance elsewhere. According to him, with the transfer to East Pakistan of the more fertile tracts which could support as much as 1000 people per sq.m., 500 persons are about the limit that the rural areas of West Bengal can support from agriculture, any excess beyond this "being either drawn off into other industrial or commercial enterprises or coming to brief end." The process of adjustment may be painful because of the understandable reluctance of people engaged in agriculture to give up substantial rights in land for other occupations, but the economic forces are inexorable and too strong to be resisted for long. "Midnapur provides the most forceful example of how density of population in rural tracts varies directly with the fertility of the soil, and how the onward march of an overwhelming density abruptly stops short along a sharp line from end to end where the soil changes its alluvial and fertile character and becomes suddenly rocky and laterite—like a sharp line of rain mark in a field up to which the clouds have shed their water and no further. Thus Midnapur sadar and Jhargram subdivisions have densities of less than 520 and 390 respectively to the sq.m. while Contai, Tamluk and Ghatal have densities of over 800." Similar examples are cited from Burdwan, Birbhum, Bankura, Nadia, Murshidabad, Malda and West Dinajpur to prove that the quality of the soil sets the limit to the density of rural population.

5.31. It is probable that this limit of 500 will have to be revised in view of the extraordinary growth of the last decade. The statement that neither agriculture nor the tea industry in the two districts of Jalpaiguri and Darjeeling can comfortably bear a greater pressure of density on the land will also need qualification in view of the very great population increase in those districts unless the accent is on the word 'comfortable' or unless his gloomy prophecy that the surplus population "comes to a brief end", is unhappily realised. But the general proposition is quite correct and in accord with the phenomenon of the city-ward migration all the world over. However much agriculture may be improved by scientific methods—in fact, the more scientific the method is the less is the number of men needed—it cannot give employment to more than a certain maximum and others must seek alternative jobs in non-agricultural occupations which are generally to be found in areas of the greatest urban concentration. That is why when population increases densities begin to increase much faster in urban non-agricultural areas than in agricultural or rural areas.

5.32. Four such zones of high density were distinguished in the Census Report of 1951 though one or two more may now be in the offing and find a place in the Census Report of 1961 when published. Each of these zones has a certain cohesion, a common pattern of production and life, and a unified network of transport and communication which give it a common demographic character. The first is the Asansol-Raniganj zone in Burdwan district (comprising the police stations of Salanpur, Kult, Hirapur, Asansol, Barwani, Raniganj, Jamuria and Ondal) and covering an area of 395 sq.m. The second is the Hooghly-Howrah zone along the west bank of Hooghly river, roughly about 50 miles long and 2.5 miles wide making a total of

126 sq.m. of which about three-fourths fall in Hooghly district and the rest in Howrah. The third is the Barrackpore-Calcutta-Budge Budge zone, roughly 55 miles long and 5 miles wide, covering about 276 sq.m. from Halisahar on the north to Budge Budge on the south. And lastly, there is the small railway settlement at Kharagpur covering only 13 sq.m. which, with the Indian Institute of Technology in close proximity, has potentialities for considerable future expansion, though one hopes that the Institute will be sufficiently segregated to enable its academic atmosphere to be helped and not swamped by such development. The Hooghly-Howrah zone and the Calcutta Industrial zone are together shown in the Census Report of 1951 to be covering an area of 402 sq.m., but this is because entire thanas have been taken into account regardless of whether industrialisation has affected only a part of these thanas. If attention is confined to the industrial belt alone where most of the people are congregated the area would necessarily be much less. Therefore, apart from the disparities of density exhibited by different districts, the much greater unevenness of population distribution will appear from the fact (1) that, according to the Census Report of 1951, the 61 industrial police stations in the three zones mentioned above (i.e. excluding Kharagpur) comprising 2.2 per cent of the total land area of the state contained 23.3 per cent of the population; and (2) that 104 police stations of which 26 are entirely rural, 17 had one non-industrial town within it, and the 61 industrial thanas mentioned in (1) above contained as much as 42.7 per cent of the state's entire population although they constituted only 13.4 per cent of West Bengal's land area. With the exception of 10, all the other police stations of the 105 mentioned above were within the 5 industrial districts Burdwan, Hooghly, Howrah, 24-Parganas and Calcutta which shows the tremendous overcrowding which these districts have in comparison with the other districts of West Bengal.

CHAPTER VI

The Progress of Urbanisation

6.1. The uneven distribution of density referred to in the last chapter will be clearer from the rate and extent of urbanisation that has been going on during the last half century, and an enquiry into why these have been the areas of greatest concentration may be rewarding. There is, it must be admitted, a slight arbitrariness in the distinction between town and country at least at the border line, for although city and country have been for many centuries the two most recognisable general types of human habitation, there is no sharp demarcation between the two so as to tell where the city ends and the country begins. What marks a town or a city from the sparser human settlements is its greater compactness which generates a need for certain common services and affords an opportunity to develop certain standards of culture or co-operative living. There is also, inevitably, an implied suggestion of a non-agricultural livelihood for the large majority of inhabitants, because a purely agricultural community, even under a reasonably advanced system of agriculture, requires about 1 sq. kilo meter of cultivable land to feed 200 people.* The degree of compactness necessary to confer the status of a town to a nucleated human settlement will of course vary and is different in different countries. The Scott Committee defined every compact grouping of over 1500 people as a town.† The minimum limit in France is 2000 and in U.S.A. 2500, while in Japan it is as high as 30000. The census authorities in India have laid down a minimum of 5000 people unless the area has already been recognised as a municipality. According to them all municipal areas and areas which have a total population of not less than 5000 (of which about three-fourths must derive their living from non-agricultural pursuits) and whose density is not less than 1000 per sq.m. are entitled to the status of a town provided they have some importance as a centre of trade, industry, distribution or administration. The definition is more or less in accord with the test which the Bengal Municipal Act, 1932, has laid down for qualifying as a municipal area (except that the minimum population may be 3000). and the action of the census authorities in giving urban status to a nucleated area may merely anticipate the action of the state government in recognising it later as a local municipal authority vested with power to administer the local services. A city is only an enlarged town having a population of more than 1,00,000. No doubt these definitions emphasise only the external feature of a town and ignore the more fundamental and marked contrast between rural and urban life; they do not take any account of the fact that the city "is a place where the diffused rays of many separate beams of life fall into focus". But as the quotation itself makes clear, external features are a much more practical basis of definition for statistical purposes than the more subtle but less measurable characteristics of urban life which can hardly be put into the form of a precise legal formula, still less applied to a given set of physical or functional developments.

Classification by size

6.2. This external feature also forms the basis of the six-fold census classification of cities and towns into:

I—Cities with population of over 1,00,000; II—towns with a population of 50,000 to 1,00,000; III—towns with a population of 20,000 to 50,000; IV—towns with a

* Colin Clark—Op.cit., p. 40.

† Report of the Committee on Land Utilisation in Rural Areas (1942), p. 2.

population of 10,000 to 20,000; V—towns with a population of 5,000 to 10,000; and VI—towns with a population of less than 5,000. The march of progress in this sphere during the last 50 years will appear from the following table* :—

		Number of towns				
		1921	1931	1941	1951	1961
Class I	....	2	2	3	7	12
Class II	....	4	2	10	14	17
Class III	....	23	21	28	27	50
Class IV	....	21	27	27	40	45
Class V	....	27	24	21	15	50
Class VI	....	8	14	10	11	12
Total—		85	90	99	114	186

6.3. The successive but gradual increase in the total number of towns and cities is worth noting as is the gain, upto 1951, of the larger cities at the expense of the smaller. The gain in number has generally been due to a gradual accretion of more people at a particular focal point by natural increase or migration and, very rarely, by the splitting up of one existing municipality into two; while, occasionally, a town like Beldanga, which somehow kept its head above water upto 1941 and then fell from grace in 1951 on account of a decline in its population through the loss of its sugar mill, re-emerged as a town in 1961 by again rising above the 5,000 population mark. Cities have gone on from strength to strength at every successive census, the reduction of one by the merger of Tollygunge in Calcutta being more than made up in 1961 by the promotion of six (Baranagar, Kamarhati, South Dum Dum, Bally, Burdwan and Asansol) into class I, while there are two others (Panihati and Serampore) which are making a strong bid for inclusion in the very near future.

6.4. The 1961 figures disclose an extraordinary increase of 66 urban areas over the figures of 1951† which contrasts strangely with the more gradual increase of the previous decennial periods. Only Darjeeling, Cooch Behar, Malda, Bankura and Purulia have not added to the number of towns but all others have, the increase in the case of Howrah being as high as 20 and of 24-Parganas‡ 17. 24-Parganas has by now as many as 49 towns and cities and Howrah has 24. The other additions are 1 to Birbhum; 3 each to Midnapur, Murshidabad and West Dinajpur; 5 each to Hooghly, Nadia and Jalpaiguri; and 6 to Burdwan. These additions, suggested presumably because they have passed the minimum population mark, include 7 towns which have not yet reached that figure.

6.5. But it is not so much the number of towns and cities as the size of the population which is important for the purpose of measuring the extent of urbanisation and on this point the last decade shows some slight recession. The original tentative number of towns given by the Census Superintendent was 145 with a population which was just about 23 per cent of the estimated total population. Even with the addition of 41 more suggested towns the revised figures of total urban population come to a little over 8.5 millions which show only a slight rise above that percentage. The proportion of urban to total population which was 15 per cent in 1921, 16 per cent in 1931 and 24.88 per cent in 1951, now (i.e. in 1961) stands at 24.5 per cent, and even this near parity with the proportion of 1951 has been maintained with difficulty with the help of a large number of freshly added towns.

* Census Report of 1951, p.161; figures for 1961 are supplied by the present Superintendent of Census and indicate his revised proposals for bringing a large number of new areas under the definition of towns and cities.

†Because the 1951 figures in the above table do not include the six towns of Purulia.

It appears as if the old existing towns have not been able to keep pace with the accelerated growth of population by developing industries and other means of employment to absorb the proportionate increase.*

6.6. But although the progress of urbanisation has been slightly halted, the process of concentration in certain special zones has not. The 12 class I cities still contain 13 per cent of the total population and 55 per cent of the urban population. The class II and class III towns together contain about 8 per cent of the total population and 32 per cent of the urban population. Class IV towns contain a little less than 2 per cent of the total population and about 7 per cent of the urban population. The remaining two groups of towns contain about 6 per cent of the total urban population and a quite negligible fraction of the total population. A close analysis will show that while all the other districts (except Calcutta and Cooch Behar) have recorded a slight rise in the percentage of the urban population, the greatest increases have taken place in the five industrial districts which now contain over 80 per cent of the total urban population. Howrah (40%), 24-Parganas (32.5%), Hooghly (26%)—all have a higher proportion of urban population than the state average. Burdwan's proportion is 18%, Darjeeling's 23% and Nadia's 18%. Darjeeling's 23 per cent is easily explained by the fact that the nature of the terrain in three of its subdivisions and the economy of the district compel a congregation of people in its 4 towns rather than in its inhospitable mountains, and Nadia's 18 per cent is accounted for by the concentration of refugees in existing or newly created urban areas. The proportion of urban population in all the other districts varies from 7 to 9 per cent of the total population and only exceeds the proportion of 1951 by a very small margin as the following figures will show :—

	Proportion of urban to total population	
	1951	1961
Jalpaiguri	7.2	9
Cooch Behar	7.5	7
West Dinajpur	5.8	7.4
Malda	3.8	4
Murshidabad	7.9	8
Birbhum	6.5	7
Bankura	7.2	7.3
Midnapur	7.5	7.7
Purulia		6.7

The increase was due in the case of many districts to several new areas being added to the list of towns.

*Reference to it and to the condition of towns was made by Sri J. C. Sen Gupta, Superintendent of Census, in a speech delivered by him at the Family Planning Conference held at the Mahajati Sadan on 21st Sept. 1962: "A sufficient number of jobs were not apparently created in the industrial sector to absorb this surplus labour in the agricultural sector. A direct result has been the slow rate of urbanisation. In 1951, 24.88 per cent of the population lived in towns as compared with 24.45 per cent in 1961 in spite of the number of cities having increased from 7 to 12 and the total number of towns from 120 to 184 (186?). The number of towns is rather impressive but it should be borne in mind that only 89 of them are municipalities, including the city of Calcutta and the town of Chandannagar which are run by municipal corporations and only five are managed by town committees. Leaving out the very few non-municipal towns like Chittaranjan, Burnpur or Kulti which are perhaps better managed than most municipal towns, the other non-municipal towns are towns in name only. They do not contain the basic amenities of urban living like proper roads, drainage, sewerage, street lighting, adequate arrangements for the supply of drinking water and educational, recreational and health facilities. Quite a number of municipal towns are in the same condition. In order to accelerate the growth of industrialisation it is not enough that a sufficient number of jobs should be created in the industrial sector to absorb the surplus labour in the agricultural sector, it is vitally necessary that the condition in which people live in towns should be made bearable."

6.7. Whence comes this fair sized urban population which, although slightly lower than the proportion of 1951, is in absolute number not at all negligible? All population growth, as has already been said, is composed of two components: (a) "reproductive change" (also called natural increase) which is the excess of births over deaths, and (b) net migration: but in the case of urban increase this is supplemented by another factor, viz. reclassification and the inclusion of new areas into the category of towns. When an area, previously rural, rises to urban status by crossing the minimum population mark, there is at once a proportionately much larger addition to urban population even without migration or movement than would have been the case if the pre-existing urban areas alone were considered. But for reclassification of areas and an addition to the number of towns, the old 114 towns of the 1951 census would have contained only about 22 per cent of total present population of the state. These new towns have, by adding about .8 million more people to the urban total, enabled it to maintain a near parity with the rural-urban ratio of 1951.

6.8. It would, of course, be wrong to presume that all this addition through the recognition of new urban areas is due to natural increase, for it is quite likely that while such increase undoubtedly played its part, a large number of in-migrants from other states to the industrial districts spread over to the neighbouring villages on being unable to find accommodation in over-congested industrial centres and brought the former one step nearer the urban status. Among the 20 new towns proposed for Howrah district at least one (Outer Bally) has a population of nearly 30,000 and is obviously a peripheral development of the industrial town of Bally, now raised to the status of a city. Three others have populations exceeding 10,000 while the rest range within the 5,000 to 10,000 group. Some of the 17 additions to the list of towns of 24-Parganas are obviously the result of partition and the influx of refugees and some others (e.g. Birlapur) are due to the normal growth of industrial towns; but it is impossible to say in the present state of our information what proportion of the increase in the rest is due to migration from outside. Similarly, in Burdwan, Outer Burnpur with a population of 44,000, Durgapur Steel town, Durgpur Coke Oven town, and probably Jamuria are new industrial developments with probably a large migrant population. In all the other districts (including Hooghly whose new towns are small in number as well as in population size) the increase seems to be due either to natural increase or to migration from the rural areas of the district within the state or to the influx and settlement of refugees. A clearer picture will emerge only when the Census Report of 1961 is published with a full account of the proportion of migrants in different districts, towns and cities, but in view of the fact that over 80 per cent of the urban increase has been in the five industrial districts which previously used to have a large immigrant population from other states for skilled and unskilled labour as well as for a portion of the white-collar jobs, one may presume that the position has remained much the same and that the flow of migration continues unabated. The myth that Indian labour is static and stay-at-home and that "regional barriers of differences in language, marriage customs, food habits, social status, and reliance upon one's relatives for mutual assistance" keeps him tied to his village or district has long been exploded in the case of up-country labour. Even for the people of West Bengal the proposition that the middle and the working classes do not take kindly to town life and revert as soon as possible to the quiet country side where they keep their families was a canard given currency to by Mr. Thompson, Census Superintendent for 1921, on a superficial analysis of the progressive decline in the population figures of some of Bengal's interior towns, but it was satisfactorily demolished by Shri A. Mitra, I.C.S. in his Census Report of 1951. The trek back to rural areas from those towns was due not to a dislike of town life but to the decline in the industries of

those towns (which used previously to support and maintain them) through unfair competition with imported goods and with the newly started mass production industries in the parvenu towns round about Calcutta. The initiative lost by the upper and the middle classes first to the European industrialists and then to their up-country confreres was never regained while the craftsmen and artisans who reverted to agriculture for immediate relief, found, by the time they were forced to look round because the land could no longer support them, that most of the avenues of industrial employment were barred on account of the infiltration of migrants from beyond the border. The growth of towns and cities in this state has been due in a very large measure to migration from rural to urban areas from two quite different sources. For the migrants from rural Bengal it was probably a short-distance step-by-step progress to the nearest towns which was characteristic of the migration in many European countries; but for migrants from other states—and they constitute the vast bulk—it was a long-distance move to the great industrial and commercial centres, somewhat akin to the mass migration of Negroes in U.S.A. from the rural South to the industrial North.

Classification by function

6.9. So far we have considered towns and cities in relation to the size of their population. Another classification is possible on the basis of their function and character which may be more significant in explaining the attraction they exercise over people living in the countryside. One of the difficulties of such classification stems from the multiplicity of their functions which stands in the way of their being brought under one exclusive category. Another may be due to the width and diversity of functions which may lead to such hair-splitting differences that in the comprehensive classification that results from such minute differentiation the wood may be lost on account of the trees.* For practical purposes the six-fold classification adopted in the 1951 Census Report viz. (I) residential, (II) industrial, (III) mining, (IV) railway, (V) rice mill and (VI) trade and shipping is sufficient and may in fact be further abbreviated by combining (II), (III) (IV) into one group and merging (V) under (I). The difficulty arising out of the multi-purpose character of a town may be met by putting it under that category to which the majority of the employed population belongs as has been done by the National Atlas Organisation in its maps,

6.10. The Census Report of 1951 classified the then existing 114 towns and cities as follows :—

I Residential towns			
(a) Administrative	....		40
(b) Ordinary	—	....	27
			67
II Industrial	....	....	33
III Mining	....	....	3
IV Railway towns	....	....	5
V Rice Mill towns	....	....	4
VI Trading and shipping towns	—		2
			114

* See the 28 types grouped under 6 heads suggested by one geographer and mentioned in Griffith Taylor's "Urban Geography", 1949, p. 418.

Residential Towns

6.11. The 40 administrative cum residential towns in the above list were all district or subdivisional headquarters but some of the omissions are significant. The capital city of Calcutta which is the State's administrative city "par excellence" was classed under (II), as were Howrah, Serampore and Barrackpore while Asansol was classed under (IV)—an unavoidable choice under ambivalent circumstances when the most predominant occupation dictates the classification or nomenclature. The 4 rice mill towns (Memari, Sainthia, Dubrajpur and Hili) might as well have been classed under 'ordinary residential' as the author himself admits, since even among residential towns 12 out of 40 administrative towns and 7 out of 27 ordinary towns contained some industry or other, the most numerous being rice mills with a few oil mills and other miscellaneous industries thrown in. From the way rice mills are strewn almost all over the state (and not in towns alone) it would appear that they are the cheapest to start and easiest to run. Only Jiaganj and Ajimganj among the residential towns had a jute mill probably because local finance was plentiful and river transport was available during the season of the year when raw materials have to be brought in.

Industrial Towns

6.12. The 1951 Census Report speaks of 33 industrial towns of which 4 were in Burdwan and the rest in the remaining 4 industrial districts Calcutta, 24-Parganas, Howrah and Hooghly.

6.13. A. These 4 districts exhibit the maximum amount of industrialisation and contain 77 per cent of the registered factory workers whose total number in the state is a little over 7,00,000. This is a fairly good index of their industrial importance though not an accurate index of all industrial employment, as many small scale and cottage industries do not require registration and some who do evade their legal obligation. Yet, taking the 1951 list of industrial and railway cities and towns within these districts and adding a few more on account of subsequent developments, the list may be arranged as shown below according as they are on the right or left bank of the river Hooghly.

Tribeni	Kanchrapara
Bansberia	Halisahar
Hooghly-Chinsura	Naihati
Chandernagar	Bhatpara
Bhadreswar	Garulia
Champdani	Ichapur
Baidyabati	North Barrackpore
Serampore	Barrackpore
Rishra	Barrackpore Cantonment
Konnagar	Titagarh
Kotrang	Khardah
Uttarpara	Panihati
Bally	Kamarhati
Howrah	Baranagar
Bauria	Dum Dum
Fort Gloster	North Dum Dum
	South Dum Dum
	Calcutta
	Garden Reach
	South Suburbs
	Batanagar
	Budge-Budge
	Birlapur

When plotted on a map with their areas accurately demarcated they will exhibit a degree of agglutination which has hardly any parallel in India except perhaps in Bombay.

6.14. The typical and unsatisfactory feature of the industrial structure of West Bengal from the point of view of town planning is its extreme localisation of large scale industries along the bank of the Hooghly, stretching from Tribeni on the north to Birlapur on the south. Here are to be found not only 90 per cent of the jute mills of India but also the vast majority of cotton and other mills, rubber factories, shoe factories, docks, power generating stations, paper mills, oil mills, match factories, printing presses, chemical and pharmaceutical works, steel rolling mills, general engineering works, brick fields, potteries, hosiery and a whole host of others— all bunched together along one (or two, according as one looks at it) huge but narrow conurbation, about 50 miles long (if the meandering course of the river is followed) and 2 broad, on either side of the river, with the railway lines defining the eastern and western limits, and containing a net area of less than 200 sq. m.* The Hooghly river has been compared to the Rhine which passes through the industrial Ruhr valley of Germany but it has few of its natural advantages, not being able to provide a cheap water-way for the transport of coal from Raniganj. But four power generating stations at Cossipore, Gouripore, Garden Reach and Mulajore supply the desideratum and compensate for lack of coal in the vicinity, while the Calcutta market and port, the developed transport system through road, rail or river, the availability of banking and other facilities, the supply of skilled, semi-skilled and unskilled labour etc., and, above all, the close proximity of the seat of government provide additional attractions. The jute mills which are the largest employers of labour (over 2.16 lakhs) are not evenly distributed throughout these conurbations but occur in scattered groups with 5 large concentrations at Bhatpara-Jagatdal, Titagarh-Kharda and Budge Budge-Birlapur on the left bank of the river and Champdani and Howrah on the right. Jute presses and cotton ginning and bailing centres are mainly located at Cossipore near the terminus of the canals, while cotton mills are confined to the right bank of the river between Serampore and Fuleswar. Large railway workshops have been established at Kanchrapara and Santragachi, iron and steel rolling mills are located in Lillooah and Belur, and these as well as general engineering works are found both in Howrah and round about Calcutta. West Bengal's contribution to the all India production of printing and writing paper is over 38 per cent and much of it comes from Titagarh and Naihati. Sahaganj in Hooghly, where the Dunlops are firmly settled, has the premier rubber factory in the East for the manufacture of heavier standardised goods like tyres and tubes but lighter rubber consumption goods are manufactured on a fairly large scale in and around Calcutta.†

* Of the 20 new towns proposed to be added to Howrah and 17 to 24 Parganas some are bound to be industrial but they will generally fill in the interstices within the 2-mile belt without appreciably increasing the area of the conurbation.

† Cf. Dr. S. P. Chatterjee—“Bengal in Maps.” West Bengal's paper production was given in that book as over 50 per cent, but the latest figure given in the Report of the Techno-Economic Survey 1962 is a little over 38 which has been adopted in the text. Apparently, new paper mills have gone into production in other parts of India since 1948 when ‘Bengal in Maps’ was published. The following figures about industrial

[contd.]

6.15 B. In the next category may be placed the industrial towns of Chittaranjan, Kulti, Burnpur and Raniganj, the two railway towns of Asansol and Ondal, and the three mining towns of Barakar, Dissergarh and Neamotpur — all in the district of Burdwan. Among the new additions suggested by the present census the two Durgapurs definitely, and Outer Burnpur and Jamuria probably, come under the category of industrial towns but not perhaps Guskura, in spite of its rice mills and trade. By some unusual coincidence Burdwan covered in 1951 about 8 per cent of the total area of the state, had 8.8 per cent of the state's total population and gave employment to 8 per cent of its registered industrial workers. The latest figures place the employment proportion at 6.1 per cent.* The industries located in this area are, however, confined to the extreme western

concentration in the Greater Calcutta area have been supplied by the Directorate of Industries in connection with registered factories :—

Nature of the Industry	CALCUTTA INDUSTRIAL AREA		WEST BENGAL		Percentage of units in Calcutta Region with respect to that in W. Bengal	Percentage of employments in the Calcutta Region with respect to that in W. Bengal
	Units	No. of employees	Units	No. of employees		
Heavy	1226	128695	1345	171806	91.1%	74.9%
Medium	431	98066	529	129098	81.5%	75.9%
Light	1366	314723	2235	402017	61.1%	78.1%
TOTAL	3023	541484	4109	702921	73.6%	77.0%

The classification into Heavy, Medium and Light may mislead unless one knows what are the manufactures placed under each category. To mention all would make a long list, but it is interesting to note that under 'Light' industries have been placed all textile production (cotton, silk, jute, woollen and others), tobacco, food processing (rice mills, flour mills, oil mills), paper, printing, leather etc. 'Medium' includes rubber, glass products, chemical and transport equipments. Under 'Heavy' come all ferrous and non-ferrous metal products, machinery, electrical machinery and generation of electricity, gas and steam as well as petroleum and coke products.

* The following figures about industrial concentration in the Raniganj-Asansol industrial area have been supplied by the Directorate of Industries, West Bengal, in connection with registered factories :—

Nature of the Industry.	Raniganj-Asansol Industrial Area.		West Bengal		Percentage of units in the region as compared with West Bengal.	Percentage of employees in the region as compared with West Bengal
	Units	No. of employees.	Units	No. of employees.		
Heavy	22	26659	1345	171806	1.71	15.51
Medium	14	9518	529	129098	2.65	7.37
Light	33	6429	2235	402017	1.52	1.60
TOTAL	69	42606	4109	702921	1.73	6.10

wing of the district and cover only a small portion of it. The reasons for their concentration are very clearly expressed in the Census Report of 1951. Asansol-Raniganj zone is the coal mining area within whose matrix other heavy industries for the production of iron, steel, refractories, aluminium, paper, locomotives, cycles, potteries, electric power etc. have grown up, helped by the existence, almost at their door-step, of fuel which is a major element in the cost of production. The entire area is covered by a good network of roads which economises haulage and transport. The industries have almost a uniform pattern of boilers, foundries, ovens, workshops and assembly lines so that a semi-technical worker, trained in one kind of factory work, can easily adapt himself to another and seek employment in a new or expanding factory within the region if for some reason the one in which he is working shuts its doors or is temporarily closed. Coal mines also offer permanent and semi-permanent prospects to miners because if one mine closes down, a neighbouring one is there to take them on. The presence of coal, the investment in communications already made in the shape of roads and railways, the easy availability of plentiful Damodar sand valuable for sand stowing the mines and in refractory work, the ready supply of clay in Ondal, Faridpur and Birbhum necessary for potteries and foundry, the ready supply of abundant labour at a comparatively cheap rate from the surrounding districts of West Bengal, Bihar and Orissa, the dry air and absence of malaria which keeps the labour force fit—all have combined to keep the area rigorously within its present limit as an ideal industrial site. On the possibilities of the further expansion of the industrial area Sri Mitra was somewhat undecided or it is possible that he changed his mind in the course of his thinking and set down both his initial doubt and his final change of view. After setting down the factors which stood in the way of the extension of the industrial area and his doubts as to whether electricity would be cheap enough to replace coal and stimulate an eastward expansion, he went on to add, "Much will depend on how Indian coal, iron, steel, aluminium, locomotives, potteries, paper and other manufactures fare within the world market or even in India. If the present trend of industry continues, this zone will have continued prosperity because, as the population avowedly depends on industry and not even in a complementary way on agriculture, no question of encroachment on food production within this zone can arise. Almost the whole of Faridpur and Kanksa police stations, comprising an area of 229 sq.m., can be developed suitably for the expansion of the Asansol-Raniganj zone. The low densities of these two police stations indicate the poor state of their agriculture and the establishment of industry in this region will not enter into injurious competition with agriculture. Industries can, therefore, grow unimpeded and mines are so well spaced and distributed as to keep sites of industries well apart, allowing each location plenty of elbow-room for future expansion."* It does not seem to have occurred to him that the low densities of Faridpur and Kanksa may be due to their being forest areas and that any extension of industry into these areas will probably have to be at the expense of forests of which we are already woefully short as things are.

6.16. The Census Report of 1951 did not mention Durgapur because its development was still in the womb of the future. Now this fast-developing industrial area, primarily concerned with the development of 'heavy' industries and employing about 4.6 per cent of the total number of persons employed in the heavy industries in the whole of West Bengal, can no longer be ignored. Taking all the factories of the area into

* Shri A. Mitra, I.C.S.—Census Report of 1951, Vol.VI, Pt. IA, P. 186-87.

consideration Durgapur provides to-day employment to 9184 persons which constitutes about 1.3 per cent of the total employment in registered factories in West Bengal.

6.17. C. The only two urban areas mentioned in the 1951 Census Report which do not fall within either of the two zones are Kharagpur and Siliguri. Both are isolated entities and it is still difficult to foresee to what extent they are likely in the normal course of events to be the centre of a constellation of a number of satellite or minor towns depending upon them for support or inspiration. Kharagpur's importance lies in the railway workshop but it has developed into an industrial centre with a total present employment of 13163 persons in its factories. Siliguri, formerly an entrepot of brisk inter-state trade, rose into prominence with the establishment of the Assam Link railway line and is now going to have added prestige by the establishment of a university. Its potentialities for growth as an industrial centre should be carefully investigated.

6.18. All this discussion reinforces the conclusion that, as in the case of population, the industries and industrial towns in West Bengal are concentrated in a very small area. The two are necessarily inter-related as is the case in all countries. The 4 districts of 24-Parganas, Calcutta, Howrah and Hooghly contain 77 per cent of the total registered industrial employees of the state, allowing them barely 200 sq. m. within which to operate. Another district, Burdwan, contains 7.4 per cent in its two zones, and Kharagpur a bare 1.8 per cent. There is also a very close correlation between this high percentage of industrial employment in these districts and the proportion of immigrant population. The remaining districts together contain less than 14 per cent of the registered industrial employees and even of these the two plantation districts of Jalpaiguri and Darjeeling contain between them a little over 3 per cent and Midnapur contains 2.4 per cent, so that the share of the remaining 8 districts becomes very small indeed. The residential towns, if they are also the administrative headquarters at the district or the subdivisional level, give employment in services, professions, service industries and in small scale industries which produce light consumer goods, while non-administrative residential towns do the same on a much smaller scale with government and semi-government services and professions left out. In a town of mixed development with industry, commerce and services all contributing their share to the employment potential the proportion of service employees does not generally exceed two-fifths and may be as low as one-fifth. In a residential town in West Bengal, with industry practically out of the picture, the burden falls on services and commerce, the latter being sometimes nothing better than petty distributive trade which hardly deserves the dignified name of commerce.

6.19. The comparative neglect of these non-industrial administrative and ordinary residential towns is a theme to which the Census Report of 1951 returns over and over again. The ordinary residential towns which are now largely decadent were once centres of indigenous small scale industries of skilled craftmanship which supplied the home, and some times even the foreign market and sustained a large artisan and middle class population with work which was complementary to the agricultural and other primary food producing activities of the surrounding countryside. The administrative towns which must have been originally selected for their importance in trade and local industries were, in addition, the points of contact between the villager and the local representatives of the governmental machinery. Far more than the industrial towns which are largely peopled by immigrant labour these towns were the resort of, and the source of alternative livelihood for, the natural born 'sons of the soil'—a source which has now dried

up because the necessary economic stimulus to their growth is lacking. If new life can be pumped into them by setting up light and medium scale industries either within them or in their vicinity the position may change, but whether it is possible or not is a matter on which opinions differ. An American writer thinks that it is not, but on that point we prefer to reserve our judgment at this stage.

The Urban pull

6.20. What constitutes the urban pull which we have been discussing so long and is there really such a pull? Some people object to the word because it implies a movement stimulated by the thing or object towards which the movement is directed. The objection is based on the ground, first, that quite often there is no movement at all, the people remaining static and gaining urban status by automatic inflation of numbers; and secondly, because most migrants are not so much pulled in by short-handed urban industries as pushed out by overcrowded rural agriculture. The first objection is valid and has already been discussed earlier in this chapter. The second is a verbal nicety based on a confusion between what is expected and what is actually realised. It is the expectation which constitutes the pull and not its realisation which, at the time one starts on one's journey from village to town, can hardly be foreseen to be foredoomed to failure. This pull does not cease to attract because of the many examples of failure. The argument that economic opportunities must be better there than in villages, that potential migrants must believe them to be so, and that in the long run their perception must be validated by experience as otherwise the flow of population would cease or reverse itself does not appear to be correct. It assumes that migration can be based on irrational considerations only in the short run, and that in the long run the imbalance must correct itself. But, in fact, only a small minority of the migrants need realise their expectations in order that the myth about opportunities being greater in cities may survive. People's irrational behaviour in regard to spatial mobility can persist even in the long run.* Explaining this urban pull as it works in U.S.A. two American sociologists have observed that as the standard of living rises and there is an increasing demand for commodities and services provided only in cities, manufacturing industries are stimulated and many are rushed to the urban centres by sheer economic pressure because of the diminishing occupational opportunities of rural areas. Some individuals, including a high proportion of the more gifted among the country born, find their capacities repressed and their ambitions thwarted by the rural environment. The larger cities provide better schools and more specialised training, both cultural and professional, and offer greater hope to talent. The best professional services—medical, engineering, legal etc.—tend to concentrate there as do the learned and academic institutions, and these necessarily have a strong attraction for many. Others who are attracted are the restless, the seekers after amusement or excitement, the exploiters, the non-conformists, the lovers of crowds and even criminals. The city's principal appeal is however the promise, though not the fulfilment, of greater economic and social opportunities that it offers to the migrants.† This last, and particularly the economic appeal, is in our opinion a deciding factor in an under-developed state whatever other factors may operate in an affluent society like U.S.A. Young dependent persons who have still to complete their education and training to fit them for earning a livelihood will go wherever such training is available; pensioners may covet a plot of land in Calcutta more than anywhere

* Prof. Shanti Tangri.—'Urbanisation' Political Stability and Economic Growth'—article in 'India's Urban Future', 1962, Chap. X p. 194 (ft. note).

† Maciver & Page—'Society', p. 336.

else and build a house to pass the remainder of their lives, though the letting value of the house is no small attraction to many in these days ; landlords and rentiers may prefer the excitements, the amusements and the recreations of the city to the boredom and quiet of the country though the number of the leisured class should steadily decrease in a society with a professed egalitarian goal. For the vast majority however who have to earn their living it is the economic opportunities of the city which are the strongest attraction and all else is secondary. Even the criminal is attracted to the city because it offers him the largest field for operation and the best possible cover. Expelled from the village because of the pressure on land and the absence of subsidiary industries men will gather wherever new economic opportunities are offered.

CHAPTER VII

Limits of urbanism

7.1. Was this particular form of agglomeration that we see in West Bengal—or, for the matter of that, any other form of intensive and extensive urbanism—inevitable? If it was, little more need be said about it, for before the 'inevitable' no question of control to bring into existence a different spatial distribution can possibly arise. But if it was not, we are immediately faced with the question whether it was desirable and, if not, what are the steps that could or can now be taken to bring about a more desirable alternative.

7.2 Speaking about the dangers of excessive concentration of all economic and cultural activities in cities Tagore once remarked that it was not a sign of health in the body politic if all the blood rushed to the head, depriving the other limbs of their life-giving vital current. In the first Reith lectures delivered by Lord Russell in 1951, he repeated the same warning with special reference to India and asked her to steer clear of the horrors which England and other western countries had to go through during the prolonged initial period of their Industrial Revolution.* But poets and philosophers are not the kind of men whom hard-headed economists are apt to set store by. We shall, therefore, examine this question at the level of the economist and the social scientist without importing into the discussion any sentimental preference for a predominantly rural way of life or the rural pattern of industrial production. To say, as Bertrand Russell did, that India is traditionally a land of village communities is only a half truth. The editor of the *Economic Weekly* was right when he said that arguments for decentralisation based on a nostalgia for a sylvan village-based culture did not stand up either to Indian history or to the requirement of modern developments.

7.3. The question came up for discussion in a seminar held from June 26 to July 2, 1960 in Berkeley, California, in which many American and Indian experts took part. The papers submitted for discussion and the summing up by some of the sponsors and invitees are now available in book form under the

*Bertrand Russell—"Authority and the Individual", p.66.

"In those parts of the world in which industrialism is still young, the possibility of avoiding the horrors we have experienced still exists. India, for example, is traditionally a land of village communities. It will be a tragedy if this traditional way of life with all its evils were to be suddenly and violently exchanged for the greater evils of urban industrialism, as they would apply to people whose standard of living was already pitifully low. Gandhi, realising these dangers, attempted to put the clock back by reviving handloom weaving into the continent. He was half right, but it is folly to reject the advantages that science gives us; instead, they should be seized with eagerness and applied to increase the material wealth and, at the same time, to preserve those simple privileges of pure air, status in a community, of pride in responsibility and work done, which are rarely possible by the worker in a large industrial town. ****Electricity and motor transport have made small units of industry not only economically permissible, but even desirable, for they obviate immense expenditure on transportation and organisation. Wherever rural industry still flourishes, it should be gradually mechanised but be left in situ and in small units."

It is remarkable that the same remedy was suggested many years ago by Tagore in his Epilogue to 'Russiar Chiti' (Letters from Russia).

title "India's Urban Future"* to which we are greatly indebted for revealing various facets of the question and for suggestions which have never failed to stimulate thought even when they could not always convince the reason. Coming as they do from men with widely different experience, upbringing, outlook or loyalty the opinions expressed were naturally greatly divergent so that it is not possible either to reconcile these opposite points of view or synthesise them into one coherent whole. One has got to make one's choice according to what appeals to one's reason or, rather, to one's idea of the desirable social objective.

7.4. Three strands of thought are clearly discernible, one favouring the historical process as seen in the West in the matter of rapid urbanisation; another slightly ambivalent in that it weighs the pros and cons with such passionless impartiality as to leave a doubt whether it leads to any definite decision; and a third which accepts the possibility as well as the desirability of a wide diffusion of population concentration by a purposeful policy of guiding the location of industries. The third group is, of course, not unanimous as to the volume of concentration desirable at any place and the number of places where they should be scattered. We set down these views in order, in their own words as far as practicable, but rearranging them to show the logical sequence of thought where in our opinion irrelevant or slightly relevant intrusions have disturbed the smooth and orderly development of the main argument.

The so-called Historical Process

7.5. Two of the exponents of this school of thought were not only very forthright and dogmatic in their insistence on the western mode of industrialisation as the only possible course, but almost ruthless in their utter disregard of the human suffering that might be caused in the process to the villager who is to be drawn into the vortex of city life. In the view of Kingsley Davis, who was also a co-sponsor of the seminar, industrial progress is linked with urbanism and a gigantic urban increase is inevitable if India wants rapid industrial development. The historical process of urbanism in the West has been a slow start of migration at first, followed by a rapid increase during the early phases of industrialisation, and ending with a gradual tapering off when further migration became impossible on account of the country having been virtually completely urbanised. After that the tide rolls back, decentralisation starts from the central core, and eventually the periphery moves out much faster (though at a thinner density) than would be expected from the normal rate of population growth. For India this would no doubt mean a huge and troublesome shift of about 60 per cent of the population from the country to the city at a very rapid rate which would be so formidable a problem that few governments would like to face it realistically. The metropolis of Calcutta would have between 12 to 16 million inhabitants in 1970 and between 36 and 66 million in the year 2000 which, however apparently large, would be a modest 6.6 per cent of the total population of India (estimated at a billion in that year) as against 8.4 per cent of the total population contained in the principal city of U.S.A. and 20.5 per cent in the main city of the United Kingdom. The volume of new housing, water supply, transport and urban employment that would be required to accommodate this mass movement of millions into the city would be staggering and urban problems and political unrest would be greatly intensified. A high density of this type which might be tolerable if spread over a little space because escape is easy, becomes

*"India's Urban Future", Ed. Roy Turner, 1962--Berkeley and Los Angeles, University of California Press.

oppressive when 66 millions jostle against one another over a wide area under conditions of 'inhuman impact' and take a minimum of four hours to drive from one end to another if, of course, traffic jams do not bring all movement to a standstill. The expressions 'formidable', 'troublesome', 'staggering', 'oppressive', 'inhuman', all quoted verbatim from the article, show that the writer is not unaware of the implications of what he is saying, and yet he gives short shrift to those who suggest that economic development in India need not be hitched to urbanisation on this scale. "If this is possible, the present writer has yet to find any evidence of it. There is no nation in history which has made the economic transformation which has not yet experienced the urban change. Development thus far in India gives no indication whatever that India will be an exception rather than the rule. In this regard neither India nor any other country can have the cake and eat it too."* For these statements, made with an attitude of almost Papal infallibility, no reasons are given except that what has been will be, or rather, that what has been in one part of the world will be in another part of the world and in another era. Some embarrassment must have been caused to this extreme advocate of westernism when his colleague and co-sponsor, Mrs. Catherine Bauer Wurster, who is an acknowledged authority on city and regional planning, said that in dealing with Indian problems western knowledge and experience and western methods of research had very little to contribute and were often positively misleading.† Even William Bredo,‡ who was almost a fellow-traveller in advocating the inevitability of big cities, dissented from a logistic projection which postulated for Calcutta a population of 66 millions in 2000 on the basis of the so-called rank-size norm of cities. He deprecated the tendency observed in some professional circles to accept the prevailing patterns of population distribution in urban centres as if they were the result of the play of natural forces which were inevitable, and to rationalise therefrom a rule that populations had a tendency to arrange themselves in such a way as to result in a certain automatic ranking of cities by size. It would, in his opinion, be quite possible by deliberate action to make significant deviations from the distribution of population implicit in a rank-size norm and to foster industry in a different spatial pattern, and both such steps could further the economic, political and social interest of the country. In fact, they might even accelerate such growth to a greater extent than would be possible in the absence of deliberate action.

7.6. The other advocate of gigantism, Mr. Britton Harris, speaks with the authority of one who is an erstwhile consultant of the Delhi Regional Plan. In proof of his right to speak on India he said that he had added to his considerable knowledge of industrial conditions and locations in U.S.A. and Puerto Rico, experience of a few months spent in India which enabled him 'to visit many industrial and non-industrial cities, inspect manufacturing conditions under a wide variety of circumstances, meet entrepreneurs and managers and assess very roughly the level of commercial services and utilities in communities of different sizes'. After this it may be presumptuous to doubt his credentials but we can't help wishing that he had presented the central part of his argument in a more digestible form. One gets the impression when going through the article that one is made to work through the steps through which the writer struggled to arrive at his conclusion; but surely once the conclusion was reached much of the scaffolding could have been taken down.

*Kingsley Davis—Chap. I in "India's Urban Future"

†Catherine Bauer Wurster—Chap. XIV in "India's Urban Future", pages 288 and 293.

‡William Bredo—Chap. XII "India's Urban Future"

7.7. The various steps of his reasoning may perhaps be set down in simpler language as follows :—

(1) Human welfare depends upon material progress which in turn depends upon productive capacity.

(2) The agency for using such productive capacity will have to be private enterprise because India is committed to a democratic form of life, the professed socialistic pattern meaning nothing more than public control and development of transport, communication, irrigation and all critical (?) manufacture, with commerce, finance, and the bulk of manufacturing industries all left to private hands under some sort of regulation.

(3) Village handicrafts whose condition ranges from poor to execrable provide a meagre income and do not survive transplantation to a new area.

(4) Productive capacity under the old (village-based ?) system being thus found wanting, new values or culture patterns (urban ?) have to be adopted. A sustained effort has to be made as otherwise there will be political, social and economic chaos. Except consumptions that improve efficiency and production (e.g. education, health, shelter etc.) all other consumptions and cultural values should be postponed if speedy economic development is to be achieved. But there is no automatic balance between investment and consumption and private enterprise economy may introduce a complication. [N.B.—What this complication is he does not explain and the relevance of this last sentence is not clear. It could be an argument against private enterprise but that cannot be the intention of one whose pronounced bias for private enterprise is obvious. Could it mean that the private sector must be humoured in order to be persuaded to turn away from investment in consumption goods ?]

(5) Urban income (including that from parasitic activities such as petty trades, petty services, petty manufacturing) is double or treble that of rural income and this is due to the different 'mix' of activities like government jobs, railways, and organised commerce and industry. These cannot be duplicated in village or small towns. Inefficient parasitic activities 'can be treated through the rationalising effect of development and its consequent redistribution of employment'.

(6) (a) Urbanism and industrialisation are closely linked but not interdependent. The city offers "certain advantages" to industry, while industry produces consumption goods for the urban people, capital goods for urban development, and equipments and fertilisers for agriculture, at the same time drawing off its redundant labour. Hence "it is apparent that urbanisation and industrialisation are concomitant parts of a much larger process which vitally involves rural areas. Cities and metropolitan areas constitute growing points in the economy as being particularly well suited to industrial development".

(b) An established industry brings under its umbrella other operating industries such as power supply and transport, facilitates educational and cultural institutions, and attracts industrial labour and technical personnel which, in their turn, attract other industries. The force of such attraction varies directly with the city size and inversely with the distance from the city centre.

(c) Industry stimulated by the indigenous basic metals and machine tools and helped by foreign exchange restrictions will enhance the attraction of urban areas.

(d) Cities demand a large share of the developmental resources of the nation. The greater the rural-urban shift the greater the expenditure needed for houses, work places and urban improvement. [A very conservative estimate is given here on the assumption that only two-fifths need be provided for.] To decentralise in order to reduce cost would undermine the prerequisites of sound industrial development, but costs can be scaled down, the present standard adopted in imitation of the West being too high.

(e) Minimum population for a viable industrial city is a quarter million; it becomes more viable when it crosses the million mark. [Calculation: an industrial unit employing 10,000 men will attract other industries employing double the number. Since industrial employment is about one-third of total employment, the total number of employees in the city becomes 90,000. Assuming that one person out of three is employed it gives a population of 2,70,000 or, say, 2,50,000. Q.E.D.]

(7) Decentralisation and redistribution of industries is possible only by controlling industrial location. But direct control, besides being undemocratic, has not proved successful in places where it has been seriously tried.

(8) Large industries grow out of small industries and select their own sites. Transplanted into any rural area, they will quickly gather under their umbrella cognate and subsidiary industries of intermediate size. Subsidiary industries demand high entrepreneurial skill found only in big cities and they cannot be made to select their sites to order. So industry cannot be diffused directly throughout the country nor indirectly decentralised even to a limited degree below a city size of a quarter million. Shift of location must be within the city, not between two cities. "Industry becomes the most flexible location element in the metropolitan complex, and the natural process of growth, expansion, and re-location can be used to structure expansion of the metropolitan area itself".

7.8. All this is apparently very neat and tidy. Everything is cut and dried. The minimum size of a viable city is exactly calculated and so is the cost of urban development needed. But the rural migrant must not expect too much amenity, for cost has to be kept down. In fact he does not need it for to one who sleeps on the pavement any kind of shelter would be 'a rise in the standard of living'. But the industrialist and the entrepreneur who would choose only cities—and 'millionaire' cities by preference—should not be directed or even persuaded to shift to new areas, for their role is sacrosanct and direct control would be anathema. The only thing missing in this neat frame-work of almost oracular statements is a closely reasoned argument as to why industry cannot thrive except in a highly intensified urban or metropolitan complex. Inconvenient questions are either begged or burked. A statement is made and then repeated in a slightly different language as if the latter is an argument for the former. The question is begged throughout by identifying industrialisation with urbanisation. If production of metals and restriction of imports stimulate industries—as no doubt they should—the writer says that it will enhance the attraction of urbanism. The large allotments currently made for urban development are mentioned as if they are an argument for further industrialisation of cities which is obviously to mistake the effect for the cause. The current expenditure is needed to mitigate the evils of past concentration and cannot be erected into an argument for further urban concentration. He is worried about the probable restraint on the rights of the under-privileged villager to go wherever he likes by decentralisation, though decentralisation means nothing more than bringing job opportunities at the villager's door-step so that the temptation to city-ward movement will be less; but he has no qualms about the squalid conditions of city life which will continue if, as he suggests, urban development will have to be scaled down.

The thesis that he should have proved is that unless there is urbanism—presumably pre-existing urbanism—industry cannot grow and thrive. The thesis that he has proved, if he has “proved” anything at all, is that if there is industrialisation, it has a tendency to develop into urbanism—a proposition which none disputes. The gregariousness of industries is quite well-known and is in fact the reason why ideas about planning and control are so much in the air in these days. The question is whether industries can thrive equally well or nearly equally well under conditions of controlled urbanism, and whether the loss, if any, on a strictly economic calculus is compensated for by gains in other spheres. To that the paper provides no economic answer for the arguments are mostly political and of doubtful validity. In fact, on many points, all inconvenient questions are either evaded or burked in a spate of words (some of which we have put within quotation marks) neither whose meaning nor whose relevance is always clear.

An Intermediate View

7.9. Another participant* in the seminar sees the arguments so evenly balanced that he seems to find it difficult to decide on which side to give his verdict. On one point he is definite and probably rightly so. It is the economics of the new adjustment that should largely influence the decision, not any ideological preference for a pre-industrial ruralised economy with its emphasis on (mostly imaginary) social values which dominates the thoughts of some of our policy-makers and accounts for the ambivalence that finds expression in the difference between profession and practice.

7.10. He starts by saying that though urbanisation is related to economic development there is no unique relationship between the two, and varying degrees of one can be associated with varying degrees of the other. There are economic advantages of concentration such as improved productivity, creation of surplus, and nurturing of entrepreneurship; as well as cultural advantages like diffusion of new values and changes of attitudes and ‘mores’. Against it should be placed the cost of overheads viz. the provision of urban development on a large scale and the social dislocation involved in uprooting a mass of migrants from their rural moorings and plunging them into the vortex of city life. The decision should depend upon a balancing of these two contrasted forms of advantages and disadvantages. The argument that urbanisation brings into existence a committed labour force necessary for industrial development is not very strong in India, for whatever skill, aptitude and discipline the industrial labourer needs can be quickly acquired through proper training by the raw migrants without the need of a long probation of unemployed or under-employed city life. Even dearth of entrepreneurial skill is not a desideratum, for entrepreneurs will not be found wanting if a suitable industrial climate can be created in what are now non-urban areas. The real arguments are that an urban concentration (1) provides the economic overheads and (2) the external economies and (3) relieves the industrialist of the cost of the infra-structure—advantages which cannot be reproduced elsewhere, at will. The force of these arguments, particularly of the deterrent effect of the high cost of infra-structure and the appeal of the nearness of the large market, are so great that the present trend of new and developing industries has been to cling to existing concentrations which the licensing policy of the government has done nothing to check or modify.

7.11. True, urbanisation in India has preceeded and not followed industrialisation as in the West, and the resultant mass of migrants overcrowding the cities without

*Sachin Choudhury—“India's Urban Future”, Chapter XI

being absorbed in productive work in industries (or engaging in parasitic or spurious jobs like petty distributive trade) is an economic waste to which should be added the huge cost of urban development needed to give them the minimum of civic services that might have been better used if directed to the development of industries. But the attractive proposal of retaining this redundant rural labour in rural areas by absorbing them in labour-intensive rural industries is also slightly utopian and economically untenable. These small industries that are still there are carrying on a precarious existence or kept alive by subsidies which, however good as a substitute for social insurance, are not a step which would lead to the growth of a self-sustaining economy, able to throw off its crutches after a certain time. Only villages subjected to semi-urban influences provide industries that are reasonably remunerative, and where a significant proportion of households are found engaged in 'arts and crafts', the wider employment opportunities are explained by the existence of prosperous villages in the neighbourhood. The writer concludes. "The location of industries, agglomeration, and urban concentration tend to follow the same set pattern everywhere. However undesirable on social or economic grounds—the latter from the standpoint of long-term growth potential—the tendency powerfully resists all but massive ameliorative measures. It is tempting for a country on the threshold of industrialisation to look back at the mess in which others landed themselves in the past, to want to profit from their mistakes, and to resolve to keep to the straight and narrow path. But maximisation of returns has still to remain the sheet-anchor of policy and that inhibits too wide a dispersal of the economic overheads basic to industrial development. A greater dispersal may be possible at a later date when more resources have been created, but by then enough harm may already have been done in a mixed economy with an enormous private sector. For, the creation of economic overheads alone does not foster industry; a combination of several other factors is necessary—markets, complementary skills, services. The environment in which newly sprung industries can gain nourishment and grow is found, if at all, in that very combination usually despised as an agglomeration. Slums and city blight may not be an essential ingredient of economic growth. They have, unfortunately, been its natural concomitants, if not its sponsors. ***A wide dispersal of industries is prevented in the beginning by scarcity of resources. After development has been initiated there may be greater scope for choice. But over large areas of the economic field decisions are individual and are taken within a horizon too narrowly circumscribed by short term economic considerations. Even small industries tend to be started where the environment is favourable and congenial to their growth. Attempt at wider dispersal or even deliberate sponsorship of multi-centered development encounters serious obstacles from the forces which are already developed and which are so difficult to counter."

7.12. The surrender to the so-called natural forces of industrial concentration seems almost complete, but there are a few silver linings. The public sector is less fettered in its choice because immediate profit is not so essential. There are some industries whose location is fixed by geography, but "with efficient transport and adequate power facilities, there is room for influencing other industries to spread out. Decentralisation thus becomes in effect a programme for ordered location of light and consumer industries". It means only change of location, not of the process of production and will be justified only if it leaves the economy no worse than it would be under conditions of agglomeration. There is no necessary reason why such decentralised industry should be less efficient than centralised industry if a multiplicity of workshops does not impair the quantity or quality of the output. To the extent that a social philosophy informs the economic

policy of the country the instruments of control that planning provides can be used for making urban development conform to a desired pattern. These instruments are power production programme, transport (specially, road transport) policies, and the creation of other overheads. It is easier to influence location of new industries than to remove or disperse old established industries. Action at the highest level is urgently needed to cope with migration by advance planning of urban development. Planned development may avoid the much greater concentration in a few places which would have been inevitable without this limited programme of dispersal which aims at a more desirable pattern of growth and not a reversal of the flow. "Also, dismal forebodings of demographers notwithstanding, India may yet have a bit of respite before migration assumes vastly greater proportions." Programmes of rural development pursued with vigour during the next few decades may significantly increase the absorptive capacity of the rural economy which will moderate the rate of migration and soften the difficulties of adjustment which too rapid urbanisation imposes.

7.13. These statements culled from different parts of the concluding pages of the article in question but not, we hope, torn out of their context show that some ground at least has been retrieved from a complete surrender to so-called natural forces, and that deliberate state action is allowed to have some hand in influencing, if not the volume of city-ward migration, at least the rate, the timing and the direction of the flow.

The open mind

7.14. The last body of opinion, as we have already said, is not unanimous, for it includes extremists in whose view urbanisation is not only not a necessary or sufficient condition for economic growth in contemporary India but is, both because of its magnitude and its nature, a factor which actually retards growth.* The majority however thought, as Catherine Bauer Wurster† says in her summing up, not that all forms of urbanisation were bad but that large congested metropolitan centres were a relatively expensive method of urban expansion and that some form of urban-industrial decentralisation was desirable. Why they are expensive we shall discuss in another section. Here we shall consider only the main argument against the protagonists of extreme urbanisation whose views we have discussed already. With her characteristic scientific detachment Mrs. Wurster candidly admits that the effect of urban development pattern on economic enterprise, productive efficiency, and employment in India was still an open question which could not be answered without a great deal of further research in which western experience was of little value and might even be a handicap. The fatalistic attitude which assumed, implicitly or explicitly, that the trend towards industrial and population concentration in a few major areas could not be diverted, whatever the resulting social costs, because any different pattern would require such arbitrary control that it would damp enterprise and reduce productivity, seemed to her to be fallacious. In fact, public decision on locational attractions were already operative, for industry and business required many services—utilities, housing, schools etc.—which were largely provided by government. If these magnets are located anywhere else than in big cities without, of course, disregarding the economies of business requirements, another kind of development pattern could be shaped. Very little was known about the comparative costs and benefits of different development patterns, but "prima facie, given adequate agreement upon and understanding of desirable goals and suitable criteria, it should be relatively cheaper and easier to achieve these

* Shanti Tangri—Chapter X in "India's Urban Future."

† Catherine Bauer Wurster—Chapter XIV in "India's Urban Future."

goals in new developments than in the re-development and reorganisation of obsolete cities which is the frustrating problem that confronts many Western planners". India started with one initial advantage in that most of her urban expansion and economic development was still to come and many alternatives were potentially open. In fact, there was never any one ideal or optimum pattern to fit all conditions; different variables in the development pattern—including city size, density, and structure—had different but substantial effect on the living conditions, costs and productive efficiency of different kinds of enterprise; and they determined whether any particular industry should be stimulated in new towns, expanded towns, satellites, old metropolitan centres or rural areas. She cites the example of Etawa where a small local industry provided not only employment but enhanced local income and supplied material for village improvement; and of Coimbatore where modern mills, established ten miles away from the city, recruited its labour from the surrounding villages, thereby ensuring economy both in land prices and in overheads because labour did not require to be provided with accommodation or paid extra remuneration to cover the cost of journey to work. There are also examples of completely new towns (Faridabad, Mohone, Chandigarh, Kalyani) some of which were successful and some not, while Bangalore had the potentialities of developing into a metropolitan centre with a ring of sub-centres scattered widely at the rim provided it could find the necessary water for the increased population.

7.15. This view was re-echoed by Asoka Mehta who viewed with apprehension the explosive situation likely to be created by the increasingly rapid rate of urbanisation if it was allowed to operate unchecked. Economic development, he thought, was quite compatible with a national policy which provided, within limits, directions to shape the patterns of towns and cities. The relation between urbanisation and economic development was rarely direct and causal. The rate of increase in the size of cities and towns was much greater in India than the rate of growth in industries and these cities and towns were already over-congested and had very inadequate social amenities. To provide such amenities would mean huge additional expenditure, while not to provide them would be repeating "the tale of two cities" which would be their final condemnation. Where high density is inescapable in the present situation ampler civic amenities should, of course, be provided, and the incompatibilities of land uses unscrambled and segregated by better town planning; but the better plan would be to siphon off a substantial part of these present land uses to new areas to be opened up as well as to self-sufficient satellite towns where the job-seeking migrants from rural areas might go and find work as well as accommodation under reasonably healthy conditions. And this planning should not be for isolated towns or rural units alone but set in a regional pattern in which the complementary functions of the village, the small town, the big city and—where it exists—the large metropolis may support one another and not be in conflict. "When a river is to be trained it must be directed both at its source and further down its flow; similarly the flood of urbanisation must be attended at its source, during its course, and at the metropolitan estuary." This, in his view, was a perfectly practicable proposition. Through the power held by government in the location of industry, the purposeful economic development contemplated during the next 20 years can help this region-based urban development. Large factories can be deliberately planted in a small town or a new town, and as the employment multiplier is high they can be the nucleus of a growing urban community. Expansion of the facilities of transport, credit, and technical aid can encourage medium and small industries to move out of the existing cities. The proliferation of industrial estates holds considerable promise in these directions.

Localisation of Industries

7.16 Implicit in the divergence of views about the feasibility of control of locations is a more fundamental difference about the forces that determine the localisation of industries. For a long time it was generally assumed that the location of industries was settled by hard economic facts which could not be questioned. The industrialist set up his plant on a site where his costs would be lowest according to his calculation based on a most complex formula which embraced the cost of supply of raw materials, the cost and availability of labour, the cost of transport of his goods to the market and many other factors; and it was a reasonable conclusion that he who was risking his capital knew better than any one else what he was doing and where he was going. Under conditions of perfect competition assumed by "laissez-faire" capitalism this was supposed to contribute to general welfare by eliminating uneconomic firms and leaving the field only to those which were on economic (i.e. most advantageous) sites and therefore able to supply the market with the same kind of goods at a cheaper price. Thus did Adam Smith's "Invisible Hand" ensure that the more thoroughly an industrialist pursued his own interest in the selection of his sites, the greater was the benefit to the public. But later developments cast doubts both on the supposed grounds of selection of sites and on the automatic promotion of public welfare through the zealous pursuit of private interest. The squalid slums were a visible contradiction of the benevolence of the "Invisible Hand", and questions were asked whether there were not perhaps other factors to be taken into account besides the industrialist's own calculation of costs and profits.

7.17. In one of his books * G. D. H. Cole discounts as specious but untenable the theory that the entrepreneur knows best where it will be most advantageous for him to put his factory. The majority of employers, in setting up or developing a business, do not in fact, nor can be in a position to, decide on perfectly rational grounds where to put their factories. Besides an element of rational calculation which is usually largest in the case of big concerns, there is always a great deal of sheer haphazard in their placing. A man starts on a small scale in his native town, strikes lucky, and expands in his own site if he can; if not, he looks out for a site somewhere near enough for him not to uproot his workers from their homes or to be at the pains of getting and training a new labour force. † Even for a syndicate or a big company the choice is made less on rational economic grounds than by settling either where other firms of a similar sort have gone already or where the chief promoters (or their wives) prefer to live. There is a very large irrational element in the choice of the location, and in a great many cases there is in effect nothing that may be called conscious choice.

7.18. In fact, in talking about the location of industries it may not be inappropriate to distinguish between the economics of site and the economics of gregariousness. Some industries are completely tied down to particular localities. Among them are the extractive industries, mining, stone quarrying etc.—where the site is predetermined by Nature. Coal must be mined where found and the only choice of alternatives lies in deciding which measures to exploit first with modern technological improvement bringing deeper seams within reach. Ships too can only be built near the mouth of a navigable river with a clear outlet to the sea. In the same

* G. D. H. Cole.— "Building and Planning". 1945, p. 23.

† Cf. Prof. J. H. Jones's note printed as Appendix 11 to the Barlow Commission Report giving striking examples of the "personality" factor of pioneering employers in playing a deciding role in the selection of site viz. the motor car factory near Oxford.

category we may perhaps place tea which must be processed immediately after the leaves are plucked, making it inevitable that the factory must be within the plantation. In these cases the site is dictated by the source of the raw materials. At the other end of the scale are the industries—mainly service industries—where site is dictated by the market where the goods and services are consumed. Laundries, bakeries, hair-dressing, dress-making, domestic service, education, law, housing, accountancy, retail distribution, transport, municipal services etc. satisfy local needs and cannot be supplied from a distant source. Tailoring also comes under this description though there is a growing industry of mass produced men's wears which may replace part at least of the work done by local tailoring establishments, especially if the consumer is not too fastidious about cut or style. The distribution of electricity and gas must also be local wherever the source of supply may be located. These industries are distributed throughout the country and their scale and importance vary with the wealth or poverty or size of each local community.

7.19. In between these two limits however there is a wide range of industries whose location is not precisely determined by natural or human factors. The exact reason which leads originally to the setting up of industries in different regions are many and various. Apart from the accidental and haphazard selections we have already referred to, part of the reasons must have been economic in character. The industrialist wants to produce goods and services at the lowest possible cost. Cost may be divided into cost of securing raw materials (including power), of preparing the product, and of conveying it to the consumer. The first and the third depend to a considerable extent, though not exclusively, on the availability of an efficient means of transport connected both with the source of supply and with the market, and this has considerable influence on the choice of site. If the cost of distribution comprises a small proportion of the value of the product its influence upon location will be weak; if the cost of collecting the materials is relatively high the attraction of the industry to the source of supply will be correspondingly strong. Where raw materials are bulky and power based on the consumption of a large quantity of coal is an essential ingredient of the process of production it tends to be set up in close proximity to the coal fields but not far removed from the railway stations which provide the means of transport. Commodities that are heavy and bulky and cannot profitably be conveyed to great distances tend to be made as near their respective markets as possible. In fact, even in the case of other industries—especially those that produce light industrial and consumer goods—nearness to the market and the availability of suitable labour in the vicinity are outweighing the advantages of raw material supply in determining the location. If an industry requires highly skilled workers the fact that the workers are concentrated in any particular region may be decisive.

7.20. The Asansol-Raniganj zone is an illustration of the first type of industrial concentration. The site of coal was predetermined. Its presence as well as the presence of iron ore, clay and other raw materials drew other industries into this zone, especially when railways opened up the area and provided a regular transport for raw materials and finished goods. But this latter group is no longer tied to the coal fields and the railway stations in the same manner as they used to be before. Technological changes during the last half century or more have greatly increased their mobility, and location has become less dependent on proximity to coal fields as a result both of easily transmissible electric power and of large economies in the amount of fuel consumed in the industrial process. The conservation of heat and other economies achieved in modern integrated plants has made it profitable to utilise low grade ores and effected a considerable reduction of the amount of coal required to produce a ton of

steel. The internal combustion engine has revolutionized transport and motor vehicles are a serious contender with the railways in the carrying trade. They have freed industry from the necessity of siting itself along railways and given an extraordinary flexibility to industrial sites by reason of their ability to undertake haulage from any point on a widely ramified road system instead of from points set 5, 10 or 20 miles apart along the route as is the case with railways. If in spite of this industries still cling to where they were it is because of the well-known fact that the advantages which are created by man after an industry is once established foster further growth by a process which we have previously described as the economics of gregariousness. Strictly speaking, the economics of gregariousness relate to the external economies about which more will be said later. The economies which are due to the large scale of the industry relate to internal economies of which economic overheads are one, though several related industries under the same management may give rise to both. There is a third kind of economy which arises when industries are sited in cities because of the fact that the land is already equipped with municipal services and roads and does not require any further outlay of a capital kind from the industry itself.

7.21. There was no particular or inherent advantage to single out Calcutta or Howrah as the location of the most important industry of Bengal, jute (whose source of supply was in far off East Bengal), except the river and the port. In the earlier era, another British industry, indigo, also based on agriculture, was not concentrated in Calcutta but scattered throughout the districts near the source of the raw materials. But the Scottish industrialists who interested themselves in jute preferred living together in a compact area in close touch with fellow Britons who were running the administration, such proximity not only facilitating convivial meetings in clubs and social functions but giving them a pull on the administration from which the industry expected to benefit and did undoubtedly benefit. Jute was primarily meant for export and the nearness of the port, together with proximity to the seat of authority, overrode all other considerations. "The extremely heavy concentration of industries (in Calcutta and Bombay) where close to half the Indian manufacturing plants are located were developed as a result of trade with the West. At first only trading centres, they grew in the course of time into populous cities with heavy industrial concentrations which have encouraged further growth."*

7.22. This encouragement is due to the creation of Marshallian external economies which are thus explained in the report of the Barlow Commission :—

(1) Once a major industry has come into existence at any place it attracts to itself cognate industries engaged in the same kind of product, or related industries which either complete the finishing process or utilise the by-products or supply it with equipments and components. The original industry and the subsidiary industries acquire a momentum which enables them to persist and to grow long after the original causes that explain their location have disappeared. Many of the subsidiary industries such as repair shops, foundries, makers of component parts of machineries etc. also serve other industries not directly related to the primary or basic industries which originally brought them into being, so that the snow ball effect of one industry attracting another and the latter attracting still others can go on almost indefinitely till the umbrella spreads over a very wide area. This localisation of several industries lowers transport cost, co-ordinates marketing, selling and warehousing arrangements, and builds up a pool of common services and facilities to meet the needs of the whole group of firms.

*William Bredo --- Article in "India's Urban Future", Chapter xii, P.280,

(2) A reservoir of skilled labour is established accompanied by an appropriate system of technical education. Experts, consultants and higher grade employees with technical and administrative experience flock to the place, which stimulates inventive capacity spurred on by rivalry between competing firms engaged in the same process. In various ways an industrial atmosphere among businessmen and an industrial tradition among workers are created which help the efficiency of both.

(3) A wide local market grows up. The concentration of a number of varied industries and the resultant concentration of population attracts producers of a wide range of consumer goods and services and enlarges the market still further both for the original manufacturing units and for the new entrants into this industrial complex. The proximity of the market facilitates close contact between producer and retailer ensuring punctual and frequent delivery at small transport cost without the need of holding a large stock of goods.

(4) Lastly, although the Barlow Report does not specifically refer to it, there is the economy in the social overheads, the bulk of whose cost the industries are able to pass on to the public. In an isolated industrial settlement, the responsibility for providing civic services like roads, water, light, sewers, houses—even schools and recreation centres—rests primarily on the industry.

7.23. Once the right impetus has been given all the relevant factors—the development of skill and enterprise, the improvement of transport facilities, the growth of local market, the saving in “infra-structure”—all pull in the same direction with cumulative effect and generally give rise to the conurbations which are a feature of urban industrial development in the West and of which we see examples on both sides of the river Hooghly.

7.24. But the Barlow Commission were not content with stating merely the economies of concentration. They were also, as Peter Self says, the first to state publicly the dis-economies of such concentration some of which are still very important : (1) The concentration which is the result of high specialisation and leads to industrial depression when for some reason or other the demand for that particular commodity declines need not be stressed here because in the Hooghly side conurbation the general pattern is diversity rather than specialisation. (2) Nor is the competition for skilled labour by different cognate industries, clustered together within the same small geographical area, any economic argument, for if the requisite quantity of any particular type of skilled labour is not available at any one time dispersal of industries would not make it so. (3) More relevant is the traffic congestion in large towns which, by prolonging the journey in crowded buses or trams, steals man hours out of working time, increases absenteeism, impairs efficiency by its effect on the nerves, and justifies a demand for higher wages to meet the extra cost. Where industry is concentrated as in Bombay or where the location or movement of industrial sites and housing sites is in opposite directions as was the case in England when the Barlow Report was drawn up, this is a correct assessment ; but in Calcutta, where industries are dispersed and the central city core is mainly administrative and commercial and not industrial, this argument has less force, and occasional instances of houses and worksites being separated by a long distance should be regarded as exceptions. (This does not mean that traffic does not pose a problem in Calcutta. It does, and in a very acute form, but only to the general public who have to travel during peak hours under conditions of inconceivable overcrowding to their offices and is a good argument for staggering of hours or a wider geographical distribution of offices and business houses). (4) But the high cost of land definitely is a strong economic argument against industry being sited in cities like Calcutta, for the soaring prices must

greatly increase capital cost if any expansion of the factory premises or any provision for labour housing has to be made. (5) Moreover, the greater the urban concentration the more stringent are building and other regulations which local authorities must impose and this raises the cost that could have been avoided in less congested areas. (6) The other two dis-economies pointed out by the Barlow Commission are costs to the nation or the public authorities, not to the industry itself—viz. the encroachment on good agricultural land which correspondingly diminishes the farm output, and the increased expenditure for municipal services which have to be incurred by the local authorities from public funds. They need not therefore be discussed in this connection.

7.25. But economic considerations and the maximisation of profit are not the only factors that enter into one's calculations in deciding where an industry or a group of industries should grow. The Barlow Commission also referred pointedly to the social and strategic disadvantages which can only be very briefly referred to here as they relate to English conditions in the late thirties which are not necessarily identical with conditions obtaining here. As regards health, the conclusion was that despite enormous improvement in urban health conditions and the advance in medical science rural districts were still healthier than industrial and urban districts. The causes were the crowding together of houses, the overcrowding within each house, the adverse effect of economic pressures upon the standard of living, the sadly deficient quantity of public open space for recreation (due to high land values), the effect of smoke not merely on health but—through fog or smog—on traffic dislocation, the deleterious effect of noise on hearing, efficiency, nerves etc. the receding countryside, and other matters. On strategical grounds it was argued that the extreme concentration of men and industries in the Greater London area made it peculiarly vulnerable to air attack. Possibly in the era of space ships and nuclear bombs the whole mechanism of defence strategy will need re-thinking.

The advantages of decentralisation

7.26. Provided that there is no insuperable economic argument against the siting of industries in, or their transfer to, non-urban or semi-urban areas or small towns, it is not difficult to see the advantages that may flow from such decentralisation:—

(1) In the first place, there will be greater regional parity in economic development which is now concentrated in a very small part even of this small and truncated state, and sizable segments of the population who are now living in remote districts in comparative neglect and poverty will be brought into the main stream of economic progress. The reasons which justify a wider dispersal of public sector industries in different Indian states even at the sacrifice of short-run economic advantages apply here with almost equal force. By decentralisation industrial centres may be established to create the nuclei of economic activity in under-developed regions within the state which will make the economic development of the country geographically more well balanced. It will also remove one element of the latent and half-articulate grievance now felt against the 'intruder' from across the border which may one day lead to more vocal resentment and violent conflict.

(2) Even economically the gains will not be inconsiderable. Factory expansion will be less costly because land is cheap and plentiful. The housing cost may be nil if the site is near enough to enable the worker to stay at home; in any case, the multi-storeyed and costly constructions necessitated by high land values and stringent municipal regulations may be replaced by cheaper and simpler constructions with ampler space standards, whose cost may be further economised if indigenous materials are used

and self-help method adopted. Either way, there will be a great saving in house rent whether the cost is borne by the labourer or the employer. Even the costly infra-structure of the cities may not be needed if some selected deep tanks are reserved for drinking water and septic tanks, aqua privies, and bore hole latrines or pits are substituted for sewers as has proved successful in Japan without losing their economic advantage.†

(3) The cost of journey to worksite will be nil (except in terms of human energy) if the labourer lives in his village home or in huts erected within walking distance from the factory ; at the most it may mean a capital investment in a bicycle if he can save enough to buy or hire one. The labourer may use his spare time or his off days in his patch of ground at home to grow vegetables to supplement his food. All these savings—in housing, cost of journey, and supplementary farm produce—may make him agree to accept slightly lower wages than he would have demanded in the city or the metropolitan area.

(4) An industry conducted under more peaceful conditions—free from the smoke, fume, noise, dirt, vibrations etc. except what it itself creates—is conducive to efficiency both for the management and for the worker. The labourer is more healthy because of fresh air, sunlight, clear sky and nerve soothing green earth. Remoteness from the centres of political agitation makes labour unions concentrate more on their economic grievances and measures calculated to remove them and less on the political implications of labour-capital relationship. There will thus be less temptation to lend themselves as pawns in the political game as is done in cities and big industrial concentrations which so often leads to absenteeism, strikes and soft-peddling of normal work.

(5) If the industry is suitably selected so as to be able to utilise local resources that would otherwise have run to waste because of their perishable quality or bulk it saves cost (in price as well as in transport), while the local producer gets an addition to his income by selling things for which there was previously no market ; if it is of a kind that supplies a local consumption need it may make them available at a cheaper price to the inhabitants of the villages. The productivity of the household and the content of living of the members of the household will both be improved.

(6) Considerable gain will accrue from the prevention of social dislocation implicit in the long separation from family life, of the corrupting influence of anonymous living in an urban atmosphere which offers temptations but not responsibility, and of the political instabilities and tensions to which mob psychology is particularly prone.* There will be no need to spend a long period of heart-breaking hand to mouth existence in idleness or in parasitic secondary or tertiary work—sometimes long enough to kill all capacity for regular disciplined work in factories—which is now the fate of many of the in-migrants to cities, if industry can be brought to the door of the villager or near enough to enable him to keep in touch with its development and labour needs from his own village home.

(7) Agriculture will benefit in more ways than one. (a) There will be more demand for farm produce—cereals, vegetables, milk, fish, eggs etc.—from an increased population, and better prices obtained. In fact, agricultural productivity will itself be stimulated not merely because of increase in price but because of the variety of demand from an increased market and the possibility of disposing of the produce before it tends to rot or perish. The fillip to potato cultivation in Hooghly in the industrial

† Cf. Catherine Bauer Wurster's article in "India's Urban Future", page 288.

*This has been fully explained by Prof. Shanti Tongri in the article "Urbanisation, political stability and economic growth" in a manner which is likely to make one's flesh creep. See Chapter X of "India's Urban Future".

hinterland is an instance in point. Even in England, the new towns have greatly stimulated farming or agricultural activity in neighbouring villages which would otherwise have lain dormant because of lack of demand in the vicinity. (b) By drawing off redundant labour which improved agriculture may bring in its wake it will relieve agriculture of unproductive or less productive labour and at the same time increase the potential demand for agricultural produce. (c) If the industry be of a type which produces farm implements or fertilisers its proximity will be an undoubted gain but this can only happen to a limited number of rural areas.

(8) One of the greatest gains will be the metamorphosis that an industry within its boundary or on its fringe may bring about in the life of a stagnant or moribund village and the two-way cultural traffic it may induce. (a) The villages that have been losing their population to cities are suffering a double loss. "Migration is always a selective process. The young and the energetic find it easier to move than the old or the lethargic ; a single man or woman is much more mobile than the father or mother of a growing family ; the able-bodied can move more easily than the ageing, and the adaptable more easily than those who have become set in specialised skill or routine. Accordingly, where an area is losing population by emigration it tends to lose just those whom, from the point of view of productive efficiency and of adaptability to alternative occupations, it needs most to keep. It is left with an abnormally high proportion of the old, the ailing, the feckless and the unadaptable and it is severely hampered in its task of re-orientation to changing conditions by its lack of the very persons who would be most helpful to it in dealing with these tasks." * This is true not merely in England but also in India for, as Messrs. Bogue and Zachariah have shown, "the propensity to migrate to urban areas is much higher among literate and educated people than among the illiterate and that as the level of education rises the tendency to travel greater distances to seek employment increases."** Whatever leads to check this flood of emigration—as decentralised industries are expected to do—will therefore be of help in bringing new life into villages. (b) This new life may find expression through various channels—re-invigorated self-governing local bodies or panchayats, local sports clubs, libraries, theatricals, and local educational, charitable or cultural institutions—all may benefit from the money that may filter through to them from the industries in the neighbourhood or from the wider area of choice for people who can take part in and run them. (c) A harmonious combination of agriculture and industry will bring variety into village life, raise the status of the villager in his own eyes as well as in the eyes of the outside world, and open up channels of cultural contact between city, town and village to the benefit of all. The polarisation which Asoka Mehta has apprehended will either cease to exist or be much less pronounced.

(9) There may be greater equality between town and country in the matter of income and also in the distribution of economic power. This latter does not, of course, follow as an inevitable corollary, for there are some forms of decentralisation which may leave economic power where it was before. When a big firm establishes factories in different parts of the state or an industrialist-cum-financier farms out production to a large number of cottage-based work-shops, advancing loans and collecting the produce at his own price in order that he may take advantage of the subsidy which government gives to cottage and small-scale industries, some sort of decentralisation is no doubt achieved, but economic power remains concentrated in as few hands as previously. Power attaches to the firm, not to its scattered factories; to the financier, not to the sub-contracting producers. In order that decentralisation may

* C.D.H. Cole --- "Building and planning", 1948, P.14-18

** D.J. Bogue and K.C. Zachariah---"Urbanisation and Migration", Chapter II in "India's Urban Future", P.53. Also see Sachin Choudhury's article in the same volume at page 226.

lead to redistribution or equalisation of economic power it is necessary also to reorganise the financial or credit structure and improve marketing facilities.

(10) Smaller units of population concentration, provided they are not too small to pay for the social overheads and the cost of running an administration, are easier to run as local authorities than larger units. A gigantic city or conurbation is unmanageable as a local authority and a co-ordinating body consisting of representatives of different local authorities within a large metropolitan complex may be a scene of perpetual squabble or log-rolling.

(11) Lastly, there is the important fact that the social overheads in cities and large towns are so vast and costly that even their provision on a modest scale will be a terrible drain on the scarce resources of a country which needs all such resources for its programme of economic development. These resources may be measured in terms of money or in terms of materials (coal, power, cement, steel etc.) as well as skilled labour; but however they are computed, anything diverted to urban development will be so much withdrawn from industrial development and, to that extent, will be a factor impeding economic progress. To allow cities to expand by taking in more industries and more industrial labour from the villages without at the same time providing for their accommodation and supplying minimum municipal services in the hope that they will somehow accommodate themselves and use the streets (in the absence of vacant spaces, for there will soon be little vacant space left) for their normal physical functions will be unthinkable in these days.

Conclusion

7.27. What do all these add up to? Is it possible to have the much-needed economic development in this state without the extreme form of urbanisation envisaged by some of its protagonists although it is unanimously agreed that in spite of the two being interlinked there is no causal connection between the two? How valid is the assumption that such extreme urbanisation is the necessary pre-condition and concomitant (though not the cause) of industrial viability? If, as Britton Harris implies, new industries will not be started unless the rural migrant is prepared to submit to the pig-sty life of bustees in order to induce the private sector to risk its capital in industrial enterprise, is it not itself a condemnation of the private capitalist system which he so strongly advocates "on democratic ground"? True, there are external economies to be considered but it is important to distinguish the real economic advantages which foster growth from the circumstantial factors which have the same effect. "In the absence of compelling economic reasons to choose one place rather than another many firms have simply stuck to a traditional location or 'gone with the crowd'. These conurbations contain many firms which have no compelling economic reasons for being located there but which are drawn by incidental advantages not all of which are economic ones." *

7.28. One of the important external economies is the existence of a reservoir of skilled labour, but as Patrick Abercrombie has observed in his Greater London Plan, most industries to-day require no specialised aptitudes and do not need to be sited by reference to the traditional skill that exists in any particular locality. The nature of their work demands relatively little skill but a high degree of steadiness and reliability—'qualities which could be found almost anywhere among the working class population to-day.' Similar views were expressed by the Barlow Commission which said, particularly with reference to light industries, that most of them "tend to utilise a smaller proportion of highly skilled labour requiring lengthy periods of training or

* Peter Self—"Cities in Flood", 1957, p.30-31.

apprenticeship and a larger proportion of semi-skilled, including female or juvenile, labour in the shape of machineminders. The dexterity and type of skill is quickly acquired and adapted fairly readily to a number of different industries so that those semi-skilled in one form of modern industry have not much difficulty in transferring to other firms." * It is not necessary that there must be a reservoir or labour already waiting on the spot in order to be utilised, for new areas can be developed by attracting labour either from surrounding areas or other places. Population will follow industry. The greatest pull of cities is economic. The large number of men who flock there and are either unemployed or engaged in parasitic work of dubious economic value do so in the hope of getting some more stable job in future. Transfer the pull to some other place and the "carrot" will do the trick without the help of the "stick."

7.29. Another desideratum is entrepreneurial skill which is supposed to be a hot house plant bred only in the metropolitan atmosphere. That such skill may not be found elsewhere or may refuse to go to non-metropolitan or non-urban areas even if a suitable industrial climate is created is not supported by evidence and is not accepted even by those participants in the seminar at Berkeley who, on other grounds, were half inclined to side with the agglomerationists." †

7.30. The theory that all industries seek land in concentrated urban areas to set up their factories in order to take advantage of pre-existing external economies is also contradicted by experience. That the public sector industries are not thus fettered in their choice is admitted. Large-scale industries even in the private sector are inherently more self-sufficient. They can often be established successfully in rural isolation as has frequently happened in other parts of India and also in West Bengal.** They have created their own external economies, and built up their own infra-structure without any difficulty about the labour supply or any strain on their capital resources. There is no reason why others should not follow suit. These industries may be the nuclei of a number of light or medium scale industries leading to urban areas of fair to middling size or even cities exceeding 1,00,000 mark without the congestion or squalor which is incidental to unplanned growth. The objection that light and medium scale industries need the support of big industries or the neighbourhood of a local market may thus be met. But even this is not, in our opinion, a necessary prerequisite for the viability of such light or medium scale industries. With comparatively cheap labour at site, with industrial estates providing the necessary infra-structure and even factory premises at moderate rent, with credit facilities provided through the financial institutions designed to help struggling young industries till they find their feet, we do not see any reason why such a planned dispersal or decentralisation even of light industries should be foredoomed to failure. In fact, as has been observed already, there are certain circumstances which favour such a pattern of development. Economic planning is now an accepted doctrine, and although physical planning has not made much headway it should follow as a natural corollary from the first. Both urbanisation and industrialisation are on the eve of the "great push" and it is not yet too late to shape the future pattern of growth. There are many instruments in the hand of government to direct the location of industries and the consequent movement and concentration of population—viz. the setting up of industrial estates, the laying out of new transport routes and facilities, the expenditure of public funds in housing and sanitation, the issue of licences, import control and export

* Barlow Commission Report, p. 58.

† Cf. "India's Urban Future", Chapter XI, p. 226.

** Cf. The eight towns or townships which grew up from single isolated industries—Burnpur, Kulti, Sahaganj, Batanagar, Chittaranjan, Rup Narayanpur, Kanyapur, and J.K. Nagar.

encouragement—all of which, if wisely used, may help greatly to bring about a desirable spatial distribution.

7.31. Will such guidance about location be resented by the big industrialist because he does not like to be ordered about? Would it inhibit investment because the slight margin on which he works will make all the difference between success and failure if he shifts from the site of his choice to any other among many within which he is allowed to exercise his option? Those who have seen the conspicuous consumption indulged in by big industrialists, their large entertainment bill at the cost of the company, the high salaries and other perquisites given to the top executives, the high rents they pay for long-term company leases for luxury flats for their officers, and the large donations made to selected charities or political causes find it hard to believe that a slight shift in site will wipe off a "slender margin of profit" so as to compel them to close their doors or withdraw from prospective investments. As we have already seen, big industries do not depend on existing external economies in order to survive; they create them.

7.32. We are not opposed to industrialism and the degree of urbanisation needed to support it or carry it forward. While we are in favour of increased vigour being imparted to existing indigenous village industries carried on in cottages or small workshops whenever they are viable or have an aesthetic value of their own, we do not suggest a reversal of the present trend to industrialisation and a reversion to the handicraft stage for all the goods we need. Economic development without mass production method is not, in our opinion, feasible. All we have tried to say is that the extreme form of urbanisation or agglomeration we see around us is not a necessary concomitant of industrial growth—even rapid industrial growth. It is impossible to avoid urbanisation, for when 5,000 people living at a density of 1,000 per sq.m. are enough to constitute a town, few industrial developments can take place even in rural areas without their gradually taking on an urban content. The only question is how much urbanisation and where. On the first point it is impossible to be dogmatic. Some have argued that a town with a population of 20,000 to 50,000 is industrially viable. A leading American economist, Prof. Rosenstein Rodan, is stated to favour 4,00,000 to 5,00,000 as the minimum that is necessary. In between, all possible figures are given and Britton Harris lays down a minimum of 200,000 or 250,000 to start with but favours to have it converted into a 'millionaire' city as soon as possible. On that we do not presume to offer any opinion for each case will have to be decided on its own merits. All we suggest is that cities must not be set cheek by jowl and that whenever the prescribed population is reached further increases should be strictly controlled so that one city does not impinge on another and lead to the growth of big unwieldy conurbations.

CHAPTER VIII

The control of urbanism

8.1. We may deal at this stage with the question of how the problem of extreme urban congestion can be and has been tackled in some other countries by substituting a policy of conscious direction for a policy of drift. Should the development be "Outwards or Upwards" as the question was headlined by a writer in the *Journal of the Town Planning Institute* (March 1958)? And if outwards, should it be by a continual peripheral development with the countryside receding almost to vanishing point; or by a decentralisation of homes and employments from metropolitan areas in a way which physically and economically separates them from the parent town? For it is obvious that if vertical construction is ruled out, these are the only two alternatives that are open. As Mr. Macmillan pithily said in 1952 when he was the Minister in charge of Housing and Local Government in England, "if towns are not allowed to swell they must be encouraged to hop".

8.2 Vertical construction advocated by Dr. Ruth Glass* in order to save nearly a million commuters from the necessity of journeying daily to London for work did not receive much support from others. It was pointed out that she had not given any reasons for doubting the practicability of decentralisation. The writer of the article "Outwards and Upwards" proved, after taking into account all forms of expenditure including that on travel, that the cost of decentralising up to a distance of 30 miles would be less than building tall blocks of flats in the city centre. Far from reducing the problem of transport as Ruth Glass thought, it would render the provision of a workable transport system physically impossible, for the car-owners among the commuters would bring their cars to the city, competing for inadequate garage space and adding to the congestion of traffic. To bus queues there would now be added lift queues of much greater intensity than one sees in the New Secretariat building or in multi-storeyed business premises; and the chaos that would follow in case of a temporary break-down or power shortage can be easily imagined. Moreover, a larger resident population does not merely mean greater living space but requires more social services (schools, hospitals), more playgrounds and recreation centres, more and wider roads with ampler parking facilities—most of which require a larger proportion of horizontal space than vertical. The saving of space by vertical construction of houses or flats to live in would be small compared to these other land requirements which cannot be sacrificed except by denying the citizens some of their most pressing social, cultural and physical needs. As Keeble says, "It is difficult to see why such a fate for metropolitan dwellers should be tamely accepted. It is futile to raise the standard of living on paper by creating enormous complexes for production, distribution and exchange, if the cost is to be a hellish physical environment for many millions of people".†

8.3. On continued peripheral development Keeble's comment is equally brief. "The consequence of this could only be a spreadout hell instead of the compressed hell to be expected from" vertical construction.

*It is interesting to note that when Dr. Ruth Glass and her husband Dr. David Glass, both eminent in their academic lines, met the chairman of this Commission during their visit to India in the early part of 1961 they reiterated their belief that in West Bengal with her acute shortage of land, vertical construction in big cities was probably the only way out.

† Keeble, *Op. cit.*, p. 44.

8.4. If sprawling suburbs are also ruled out there remain only three alternatives which can be tried and have been tried with varying degrees of success in the Western countries. They are (1) satellite towns, (2) brand-new independent towns built almost from scratch, and (3) expansion of existing towns. Another method, that of green belts, has also been suggested, but this, as we shall presently see, is not a remedy for urban congestion but a means of temporarily halting an endless suburban sprawl.

Greenbelts

8.5. This picturesque expression of what may not always be green nor a band or belt of uniform width encircling a city or town creates different images in the minds of different people and serves two distinct purposes which have nothing in common with each other. The first purpose is to preserve stretches of attractive countryside lying on the periphery of big cities for the refreshment and recreation of city dwellers but without doing any harm to agriculture; the second is to interpose a barrier between two neighbouring towns or cities to prevent their being fused into one huge and shapeless conurbation.

8.6. For the second purpose it is not necessary that the belt should consist of agricultural or arable land, for anything that acts as a buffer between two cities (e.g. the moors and mountains that surround the Clyde Valley or the vanishing Salt Lakes to the east of Calcutta) would serve the purpose just as well. But natural barriers which are nearly insurmountable pose no problem and demand no action; it is only solid land (or what can be turned into solid land by reclamation) that is in danger of being built upon and it is to such land that the green belt concept particularly applies. The distance necessary to separate one town effectively from another has been variously estimated from 2 to 5 miles or even more but it naturally depends upon their size and topography and their mutual gravitational pull. A narrow moor land or swamp is a more effective barrier than a much wider stretch of flat open country which is the speculative builder's paradise. It is very seldom that one will find an entirely unbuilt stretch of land on the peripheries of a big town though the density of development may thin gradually as one moves farther off, and such stretches will be of uneven width and may not complete the circle if ribbon development has been going on for a long time without let or hindrance. In fast-growing conurbations the more practical question may therefore be the possibility of finding out any stretch of land at all that may still be saved from the prospective builder's grasp or the prospective seller's greed, and of saving it regardless of whether the width conforms to the standard laid down by planners.

8.7. As a means of recreation in open country without injury to agriculture, a green belt has obvious limitations. Golf courses may not be much in vogue in our country but even football grounds which are cannot be laid out without encroaching on some agricultural land; and motor rides, in order to be enjoyable, need smooth hard-surfaced roads stretching over long distances. The declaration of an area as a green belt, even if the law allows it, does not destroy all private rights in the land nor make trespass legal. Pedestrians, out in the country, must watch their steps lest they unwittingly damage some crops or invade the privacy of rural life. But in spite of all these limitations, hiking into the countryside can be both pleasant and invigorating. The preservation of agricultural land and market gardening may provide the housewife with the fresh vegetables she needs for her kitchen. Under favourable circumstances such friendly intercourse may even break down the invisible wall that often separates the villager from the town dweller. The case for preservation of green belts on these grounds stands on the most solid foundations.

8.8. But for the second purpose, the green belt idea is only good as a temporary respite. When successful, it really goes counter to the idea of thinning out congestion at the centre unless it is considered as a stop-gap measure designed as a first step in a more long-drawn process—"a prolegomenon to an effective policy, valuable only as a part of a broader strategy".* The suburban sprawl is the natural, if unimaginative, outlet through which a congested city tries to redress the balance of extraordinary growth at the centre. By stopping it, one either freezes the congestion at its present intolerable density or compels the would be escapist to settle beyond the green belt area. If the original city remains the centre of business and gainful occupations, this will merely increase the distance of the journey (which the wealthy car-owner may not mind), accentuate traffic congestion for a longer distance, and do nothing to relieve congestion within the city during its busiest hours. Since most people have not the means of moving so far out green belts are constantly under the twin pressures of city inhabitants wanting to live in them and of owners anxious to sell out at a bargain and quit a livelihood (agriculture) which, even under the most favourable circumstances, is perhaps the least profitable of all. It may wear out the resistance and tax to the utmost the ability and vigilance of even the most efficient civic administration to preserve the green belt unless its task is made easier by opening other outlets where the overspill population could go.

Satellite towns

8.9. One such outlet can be the so-called satellite town. There is considerable ambiguity about the meaning and content of this term, and some writers have used it in a sense which makes it hardly distinguishable from the new towns established in England under the New Towns Act.† Since new towns are separately dealt with in this chapter we use the term satellite in the restricted sense in which Peter Self has used it,†† viz. houses and other ancillary buildings built by a large city to provide for its overspill population outside its own boundary because there is not room enough within the city for their accommodation. In intention it is something more than a mere housing estate, and land is reserved for industrial development and community needs to attract a broader cross-section of the community by providing local employment and reducing the incentive to go to the parent city for ordinary social needs and recreations.

8.10. The attempt, however, has not been quite successful, firstly, because provision of adequate industrial or other employment was beyond the capacity of the parent town; and secondly, because the perpetual ownership of the satellite by the parent town prevented the growth of that corporate life which comes from shared responsibility in the administration of civic services and utilities.

* Peter Self, *Op cit.*, p.101.

† Thus Lloyd Rodwin (cf. *The British New Towns Policy*, p.55) calls the new towns "balanced small cities or metropolitan satellites"; and Keeble (cf. *Principles and Practice of Town and Country Planning*, p.43) says that the present-day planning policy in England is largely based on the self-contained satellite town, able to provide employment to all its inhabitants, physically separate from the large town (preferably at least 20 miles away in order to discourage it from being a semi-suburb) but within the same region, so that it may use the same sources of raw materials, sell to the same market and utilise the same links with the business and financial organisations of the parent town as if it was located within it. He distinguishes it from a purely residential unit physically detached from large towns which is Peter Self's definition of a satellite. It may be noted that the 8 new towns established on or within the rim of Outer London are at a distance varying from 18 to 32 miles from Charing Cross and have as one of their principal aims the drawing off of the surplus population (with their employments) from London without completely cutting off their social and economic links with the parent town. They would therefore be satellites according to Keeble.

†† Peter Self, *"Cities in Flood"*, p.101.

The selection of tenants, both at the start and for subsequent vacancies, had to be made from the waiting list of the parent town, according to the length of time a man had been waiting in the queue, regardless of whether he was likely to get a job locally or not. Preference for such persons also meant that when the growing family of a tenant had young persons of marriagable age, this potentially larger family had either to be cramped within its original accommodation or split up and send a splinter away to another and possibly more distant area. Industry was shy when all its labour could not be sure of accommodation within the area, and many people, after having come to the satellite, found a long journey to work so they fatiguing that despite pleasant housing conditions, preferred to go back. The natural desire of the city to cater to its own ratepayers according to its own priority list, therefore led to a more transient type of community in the satellite and stood in the way of its organic growth.

8.11. The verdict of sober critics is that intrinsically the satellite of this type has nothing to recommend it. Its only advantage is that it can be built quickly by the housing machine of a big city, but "speed in relieving distress may be bought too dearly if it entails building unsatisfactory communities permanently sited in the wrong places". For West Bengal the idea of a city-built satellite on the land of some other local authority can be quickly dismissed as unpractical and lacking the initial impulse which prompted such activity in England. The obligation to provide accommodation to its citizens which local authorities in England acknowledge as part of their duty and in the performance of which they receive liberal grants from the Treasury, has not, by law or custom, been thrust upon local authorities in India nor accepted by them. No city or town, however big or solvent, has any legal or economic incentive to go beyond its borders and build houses and ancillary services for the homeless among its citizens. The very idea of providing houses for persons who would immediately cease to be its rate-payers would appear to it to be Gilbertian.

New Towns

8.12. As against satellite towns which are "too closely tied, administratively as well as geographically, to the apron strings of the metropolis" the new towns were designed to be fully self-supporting, self-contained communities. The seminal idea, derived from Patrick Abercrombie's Greater London Plan, was greatly reinforced by the recommendations of the Reith Committee in 1945. The Labour Government followed it up by the New Towns Act 1946 with commendable rapidity with the object of accommodating the surplus population from overcrowded towns to enable them to be redeveloped at a much lower density without perpetuating or reproducing the previously existing congestion. The primary stress was on the decongestion of London by setting up a ring of balanced new towns within its outer rim while other new towns were to be built to correct specific urban disorders in other areas. By 1950, 14 new towns were decided on—8 in the London metropolitan region and the rest distributed over a wide area in Scotland, North East England, the Midlands, South Wales and some mining areas. With the Conservative Government coming in after 1950, there came a lull. The new towns already set up were continued, but fresh activity on that line was stayed as emphasis was henceforth to be laid more on expanding and developing old existing towns than on starting new ones.

8.13. Into the particular history of these new towns and their special characteristics and vicissitudes it is not necessary to enter. But their general features and the way in which the schemes were carried through may serve us as models while the hurdles they had to cross may serve as a warning of the pitfalls to be avoided. We therefore propose to deal with them in greater detail than we have done in the case of satellite towns or will do in the case of expanded old towns.

8.14. (1) The new towns were directly sponsored by the government. From the planning point of view the most important feature was that the city was no longer to be "an accidental by-product of countless individual decisions" of private developers, industrialists, traders and property owners who were guided largely by markets, prices and profits. It was to be planned in advance to embody certain social goals so as to provide a framework into which all private decisions were to be fitted.

8.15. (2) The site is selected by the Minister after consulting all the local authorities concerned but not necessarily in obedience to their wishes. Among the factors that guide his choice is that it must be comparatively unfertile and unsuitable for agriculture, reasonably accessible through roads and railways, relatively economical for the supply of water, or provision of drainage and sewerage, and attractive to industry. Before designating an area for acquisition, the Minister has to prepare and publish a draft order, invite objections, and allow an opportunity for objections to be heard.

8.16. (3) The next step is to set up the machinery for the purpose of preparing the plan and executing it. In partial disregard of the suggestion of the Reith Committee which thought that the work might be done by local authorities or other "authorised associations", the Act decided in favour of a public development corporation of not more than 9 members (including the chairman and the vice-chairman), wholly appointed by government and vested with fairly wide powers. Most new towns were lucky in the personnel of their development corporations and particularly of their chairmen and managers, some of whom were men of great ability and imagination who had already made their mark in business, in public or academic life, or in the permanent civil service. *

8.17. (4) The efficiency of even a hand-picked corporation depends greatly upon the powers with which it is vested, the amount of freedom allowed to it in policy formulation and day to day administration, and the availability of funds which it may use at its discretion with the minimum of financial control from above. The apparently extensive power "to acquire, hold, manage, and dispose of land and other property; to carry out building and other operations; to provide water, electricity, gas, sewerage and other services; to carry out any business or undertaking in or for the purposes of the new town or for purposes incidental thereto" were however somewhat deceptive, for they were considerably circumscribed by the addition of a clause to the effect that in performing these functions it must strictly 'conform to the general law'. The net result is that it can plan and build roads, houses, factories and shops, and it is relatively easy for it, where necessary, to obtain sewerage and water-supply powers normally vested in local authorities and water companies; but beyond this the development corporation cannot exercise the functions which elsewhere would be undertaken by local authorities. In other words, it may do anything judged necessary to make the town attractive and viable but other main local government services and utilities cannot be undertaken except when a local authority or statutory undertaker † fails to come forward to provide them and the Minister agrees to their being undertaken by the corporation. In the disposal of property it is expected not to grant leases beyond 99 years except with the Minister's express approval.

*The list is impressive and includes men like Lord Beveridge, Lord Reith, Sir Ernest Gowers, Sir Thomas Bennet, Mr. H. W. Wells and Mr. Richard Costain.

Since a new town may be made or marred by the type of corporations set up we cannot insist too strongly on the need of selecting men who combine ability and imagination with a high sense of devotion to public duty. Such corporations must be kept absolutely insulated from patronage, political pressure or party advantages.

†By which is meant a public utility concern authorised by law to carry on transport undertakings or supply electricity, gas or water.

8.18. Being able to start from scratch and without having to subordinate all other elements of a well-knit and balanced town to the sole purpose of providing accommodation to Londoners in need of housing, the development corporations could plan and design on a generous scale with the help of the most competent professional and technical talents available. The fact that all the lands were under single ownership was of inestimable advantage. All the towns were of moderate size and relatively low density, with segregated land uses and an emphasis on open spaces—public as well as private—including playgrounds, gardens, parks and the countryside. In spite of being relatively close to the capital and within its orbit of employment or cultural and recreational facilities the towns avoided the risk by creating most of the conditions of satisfactory living within themselves. The primary emphasis was on attracting suitable industries for they were to be the backbone of most local employment. True, their range of choice was restricted, for the new towns in the London metropolitan region could only admit London firms or their branches and, that too, after they had overcome the Board of Trade's desire to despatch them to 'development areas' elsewhere. Nor could they offer the incentives or subsidies which the Board of Trade was free to offer to divert industry to those areas. But by laying out industrial estates, providing all necessary services and utilities, building standard factories to order and offering a house for immediate occupation to every industrial employee the development corporations were able to draw to the new towns a sizable number of industries from overcrowded London with assured job opportunities for the bulk of the new town inhabitants. The success of the new towns in this respect is proved by the stability of the people and of the industries who have moved in. The industrialist is satisfied because there is better health and less absenteeism among the workers and because greater willingness to work over-time under pleasanter factory conditions has resulted in increase in productivity.

8.19. (5) But minute governmental supervision and the stringent scrutiny in matters financial cramps the style of many development corporations and is galling to the ablest among them. Another bottleneck arises from the peculiar administrative set up of English local government and the division of functions among different tiers of local authorities.* Sir Ernest Gowers, Chairman of Harlow and one of England's most distinguished ex-civil servants, complained of "the cumbrous machinery with a profusion of officials doing one after another work that one official could well have been trusted to do by himself"—a statement from which Sir Northcote Parkinson might have drawn his inspiration if he had seen it before he deduced his famous law. But the author of "Plain Words" did not berate only the local authorities; he had a few plain words to say about the Ministry itself, about how Harlow's "progress has been unnecessarily delayed and its expenses unnecessarily swollen by prolonged scrutiny on the part of the Ministry's officials of matters of detail which might have been left to the corporation's discretion". This exasperating parental fussiness over its new town babies—as Peter Self puts it—was perhaps natural at a stage when the Ministry had to face

*Lloyd Rodwin—The British New Towns Policy, p. 73. "They must consult with and secure approvals from local district councils on building by-laws, on plans for sewerage, open spaces and sometimes water. They must engage in similar negotiations with the county council for roads, surface water drainage, education and health services; with statutory undertakers for special services such as gas and electricity; with the Ministry of Health on water and sewage disposal; with the Board of Trade on industrial development; with the Ministries of labour and works for labour and materials, and so on. Moreover, since sites for the new towns were chosen presumably for technical and socio-economic reasons the boundaries of local authorities were often slighted; and as a result some of the above complications were multiplied because of overlapping boundaries and multiple jurisdictions." See also pp 74-75.

a highly critical Opposition and not too enthusiastic supporters. Sir Ernest Gowers himself admitted that the problem of how much control was proper for a government to exercise over a statutory Board was exceedingly difficult and no generally accepted solution of it had yet been found. But if "five months devoted by the officials of the Ministry to each of two projects ended in the acceptance of both, subject to very slight modifications which affected a reduction of some £3,000 in programmes estimated to cost nearly two millions" he had a legitimate cause of complaint. In these five months the staff remained comparatively idle and cost went up so that the ultimate balance sheet was one of loss, not gain, by the pruning.†

8.20. (6) The finance of the development corporations was to be obtained as a long term loan from the Treasury and not by borrowing in the market which however was not an unmixed blessing. While it assured the corporation of all the capital it needed provided it could make out a case, the case was judged on a strictly financial yardstick. Neither the Minister nor the Treasury would approve of any advance of funds for any specific development purpose unless it was likely to secure a reasonable return. This, as well as the restriction on applying the profits of one type of activity (e.g. industry and housing) to meet the deficit of another (e.g. provision of social facilities) prevented the corporation from providing these facilities except on austerity standards. "Without sewers, water, roads and factories there can be no towns; but without the necessary schools, churches, community buildings and recreational facilities the towns could hardly fulfil their promise. Till recently, the policy was to add only a bare minimum of the community buildings and recreational facilities until the bulk of the population arrived. ***Fortunately, this policy is in process of being reversed."*

8.21. (7) The architecture of these new towns has not won universal approval. This is not surprising; for the common gibe against economists that when there were six economists there would invariably be seven different opinions, two of them being Lord Keynes's, might apply to different schools of architecture as well. Some sophisticated connoisseurs of contemporary architecture and town planning confessed to "their greatest disappointment" when "comparing expectation with achievement". Some have branded low density housing as 'the cult of isolationism' while others have stoutly defended it. The design of the new towns, according to Peter Self, is largely an attractive and successful compromise between plans nurtured in a mood of expansionism and applied under conditions of financial stringency, between the opportunity of architectural and social experiments and the conservatism of popular taste. The dwellings have been necessarily fairly uniform in size and cost but the use of numerous variants on the basic theme of two-storeyed terrace houses and three-storey blocks of

† One can parallel this with much worse instances here. The chairman of the present Commission played the role of midwife to Kalyani town at its birth and for some months after, though the seminal idea must be traced to a slightly earlier period and to his predecessors in office. It may surprise many that he had actually been approached by a Deputy Secretary to agree to a reduction of two scythes or shovels out of four he had asked for as garden implements required by the arboricultural overseer. Every little proposal led to a long exchange of notes and considerable loss of time and even when the proposals were finally accepted 'the tide in the affairs of men' may have turned. The years that were lost, even after the principle was accepted, in obtaining financial approval to even the pettiest of expenditures raised costs, made capital scarce because of other unforeseen demands that came up in the meantime, and greatly reduced potential demand because the East Bengal refugees who could have settled there instead of squatting anywhere they liked, had by then run through the slender stock of cash they had been able to bring with them. After that, foreign exchange restrictions between India and Pakistan dried up a source which might have fertilised and improved town development in West Bengal at Kalyani or elsewhere.

*Lloyd Rodwin, *Op. cit.*, p. 55.

flats, and a clever use of landscaping have imparted to parts of new towns a genuine originality and grace. Experience has however shown that class segregation was too deep-seated an instinct to be cured by a mere artificial mixing up of residential accommodation for all types of income groups within a compact area, and in order to prevent a nightly exodus of top factory executives and officers to a remote and secluded rural retreat, better class houses in selected districts had to be built. The compactness of the Corbusier plan of tall blocks of flatted accommodation and the expansiveness of 'Garden City' advocates were alike avoided.

8.22. The success of the new towns can be measured by the absence of any sign of restlessness among the residents or any desire to return to London. This is not because they have secured a new house, for the same advantage had not stopped a steady drift of families away from the satellite. "The decisive difference is that the new towns really are towns; that the residents both live and work there, often within cycling distance; and that the general atmosphere of modernity and prosperity is exhilarating." There was at one time some anxiety as to what would happen to them once the developments were completed. Would all the assets created after so much effort be handed over to the local authorities within whose jurisdiction the new towns lay as was contemplated by the 1946 Act? The assets are likely to be of considerable value and the provision in the Act putting a local authority in the position of owning most of the real estate in the new town area which it had done nothing to create was the subject of strong criticism, particularly as it might make rents and estate management (which should be settled on stable long-term basis) the subject of local political dispute. The point has since been set at rest by an Act passed in 1959 setting up a New Towns Commission to which all such assets should pass on the dissolution of the development corporations.

The New Town—Kalyani

8.23. It is possible to judge from the above some of the reasons for the comparative failure of Kalyani to attract a sufficient population from Calcutta or its suburbs. Its original sponsors do not appear to have had a clear idea of what function this town was to perform, for in its original form it was no better than a small township occupying one corner of a large stretch of land that was to be divided between a military cantonment, a railway colony and a residential and technical university. Whether four more or less disparate elements would be able to cohere and be fused into one integrated whole does not seem to have bothered the sponsors of this idea. Even when others quitted the scene and the new town had "carte blanche" to plan as it pleased it was not clear whether the purpose was to create a dormitory or a satellite of Calcutta or a fully independent town providing within itself jobs and employments for its inhabitants. No inducements were offered nor pressure applied to any industry to move out; and the proposed removal of some less important government offices from Calcutta to the newly built town was not pressed home on account of staff reluctance to go away from Calcutta to a place where schools, markets, hospitals etc. were lacking. The development of the block nearest the main railway line would perhaps have met with better initial response, but the selection of a remoter block was based on the expectation that the temporary railway line, built during the war, would be permanently retained by the Railway Ministry which they ultimately refused to do on the ground that there might not be enough traffic for that line, at least for some time to come, to reimburse the cost. Houses were put up as additional attractions to potential buyers without ascertaining the extent of demand for living accommodation in a place where employment facilities were nil. In any case, mass-produced houses have less

appeal than houses built to suit individual taste and conveniences and are bound to produce a sense of drabness by the monotony of their elevation. It was also a mistake to think that development on such a colossal scale could be done departmentally by government with all the clogs and checks and balances which departmental action implies. In retrospect, one can only justify it as a "pis aller" for it prevented the land from passing into the hand of some private entrepreneur anxious to put up a shoddy development under government auspices which would have yielded him handsome dividends but scotched a pioneering effort at good town planning. A small and semi-autonomous development corporation of the nature of an improvement trust might have shown better and quicker results.

8.24. But much may yet be retrieved. The establishment of a university may be the first step in making the area hum with new activity which may have a snow-ball effect. The starting of some new industries, even by offering very attractive incentives if necessary, will be of great help. The static land prices of Kalyani have an advantage over the soaring prices in Calcutta and its suburbs. And with communications made faster and more frequent by railway electrification (when it does take place) many more people may be induced to move out of Calcutta to Kalyani than now seems probable.

Expanded old towns .

8.25. The expanded old towns are in one sense an alternative to new towns built under the New Towns Act and in another a logical corollary of the satellite idea. There was shortage of space within the city for housing its inhabitants which the local authorities were legally obliged to provide. The shortage was aggravated by development plans which prescribed maximum density standards which the cities could not disregard in their own housing schemes while applying it in the case of others. There was consequently a surplus or overspill of families which had to be housed elsewhere. A partial solution was the building of satellites, but the building of satellites outside their boundaries, especially by big local authorities, was causing bitter conflicts and rousing strong opposition from the smaller local authorities who objected to the permanent stationing 'within their boundaries' of big housing blocks whose occupants, besides being—so they thought—of doubtful social origin or political affiliation, were bound to owe allegiance permanently to an outside local authority while they enjoyed social services and utilities that were unlikely to be balanced by an equivalent payment in rates they would be able or willing to pay. At this stage the successful experiment in Lancashire of a tripartite agreement between a congested town anxious to 'export', a thinly populated town not unwilling to 'receive', and the County Council ready to help with financial and technical assistance pointed the way out and provided the basis of The Town Development Act of 1952.

8.26. Under it an existing town serves as a nucleus of a greatly enlarged community. The intention primarily is to provide accommodation for residential purposes in order to relieve congestion or over-population elsewhere, but in doing so the development authority (which is expected to be the local authority having jurisdiction over the area) is not precluded from providing accommodation for the carrying on of industrial and other activities, of the appropriate public services, facilities for public worship, recreation and amenity and other requirements.*

8.27. The advantage of this was obvious. Many towns may well benefit from some influx of population, particularly if it is accompanied by an improvement and diversification of employment opportunities, leading gradually to a broadening of

*Town Development Act, 1952, Section 1.

cultural and educational facilities and improvement of the basic services. If the influx is not large the new-comers may be assimilated easily into the already existing population. Another advantage is that comparatively small expansions of a fairly large number of existing towns will cause the least amount of dislocation and at the same time siphon off a sizable overspill population so as to permit the necessary replanning and redevelopment of the large exporting town.

8.28. The greatest stumbling-block was finance and, next to it, the absence of requisite technical staff. For a long time it was uncertain whether either would be available to the receiving local authority in an adequate measure to enable it to fulfil its obligation under the Act both for the purpose of building houses and for providing the necessary services. The provision that the exporting authorities and the county councils might join as participants with financial contribution on certain terms has gone some way towards easing the burden. The financial arrangement of the central government is also supposed to offer more latitude and advantage to the receiving authorities than are given to the new towns.*

8.29. Another difficulty was the provision of jobs for people who were to reside in these expanded towns. The accommodation of industrial sites in these extensions was optional and apparently an after-thought. There was no special provision empowering expanded towns to divert industries to their area and the Board of Trade which was expected to channel industries into them did not prove particularly helpful. The expanded towns had therefore to rely, as do the new towns, on their powers of attraction and on the capacity of the exporting authorities to channel their badly housed and non-conforming industries to new locations.

Conclusion

8.30. Strictly speaking, the distinction between new towns and expanded towns is partly a matter of degree and partly one of machinery. It is generally impossible to find a fairly large-sized area of virgin land, suitable for development as a town, which is absolutely unoccupied. The choice is therefore between a moderate expansion of a human settlement already large enough to have a civic authority of its own, and a very large expansion of an existing small community whose rudimentary common needs are supplied from the distant seat of the rural district council or the county council. It is this factor too which dictates the different kinds of machinery employed for development. Under the Town Development Act the existing civic authority is the instrument designed for the moderate expansion mentioned above. For the much larger expansion of a sparsely populated area, an ad hoc body with unrestricted powers is rightly considered to be more appropriate.

8.31. It is impossible to say which of these two Acts will be the more potent instrument in future for effecting the much needed decentralisation of congested urban areas in England. When the Town Development Act was passed, the Ministry declared itself in favour of proceeding under this Act in future and against establishing any New Towns unless parliamentary approval was secured beforehand. Writing in 1956 Lloyd Rodwin observed that "This legislation may some day far overshadow the earlier New Towns approach".† Others, however, are not so sanguine. The spacing of existing towns are already fairly close so that any considerable expansion of all these towns increases the risk of creating or intensifying the condition of conurbation which planned decentralisation is specifically intended to prevent. For this reason, and because the relief afforded by even a large number of expanded old towns would be of comparatively

*Lloyd Rodwin—"British New Towns Policy". p.160.

†Lloyd Rodwin—"British New Towns Policy", p.148.

small magnitude, they look upon a number of new towns capable of providing homes and employment to upwards of 25,000 people each as the major alternative to the present state of density and conurbation. For such towns development can be conducted more economically and with lower overhead costs while the appreciation in the value of property, originally acquired as agricultural land, is likely to be sufficiently high to go a long way towards financing the scheme. Since industries tend to move together and require common services and a general pool of labour they would prefer towns of such scale as the minimum necessary for organising industrial development economically. While many small towns may have their particular attractions for individual firms, an effective alternative to the powerful pull of conurbations can, on such view, only come from development schemes designed on the sort of scale of the present new towns.

8.32. The machinery would naturally depend upon the type of development preferred. In a few cases development by a local authority facilitated by the Town Development Act may provide the answer, but in most cases a town development corporation or something similar to it is the only agency equal to the task. "Unlike a local authority which has numerous other duties, a development corporation can devote its whole energies to the work of town building ; it can undertake many tasks (such as, factory and commercial buildings) which are not usually done by any but the biggest local authorities ; and it will be able to plan first and foremost for the welfare of the new population. This last point is important for the local authority on the spot is bound to think first of its existing ratepayers and the distant city of its housing need ; they cannot look sufficiently to the welfare of the emerging town".*

8.33. For us in India it is desirable to have both kinds of weapon in our legal armoury so as to be able to use whichever is more appropriate in any particular circumstance. The legal and administrative complexities arising out of varying powers of compulsory acquisition, and of varying rates of subsidies and contributions which these two agencies enjoy (or suffer from) in England are absent here. There is as yet no plethora of authorities whose consent must be obtained beforehand in order that a plan may be implemented and their number does not vary according as the agency is a development corporation or the local authority. The prototypes of development corporations are already present in the several city improvement Acts, while the existing executive authority under the current municipal Acts may be streamlined if necessary. If the municipal authorities are tried and found wanting, there are always the improvement trusts and development corporations to fall back upon.

CHAPTER IX

Current Town and Country Planning Acts in different States in India

9.1. Shortly after starting our work we asked the different State Governments in India to supply us with copies of their Town and Country Planning Acts if they had any in force. Bihar and Himachal Pradesh did not send any reply from which one may conclude that no such Act is in force in those States. Uttar Pradesh and Punjab replied that they had not yet passed such law. Mysore had just passed an Act which was still awaiting President's sanction and no copy was available. The Acts that were received from other States are mentioned below :—

Madras	— The Madras Town Planning Act 1920
Andhra	— The Madras Town Planning Act 1920
Kerala	— The Travancore Town Planning Regulations 1932 The Travancore Town Planning Amending Act 1960 The Travancore Town & Country Planning Act 1945 The Travancore Town & Country Planning (Amendment) Act 1947
Maharashtra	— The Bombay Town Planning Act 1954
Gujarat	— The Bombay Town Planning Act 1954
Madhya Pradesh	— The Madhya Pradesh Slum Improvement (Acquisition of Land) Act 1956 The Madhya Pradesh Periphery Control Act 1960
Rajasthan	— The Rajasthan Urban Improvement Act 1959
Assam	— The Assam Town & Country Planning Act 1960
Orissa	— The Orissa Town Planning and Improvement Act 1956

9.2. Not all the Acts have been very happily drafted. The language is vague or verbose, sometimes repetitive, sometimes self-contradictory; and yet, in the absence of the proceedings of the legislatures in which they were passed, the texts of the Acts are the only means of ascertaining their scope and purpose. In the following summary a great deal of matter which is not strictly germane to our purpose—the constitution and function of different authorities, the procedure of framing plans and schemes, the methods of assessing compensation and betterment, finance, land acquisition, legal proceedings etc.—has either been omitted or only briefly touched upon. Attention is concentrated only on whether these Acts are, expressly or by necessary implication, genuine Town and Country Planning Acts which give power to control the use of land in private ownership, how extensive or effective this control is, and whether for such restriction of rights there is any provision for reasonable compensation. Comments have either been avoided or kept at a minimum because at this stage it is only the bare skeleton or framework of the Acts that is being studied. (c.c.)

Madras

9.3. The Madras Town Planning Act was passed in 1920 and subsequently amended in 1930, 1934, 1938 and 1955. The Rules were promulgated from time to time and have since been consolidated. The Act itself is not a complete code of town and country

planning but the gloss which has been put upon it by the Rules has tried to make it one. Originally meant for municipal towns alone, the Act has, probably as an after-thought, kept the door open for its extension to rural areas; and even in the urban sphere, although the town is regarded as an independent unit and not as the focal point of a region, there are two provisions which permit a slight variation of such isolated treatment. By one, a town planning scheme may comprise lands beyond its border with the concurrence of the neighbouring local authority or with the consent of Government; by the other, a town and a neighbouring local authority may combine to form a joint committee for the purpose of more comprehensive planning, it being left to the participants to decide whether execution should be joint or separate.

9.4. The character of the Act is however more clearly indicated by the purpose of planning and the extent of control and for this we must turn to the schemes that are envisaged and the matters that come within their scope. Two kinds of schemes are mentioned. One is the general town planning scheme which is vaguely described in the Act as intended to lay down "the lines on which the improvement and development of the area within the municipality and its vicinity shall proceed". It is left to Rules to describe more fully what such a scheme should include, how much of the specific improvements contemplated for subsequent detailed schemes should find a place in it, what surveys are to be made and maps prepared, how the scheme should be published with Government's preliminary approval, and what procedure should be adopted for assessment of local opinion and Government's final approval. Every municipality is required to prepare such a general scheme within a specified target date or within four years from its inception, but if this proves too difficult government may restrict the scope of the general scheme to a part only of the town area. The easier way of extending the time without robbing the general scheme of its character of a master plan does not appear to have been thought of.

9.5. The other category is the ordinary (or detailed) town planning scheme meant for development or re-development of smaller specified areas within the town. Many of the contents of such a scheme have a frankly utilitarian purpose viz. construction of roads, bridges and other means of transport; provision of sewers, drains, water mains, street lighting; laying out of parks, open spaces and recreation grounds; and dwelling houses for people—matters which are hardly distinguishable from the activities of an ordinary town improvement trust as laid down in the Calcutta or Howrah Improvement Acts. A few provisions, also mostly shared with such Trusts, are ancillary to the main purpose viz. acquisition of land, pulling down old or obstructive buildings, selling surplus lands, and advancing loans to enable owners of buildings to make structural alterations in conformity with the scheme. But there are three clauses which, if their language is to be given its natural meaning, go beyond mere improvement work as commonly understood. One directs that apart from roads, open spaces etc. a scheme should make allotment or reservation of lands for schools, markets, shops, factories, hospitals, public institutions etc. Another suggests the preservation of buildings of archaeological or historical interest and places of natural beauty and religious association. A third says that in addition to imposing architectural and density control a scheme may also impose restrictions and conditions as to the "purposes to which buildings or any specified area may be appropriated".

9.6. The first of these clauses is somewhat ambiguous in that neither the Act nor the Rules make it clear whether the allotment or reservation of land for schools, markets, shops, factories, hospitals, public buildings etc. is to be made out of lands acquired, developed and sold by the planning authority or whether they apply to all lands in the scheme area. There is enough indication in the Act, however, that

buildings of historical or archaeological interest whose preservation is one of the purposes of a scheme are intended to be retained in private hands since no question of compensation could have arisen otherwise. But whatever view one takes of this there is hardly any doubt that the third clause 'restricting the purpose to which buildings or lands within any specified area may be appropriated' can only mean that the use of land in that specified area, even if be in private hands, may also be controlled. The Rules clarify it still further and say that both municipal and private activities are intended to be controlled. It seems that by determining what should be the residential, commercial, industrial and hutment areas within the town, by imposing architectural and density control, and by directing the preservation of historical buildings and places of natural beauty, a general or an ordinary town planning scheme ensures most of the important purposes of land use control which is the essence of town and country planning law. Once a scheme is sanctioned and published all new constructions in violation of its provisions are banned, all privately owned buildings may be pulled down or altered so as to be in harmony with the schemes, and all owners may be required to take such action or execute such work as may be necessary to secure such conformity. The defaulting owner may either be coerced directly by having the work done at his expense or he may be prosecuted. There is some provision for compensation if a person's property is injuriously affected but the exceptions greatly reduce its applicability. If the injury or the depreciation in value stems from a provision directing the preservation of buildings of historical or archaeological interest or places of natural beauty or religious association no compensation can be claimed, nor can it be claimed if it is due to architectural or density control or control of land use. The grounds that remain after these are excluded must be very few.

9.7. The other provisions of the Act relate to adjective and not substantive law and need only a brief mention. The initiative in framing a scheme may come either from the Government or from the municipal authority or from owners of land desiring a development of their properties. A resolution to take such action has to be publicly notified and the effect of such notification is to freeze all further development without permission. The draft scheme is discussed with owners and occupiers as well as with the State Director of Town Planning before being formally published, but although objections are invited there is no provision for personal hearing. The decision of the planning authority together with objections is forwarded to Government whose decision is said to be final. But the finality is deceptive, for there is nothing to prevent the Government from varying or revoking the scheme at any time; the municipal authority which sponsored the scheme originally may vary it by agreement with the owners or withdraw it altogether if it considers compensation for injurious affection onerous; the Arbitrator who comes in at a later stage to decide certain disputes about valuation and compensation and whose appointment is obligatory if any of the parties wants it, has the last word not merely in determining the shape and size of reconstituted plots but also in the allotment and reservation of areas for streets, squares, houses, open spaces, recreation grounds, schools, markets, shops, factories, public buildings, hospitals etc. This means a 'carte blanche' to completely change the pattern of development even in a finally approved scheme and the only safeguard is Government's right to interfere and preserve the original provisions.

9.8. The primary planning authority is the municipal body unless, for reasons of expediency or convenience, Government sets up a Town Planning Trust. The municipal body may delegate all or any of its town

planning functions to a committee but execution is to be entrusted to an officer, called the responsible officer, who must be named in the scheme itself before it is sent up to Government for sanction. The possibility of different responsible officers being charged with execution of different schemes with awkward consequences and conflicting jurisdictions cannot be altogether excluded. Government constantly keeps a watching brief or is supposed to do so, by prodding unwilling or lethargic municipal bodies to get on with the task, by helping them with the services of its Director of Town Planning at every stage of planning, and, in extreme cases, by transferring a scheme from one local authority to another within the same area, but the all-important question of finance is lightly passed over. The chapter on finance deals more with account keeping than with the sources of revenue and it is left to the Rules to say that for capital expenditure reliance is placed on Government and municipal contributions and sale proceeds of land, while the sources of revenue income are rent, ground rent, produce of land, betterment fee, licence fee, sale proceeds of maps etc. The sale proceeds of land are likely to be affected if large reservations are made not merely for roads, parks and open spaces but also for schools, hospitals, public buildings etc. which can hardly offer competitive prices, and betterment is likely to have a poor yield because of the complicated procedure laid down for its assessment and realisation.

9.9. Land acquisition can be made either under the general Act of 1894 or under the special provisions of this Act but who decides which Act will apply in a particular case is not clear.

9.10. Most of the provisions of the Act were passed long before the Constitution of India came into force. Whether it or the Rules made under it with their stress on drastic control of land use without liability to pay compensation are in accord with the Constitution does not appear to have been decided in courts.

Andhra Pradesh

9.11. This State was originally a part of the Madras Presidency when the Madras Town Planning Act used to apply to it. The same Act and Rules have been continued there even after separation.

Kerala

9.12. The Travancore Town Planning Regulations, 1932 which have been extended to the whole of Kerala after the merger of Travancore and Cochin is an emasculated version of the Madras Act many of whose provisions have been copied almost verbatim. Even the omission of the clause which permitted the extension of the Madras Act to rural areas has been made good by an amendment in 1960. Whether the Rules of the Madras Act have also been adopted is not so clear. The only substantial differences are two. Kerala does not contemplate a general town planning scheme or master plan as a preliminary step to framing detailed development schemes for particular areas. And its land acquisition is governed by the 1894 Act as modified by the Travancore Regulations. There is no ambivalence as in the Madras Act.

9.13. But Kerala has another Act up its sleeve, the Travancore Town and Country Planning Act, 1945 as amended in 1947, which almost takes one's breath away by the wide sweep of its powers and its scant regard for private rights. Under it government may declare any area within the State to be a controlled area for the purpose of regulating development which is defined even more broadly than in the English Town Planning Act as the carrying out of any building operation etc. or the making of any change in use (not material change, be it noted), agriculture alone excepted. The object of control is to

protect public health ; to provide and protect amenities and conveniences ; and to preserve objects of architectural, historical or artistic interest and places of natural beauty. Officers working behind closed doors and without taking the public into confidence produce a readymade scheme and publish it and its immediate effect is to suspend all rights accruing from existing statutes or orders, keep in abeyance all local or municipal laws, and ban all development or excavation work or the opening up of any road on lands not reserved for the purpose in the scheme and otherwise than in accordance with the rules to be prescribed. All buildings must conform to the standards laid down as regards size, height, design, external appearance, internal space between buildings, density per acre and other matters, and all uses of lands and buildings must conform to what is permitted and must be within the permitted density. There is even a clause suggesting that discrimination in providing housing accommodation would be permissible.

9.14. Government appoints an officer, called the responsible authority, to enforce the provisions of the scheme. This officer may remove, pull down or alter any existing building or any building subsequently erected in order to bring them into conformity with the scheme, demolish all erections in contravention of the scheme, prohibit a non-conforming use and restore the original user, and for such acts done in good faith under this Act neither he nor anybody acting under his orders will be accountable in any court or liable to pay damages or compensation. The only appeal is to the executive Government. There is no provision in the Act for compensation to a private owner for the abridgement of his rights, and since all other statutes and orders may be suspended it seems that he can claim none under any other law even if he is prevented from using his land to better advantage or if his building is pulled down because it stands on what is marked as an open space in the plan.

9.15. At many points the provisions of the two Acts overlap. The only purpose of the 1945 Act seems to be to extend land use control to any area within the State, to rush schemes through bureaucratic action without giving any opportunity for expression of contrary opinion from the public, and to clothe the Government and its officers with untrammelled authority for making changes in the use or disposition of lands and buildings without risk or liability to pay damages or compensation. Whether this relic of absolute princely rule will stand the test of the Constitution has yet to be seen.

Maharashtra

9.16. The Bombay Town Planning Act, 1954 replaces the earlier Act of 1915 and is applicable to the Bombay area of the State of Maharashtra.

9.17. The Act contemplates two kinds of plans, one of which is a development plan covering the entire municipal area and the other, a town planning scheme, covering only a small part of it. The first is only another name for a master plan which all local authorities must prepare within four years or within such extended time as may be allowed or which, in case of their default, may be prepared at their cost by government through their own Consulting Surveyor. As the local authorities referred to above are the Corporations or other municipal bodies set up under the different Bombay Acts or the notified area committees and panchayats if specially empowered in this behalf, a patch-work pattern may emerge if each authority acts in isolation. To prevent this there is provision in the Act for voluntary joint town planning Boards of neighbouring local authorities for joint planning of contiguous areas. The procedure for preparing a development plan—the preliminary survey, publication of intention, the consideration of objections, the detailed information to be submitted to Government for obtaining sanction etc. are only barely outlined in the Act. The Plan becomes operative from the date mentioned in the

Government's sanctioning order but is liable to be reviewed and revised every ten years, if not earlier.

9.18. The second category is the individual town planning scheme which proposes detailed developments of particular areas for providing or improving the usual municipal services viz. land reclamation, road layout, sewerage, water supply, lighting, and the reservation of land for open space, garden, school, market, and public institutions of all kinds. The requirement of open space within a building plot or between buildings, the determination of building density and of the height, size, and character of buildings, and the prohibition of parking or of loading and unloading on public streets etc. are also matters that fall within the normal function of a municipal authority. An important part of the scheme in this and in several other Acts of different States is the reconstitution of building plots which is not a normal municipal function and is apparently intended to cause as little disturbance as possible to present possession, consistently with a more rational road layout and the maintenance of the legal minimum of open space in between buildings. Unlike Madras, it is clearly indicated in the Bombay Act that reservation of lands for schools, markets or public purposes of all kinds should be made on land belonging to or acquired by the local authority and not on land in private ownership, the Government having the right to refuse sanction unless such acquisition is assured. But, as in the Madras Act, a scheme may provide for the preservation of objects of historical or national interest or natural beauty or religious buildings and also impose restrictions as to the "purposes to which buildings or specified areas may or may not be appropriated". The zoning provisions expressly authorised by the development plan and the restriction on use and control of land in private ownership implicit in the last two clauses of a town planning scheme distinguish the Bombay Act from a mere town improvement Act.

9.19. The procedure for framing a town planning scheme is however very complicated and has been rendered all the more so by reason of the manner in which the costs of a scheme are calculated and apportioned. Only a brief description can be given here. A formal resolution of the local authority declaring an intention to frame such a scheme has first to be passed and published and an outline plan of the area kept for public inspection. This is followed within 12 or 18 months by a draft scheme prepared with the assistance of government's Consulting Surveyor, and, in case of default, by Government with the help of its own officers. If nothing is done by Government within nine months after the failure of the local authority the declaration of intention spends its force and becomes inoperative for three years—a provision whose logic or necessity is questionable since Government may authorise or direct a local authority to prepare a draft scheme at any time. Objections received on publication are considered by the local authority but there is no provision for personal hearing. The local authority is expected to submit its final draft proposal within four months from publication together with the objections that have been received and government's sanction has to be published within another six months. This sanction and its publication, it seems, relate only to the draft as draft. It does not convert the scheme into a finally approved scheme, for which one has to wait for the report of the Town Planning Officer who is appointed by Government within one month from the final publication of the draft scheme and who, armed with the requisite staff, scrutinises the draft scheme particularly from the aspect of valuation, compensation, apportionment of cost, reconstitution of plots and rearrangement of titles etc. in order to draw up a final scheme. In some matters his decision is final while in others there is an appeal to a tribunal presided over by a Judge with two Assessors. The Town Planning Officer has large powers not merely to re-define the cost

structure of a scheme but to vary the draft scheme in other matters also though he is expected to do so in consultation with the local authority and not to exceed the total cost of the scheme by more than 10%. It is he who draws up the final scheme within a year after his appointment and whose report the Government accepts and sanctions with or without modification. He is thus an important link between the local authority and the Government and virtually exercises most of the planning powers seemingly left to be exercised by the local authority. As the finalisation of a scheme after so much detailed calculation of costs, betterments, compensation and reconstitution of plots takes time, the local authority may ask him to make a preliminary scheme dealing mostly with roads, sewers, drains and water supply and to give advance possession of lands required for carrying out those operations. It is not clear whether such preliminary scheme has to go through any particular procedure in order to be valid or whether the decision of the Town Planning Officer is a sufficient guarantee of validity.

9.20. The consequences that follow a development plan or a town planning scheme are far-reaching. When the intention to frame such plan or scheme is declared the carrying out of any work of development (which is defined broadly as in the English Act) without the permission of the local authority or in contravention of the provisions of the plan or scheme is prohibited. In the case of a development plan, however, Government or other authorities are left free to carry out any works that they are legally authorised to do—a concession which is not entirely without risk as the Plan may be unbalanced if each such authority follows its own inclination in disregard of the provisions of the development plan.

9.21. When a scheme is finalised all lands required by the local authority as designated in the scheme vest in it immediately and all rights in original plots (which have been subsequently reconstituted) are extinguished and replaced by rights in the corresponding reconstituted plots if the previous owner is allowed any. The person occupying a piece of land which has not been allotted to him in the final scheme becomes liable to summary eviction. The local authority acquires the right to remove or pull down buildings which contravenes the scheme or to get done whatever is required by the scheme to be done at the cost of the owner. Any breach of the regulatory provisions of the Act, any development of land or real property without permission or in contravention of a sanctioned plan, is both a penal offence and a ground for direct action by the local authority.

9.22. The provisions for compensation lie scattered throughout the Act and are not easily reconcilable. For outright acquisition under the Act of 1894 compensation is payable at the market value on the date of the declaration under Section 6, but the court is also directed to take into consideration the use to which the land was put at that date. Whether this mild and apparently innocuous expression completely cuts out development or potential value is not clear. For limitation of rights without transfer of title the different parts of the Act seem to speak in different voices. When a development plan or the intention to frame one is published compensation is not payable either for refusal of permission or for imposition of conditions, but if the land becomes incapable of reasonably beneficial use by refusal of permission or by the condition imposed the owner may ask for acquisition which, if confirmed by the Government, has to be complied with by the local authority. For refusal to a private estate development proposal no compensation right accrues. In the case of a sanctioned town planning scheme this right of forcing compulsory acquisition does not seem to have been granted to the owner. Moreover, while two sections of the Act say that for restriction of use and for injurious affection the owner would be entitled to compensation, another says by reference to the same restrictions on use that they would not be deemed to constitute injurious

affection. Obviously, if there is no injury there cannot be any right to compensation. The reconciling of these apparently contradictory principles would probably tax the ingenuity of even the cleverest administrator.

Gujarat

9.23. The Bombay Town Planning Act 1954 also applies to the newly constituted State of Gujarat.

Madhya Pradesh

9.24. Madhya Pradesh has sent two slim Acts of 16 or 17 sections each of which only the second has some bearing on town and country planning.

9.25. The first Act—The Slum Improvement (Acquisition of Land) Act 1956—may come to the aid of planning by expediting acquisition of slum areas and reducing cost but it is not in itself planning. The result of declaring an area to be a slum area is to make all slum lands vest in Government. Compensation will be either five times the net annual rental after taking the average of the five preceding years or twenty times the assessed revenue payable to Government. As the annual rental is taken to be one-fifth of the gross rent received from tenants the owner compensated on the rental basis gets barely one year's gross rental with some slight additions on account of the yield of trees if any.

9.26. The second Act—The Madhya Pradesh Town (Periphery) Control Act 1960—is really an Act for the preservation and regulation of green belts. When the State Government extends this Act to any town, an invisible belt is thrown round it whose outer ring is 7 miles distant from its external boundary line. After consideration of objections this belt is declared to be a controlled area with the result that all subsequent development within it becomes frozen and all existing uses stereotyped. Erection or re-erection of buildings, excavation of land, or the construction of any access road within this belt requires Collector's permission. Change of use requires the permission of the State Government. Loss or damage suffered by refusal of permission is compensated, the assessment being made by an arbitrator with quasi judicial authority.

9.27. Although obviously intended to arrest deterioration of the green belt area the Act does not show by what principles the Collector or the Government is to be guided. The only thing that is definite is that construction of agricultural buildings will have an easy passage while strong disincentives to starting charcoal kilns, pottery kilns, lime kilns, or brick kilns and brick fields will be provided by short-term licences hedged in with stringent conditions. The objects aimed at and the curbs intended to be applied to building constructions are never clearly defined and this may be a prolific source of conflicting decisions.

9.28. The Act permits the erection of temples, tombs or cenotaphs on lands previously used for worship or burial. It does not apply to erection of residential buildings, or excavations or construction of kutchra roads in aid of agricultural activities. Government has a large reserve powers to exempt any other building or class of buildings from its operation. A seven mile wide belt round a town comprises too large and sprawling an area for vigilant supervision and even glaring violations may escape notice. The exemption of residential buildings from the operation of the Act, if all residential buildings are meant, may bring the sub-topia into the countryside which is one of the objects of a green belt to prevent.

Rajasthan

9.29. The Rajasthan Urban Improvement Act, 1959 is intended for the improvement and expansion of urban areas only and even in that sphere its accent, for the most part, is on the improvement of lands over which the planning authority has direct control through acquisition. The list of matters that may be included in a scheme of improvement comprises amenities that are to be supplied; the roads, sewers, drains, street lighting, open spaces, water supply etc. that are to be provided; the steps that are to be taken to make the landscape more beautiful by arboriculture or afforestation or regrading of levels; the living accommodation that has to be provided by building dwelling houses etc. The list is repetitive and somewhat loosely constructed, but there is very little difference in substance between this part of the contents of an improvement scheme and that provided for in the Calcutta Improvement Act 1911.

9.30. But the Act is more than a mere instrument of town improvement for there is an attempt to engraft some of the ingredients of town planning law on what was originally modelled on a town Improvement Act. The definition of improvement is quite obviously taken from the definition of development under the English Town and Country Planning Act with one significant alteration. The requirement of preparing a master plan in advance to serve as the framework for all subsequent improvement schemes is another step in the same direction. These master plans are expected to divide the entire urban area into zones for different kinds of use, and one of the express objects of a detailed scheme is to limit the areas where special trades or industries may be carried on or which may be reserved exclusively for residential or other purposes. These restrictions are apparently applicable not merely to Trust acquired property but to all lands. One clause gives the right to close or demolish obstructive buildings or unfit dwellings while there is a section which empowers the Trust to order demolition of a building erected "in an area specified in the scheme." If this right is exercisable regardless of whether the building is still private property is not clear but there is no provision for compensation for such demolition or for the closure of an unfit building although for the much less serious damage caused by the closure of a private park or street the neighbouring owners are entitled to compensation.

9.31. The procedure for framing a master plan is sketchy, it being left to Rules still to be framed to determine the nature of the civic survey which must precede the preparation of a draft master plan. An advisory council is mentioned but neither its composition nor its functions are clearly outlined. The provisions for enforcement are also inadequate. The Act declares that when a master plan or a scheme comes into operation (1) no improvement can be effected without planning permission from a competent authority and (2) all improvements or new uses contrary to their provisions will be illegal, but the prohibitions do not appear to have any legal sanction behind them. As the language of the penal provision stands, the offence consists in disobedience of a notice, not in the violation of the provisions of the Plan or scheme. Similarly the legal right to take recourse to direct action at the cost of the offender accrues when the notice is disregarded. It is however nowhere laid down that in the event of a master plan or scheme being ignored or development started without permission a notice should be served asking the offender to desist from the act and to restore the "status quo". If the notice itself is not warranted by or provided for in the Act the basis seems to be knocked out of the penal provision or of the justification for direct action. Or should the power to serve such notice be assumed to be implied?

9.32. For land acquisition the basis of compensation is market value according to present use. Potential value and considerations about the compulsory nature of the purchase are not allowed to inflate the figure.

9.33 The Trust Board of the Rajasthan Act is almost entirely a creature of the Government but without the financial assurance that comes from such relationship. It is largely, in certain contingencies exclusively, composed of government nominees. Its technical and administrative personnel are all appointed by government. In preparing the master plan it has no say but has to accept what is prepared by the government expert. And there are numerous other ways in which it is tied to or dependent on Government. If, in exchange, its financial position had been made secure the sacrifice of autonomy would have been worth while.

Assam

9.34. The Assam Town and Country Planning Act obtained President's sanction in February 1960. Both in name and intention it is concerned with land use planning in urban as well as rural areas. The drafting seems to have been hurried for there are some loose ends which have not been properly tied up, some repetitions and lacunae, and some clauses which, literally interpreted, may lead to absurd consequences. These defects are bound to disappear when the Act is given effect to and the need for amendment is felt. The following summary of its main provisions assumes that this will be done.

9.35. Development is defined more or less on the lines of the English Act though the superior claim of agriculture is not recognised. The State Government decides which area is in need of development control and asks its Director of Town and Country Planning to prepare for it a draft master plan. This plan will divide the area into several zones for residential, commercial, industrial, recreational and others purposes and show the location of the major public utility undertakings, the arterial roads, and other lines of communication or transport. The surveys and investigations that should precede the preparation of a plan are assumed without being clearly laid down. After a consideration of the objections filed or suggestions received, the Director submits his final report together with all other relevant data to Government whose adoption gives the Plan its ultimate validity and effectiveness. There is mention of an Advisory Council whose complex, if slightly fluid, composition and elaborate provisions about appointment, resignation, removal, tenure etc. seem somewhat incongruous in the context of the nebulousness of its functions. The local authorities or their counterparts have little say up to this stage except in so far as they are consulted by the Director in the draft stage of the Master Plan, but after the adoption of the Plan by the Government the Regional Authority begins to play an increasingly important role. This Authority is not the municipal authority but a composite body whose constitution, as laid down in the Rules, gives it a distinctly official character with a minimum of local authority representation. This Authority receives the master plan and sees that no future construction or material change in use takes place without its written permission and in contravention of the Plan. It is also this Authority which defines the smaller areas for which the Director is asked to frame individual development schemes and it later finalises these individual schemes after a consideration of the objections that may be filed in writing or verbally argued. A development scheme becomes operative on receiving Government's sanction but the Advisory Council does not need to be consulted at any stage.

9.36. These development schemes may comprise built-up areas as well as areas which are in the course of development or likely to be used for building purposes.

Among the matters they may deal with, the usual works of city improvement and regulatory provisions bulk large but there is also scope for (1) reservation of lands for industrial and commercial activities, (2) preservation of buildings of historical importance or religious association as well as places of natural beauty and (3) the imposition of conditions and restrictions as to 'the purposes to which buildings or specified areas may be appropriated'. [The omission of "residential" from category (1) is probably an oversight but category (3) is wide enough to embrace it]. The prohibitions apply not merely to uses started for the first time in any land or building but also to existing uses which, if objectionable from the planning point of view, may be directed to be discontinued after a reasonable interval is allowed for winding up. All existing statutes, rules, regulations, and by-laws which stand in the way of enforcing the provisions of an approved development scheme may be suspended. Neither the master plan nor a development scheme is rigid for there is scope for amendment, alteration or revocation by the Government at any time either on its own initiative or at the request of the Planning Authority. There is, however, no statutory provision for a periodical review.

9.37. There was some initial uncertainty about the agency of implementation. The earlier part of the Act speaks of any authority (without a capital 'A') which may mean a municipal or any other local authority, but gradually the bias has grown in favour of a Regional Authority whose constitution is given in the Rules framed in 1961. It is this Authority which prescribes street alignments, sets back buildings, acquires lands within street lines or elsewhere, allows or disallows private estate development and enforces the conditions of such development, assesses and pays compensation for injurious affection of property, and levies betterment fee. It is immune from all legal proceedings for anything done under this Act in good faith. It is also this Authority which enforces the provisions of the Plan or a development scheme by prosecuting all persons guilty of infringement and taking direct action to restore the 'status quo' at the cost of the offender. But the financial provisions for such heavy responsibility are inadequate. The power to borrow is hardly better than a joke in the absence of any independent source of revenue for the servicing of the loans. The only independent source mentioned is government grant which, not being a statutory obligation, will depend on the state of the budget in any particular year, or the climate of opinion or prejudice in favour of or against town planning within the legislature.

9.38. Land acquisition is made under the Act of 1894 but compensation is pegged to the market price prevailing on 1st January 1957 plus all reasonable expenses since incurred for development and 25 per cent of the increase in value between that date and the date of acquisition. The possibility of double payment concealed in the last two qualifications has probably been overlooked. For injurious affection of property by the imposition of land use control compensation may be claimed within three months if such injury does not stem from the usual municipal building by-laws designed for safety, sanitation, traffic circulation and prevention of overcrowding. The exception, be it noted, does not include the depreciation in value or injury to a piece of land on account of its being placed in a particular use category. Betterment fee is 25 per cent of the increase in residential areas if the building is owner-occupied, and 50 per cent in other cases.

9.39. In a general way this Act embodies many of the principles of town and country planning but it will have to be greatly amplified both by additions to its text and by the framing of detailed rules and regulations to make it a really effective instrument of control. The Rules passed in February 1961 merely deal

with the mechanics of control as regards the constitution of the Regional Authority, the procedure of holding meetings and conducting business, the appointment and disciplining of staff, and the acceptance of contracts by inviting tenders. Nothing is said as regards the principles and considerations which should guide the Regional Authority or the government in granting or refusing permission for development.

Orissa

9.40. The Orissa Town Planning and Improvement Act 1956 came into force on receiving the President's assent in July 1957. The provisions may be applied piecemeal to different areas of the state as and when the state government thinks fit. When such areas are covered by a local authority but no Improvement Trust has been set up, the local authority becomes the planning authority. If an Improvement Trust is set up the local authority is superseded by the Trust as the local planning authority. The composition of the Trust is predominantly official.

9.41. The only difference between an ordinary Improvement Trust and the planning authority envisaged in the Orissa Act is that preparation and execution of individual improvement schemes are preceded by the preparation of a Master Plan after the usual civic survey of the entire urban area. In this the Improvement Trust or the local authority is entitled to receive assistance from the state Director of planning, and in case of default, the government may get it done by the Director at the cost of the planning authority. There is a long list of matters that are supposed to be included in the Master Plan but although objections are invited, the surprising thing is that nobody is given a hearing either in a public or a private enquiry. There is not even any possibility of the objections being brought to the notice of government before they give their approval to the Plan. It is only the views of the planning authority on the objections and suggestions received (and not the objections and suggestions themselves) that are sent to government. In fact, when the planning authority is a local authority and not an Improvement Trust they need not go beyond the Director. The government or the Director as the case may be, approve or disapprove of or modify the Master Plan on the basis of the views of the planning authority, and from the date of approval all future development in contravention of the Plan is barred. The rights of the public are extinguished without their having any say in the matter, for in the absence of hearing there is no guarantee that the written objections will even be gone through.

9.42. The other provisions of the Act are the usual provisions of an ordinary Improvement Act for preparation and execution of individual improvement schemes, and in such cases notices are served and personal hearing is given to persons whose rights are affected.

9.43. This review of the current statutes shows that there has been a growing recognition in most other States of the need of controlling the use of land—specially urban land—in the interest of the general public. As an instrument of land use control not all of them are satisfactory and many seem to suffer from the defects of a common origin as is obvious from the identity of the language used or the similarity of the machinery set up. The greatest defect seems to be the inadequacy of the administrative and financial provisions and the casual manner in which drastic curbs on private rights are contemplated and sought to be enforced. That is probably one reason why the Acts have mostly remained dead letter and cases have seldom gone to courts where their legality might have been tested.

West Bengal

9.44. West Bengal is one of the few States still without a town and country planning Act. The Calcutta Municipal Act, 1951, despite its enormous bulk, is concerned almost exclusively with the provision and administration of the ordinary municipal services. Its control over erection of buildings is designed primarily to ensure safety, sanitation, accessibility and minimal detachment of one building from another for the sake of ventilation. There is no power to introduce zoning as such over the whole of Calcutta or even over a large section of it, but there is one provision under which the Corporation may, in respect of a street or part of a street, impose architectural control and prohibit or regulate shops and buildings of the warehouse class. Since 'buildings of the warehouse class' not only include warehouses but also factories, manufactories, breweries, distilleries, and buildings of a like nature a successive application of this power to contiguous streets may achieve some sort of indirect zoning in a few select areas. But the method is clumsy and the narrowness of its scope will be obvious from the fact that there is nothing to prevent schools, hospitals, theatres, cinemas, motor garages, offices and dwelling houses—to name only a few incompatible combinations—from being clubbed together in close juxtaposition within the same small area. The Act distinguishes two other classes of buildings viz. public buildings and domestic buildings, the first referring to religious or academic institutions, places of public entertainments, hospitals, hotels, work-houses and the like, and the second primarily to dwelling houses. The purpose of this three-fold distinction is not separation of zones but enforcement of additional security measures in the structural portion of buildings in the first two categories, and to provide, in the case of the warehouse class, that all loading and unloading should be done within the premises and not from the street. The conversion of buildings from one class to another by change of use without permission is also barred but the ubiquitous shop is not affected and the rule, even if strictly followed which it seldom is, cannot prevent an intermixture of uses. The development of private lands and their subdivision into building plots is almost uncontrolled, for the Act is quite generous to the private owner in this respect. The only condition is that the new plots, not already abutting on a public street, should be made accessible to such public streets by the construction of private streets of approved layout, the standard being lowered in his case than would be permissible for the Corporation's own streets. There is no power to impose control of user, or to lay down a minimum area for a plot, or to insist on any reasonable proportion of public open space even when the area is designed for intensive occupation. To impose any other form of control or provide any open space the Corporation must acquire the land.

9.45 The powers under the Bengal Municipal Act, 1932 are naturally very much less than those under the Calcutta Municipal Act.

9.46. The Calcutta Improvement Act, 1911 (as amended in 1953) and the Howrah Improvement Act, 1956 apply to municipal areas named in the Acts themselves. They are definitely improvement and not planning Acts in that they do not have even the limited amount of control over private lands—whether it be in respect of architecture or use—that the Calcutta Municipal Act has. Their powers are specifically limited to the carrying out of certain physical improvements in the city and the provision of certain civic amenities which have been entrusted to them for speedy planning and execution. These specified types of improvement are effected by framing and executing schemes (variously called Street Schemes, General Improvement Schemes, Housing and Rehousing Schemes according to their main purpose) over small sectors of the town. The preparation of a Master Plan is not insisted on in so many

words though it may be implicit in the provision which says that in preparing any improvement scheme the Trust should have regard to the nature and condition of Calcutta as a whole, the several possible directions of its expansion, and the need of developing any one particular area as against the competing claims of other areas. The matters which the schemes may include and execute are quite categorically those that can be done on Trust's own acquired land. The streets cannot run nor can sewers, drains, water mains and pipes be laid in other people's land and the provision of open spaces as well as houses for the accommodation of the public or persons likely to be displaced presuppose that the Trust's own land would be used for the purpose. Even the power of demolition, alteration, and reconstruction of buildings which in a few other Acts is mentioned without reference to the lands on which such buildings stand has, since the amendment of 1955, been confined to lands which the Trust is going to acquire. The provision of zoning which was introduced by the same amendment is confined to the lands developed and sold by the Trust, not to the other lands in the scheme area whose possession and title are not disturbed. Even this prescription of use in respect of lands sold by the Trust within the area scheduled for a particular purpose has become infructuous because, like the ordinary building regulations, the enforcement of this restriction does not lie with the Trust but with the Corporation.

9.47. The only control of private land which the Trust can exercise is confined to a street alignment or park reservation whose construction work will be taken up at some future date but in respect of which it is considered desirable to freeze all development work at once to reduce future cost. Once the street alignment or park reservation is finally sanctioned all development work without permission or without the execution of an agreement abjuring claims to compensation for such new construction is prohibited. In case permission is refused the owner has the right to compel immediate acquisition of his land at the present market value unaffected by the imposition of control.

CHAPTER X

Town and Country Planning Law in England

10.1. It is sometimes said that town planning law in England represents a century of progress in social legislation. Actually it was only in 1909, just over half a century ago, that it found its way into the statute-book as a slim annexe to the Housing Act; and it is doubtful if its sponsors were inspired by any profound belief in town and country planning for its own sake. Though inapplicable to built-up areas and exercising no compulsion on the smaller local authorities to which alone it applied, it marked one advance over previous legislations however, because it recognised that proper regulation of living conditions in a town involved a consideration not merely of the particular plot on which the building stood but of the layout of the neighbourhood as well, and that "amenities and conveniences" were as much a desiderata as health and sanitation. Subsequent Acts, each designed to cure some supposed weaknesses of its predecessor, were sometimes progressive and sometimes retrograde. Even the Act of 1932 which extended planning to the countryside and brought built-up areas under control was, in the words of Desmond Heap, "a thing of shreds and patches lacking both in urgency and compulsion". It required the devastation of World War II to bring home to the British people the imperative need of a more comprehensive planning control. Three great state papers—the Barlow, Scott and Uthwatt Reports—had already stirred people's minds and stimulated a lively discussion. The blitzed areas created the desire as well as the opportunity to re-shape the face of the country. Chastened by the war the country was prepared for a great leap forward. The result was the Town and Country Planning Act of 1947, described by an American author as "a daring experiment at the social control of environment". Despite four amendments this still remains the principal legislation relating to the preparation, administration, and enforcement of planning in England. But the bulky Act of 1947 tells only half the story. The other half is contained in what Desmond Heap calls "the enormous brood of supporting legislations which the statute has spawned", the circulars, regulations, orders, directions etc. issued from time to time by the Minister. An understanding of the present state of the law requires a study and understanding of both.

10.2. The object of the 1947 Act was to ensure the proper allocation of land among various uses so as to serve the national interest in preference to individual or sectional interests. This is sought to be achieved through the medium of flexible development plans prepared by a greatly reduced number of planning authorities (with, consequently, wider areas to operate on) and subject to periodical review. All new constructions and material changes of use were henceforth to be in accordance with a plan and conditional on the consent of the local planning authority in whom the administration of control is vested, subject to the overall supervision of the Minister who is charged with the execution of a national policy in respect of land use. Positive action on the part of local authorities is stimulated by conferring on them a wider power to undertake development and increased facilities for compulsory purchase with generous financial aid from the Treasury. And as cost of acquisition of land was one of the stumbling-blocks to the carrying out of schemes of positive development, a way out was sought by substituting for the 1939 standard of market value a completely new system of assessment of compensation by which all development values were nationalised at a price and the owner was left with the existing use value for which alone he was to

be recompensed. This part of the Act has been successively whittled down and finally abrogated by amendments passed in 1953, 1954 and 1959, but the other parts with very minor modifications are still valid.

10.3. The control of land use extends not merely to new "development" but also to display of advertisements, demolition or defacement of buildings of historical or architectural importance, and destruction of trees specially marked for preservation. We may, therefore, consider in this connection,—

I. The meaning of development and other matters which are the subject-matter of control;

II. The machinery of control;

III. The preparation of the development plan and the procedure of control (including appeals);

IV. The enforcement of the restrictions imposed by the plan;

V. Compensation and other remedies open to the owner whose rights are restricted; and

VI. Compulsory purchase and compensation.

10.4. 1. The Act tries to give a precise connotation to the term "development" first, by setting out its contents in words which are given an extended meaning and then by limiting its application by qualifications which either exclude certain operations from development or place them in a certain privileged category where they do not require any planning permission or are legally presumed to have such permission granted to them already. The intention obviously is to restrict control to the more serious breaches of good planning and leave to the owner or occupier a fair measure of freedom in others.

10.5. Development is a composite concept of two distinct strands, the first of which involves physical interference with land i.e. a change of "matter", while the second merely involves a change of "manner" i.e. use. In the language of the Act, development is (a) the carrying out of any building, engineering, mining, or other operations in, on, over or under land, or (b) the making of any material change in its use or in the use of any building standing on it. Building operations include re-building, alteration in whole or in part, and also demolition when it is a step preliminary to reconstruction. Engineering operation is limited to laying out streets, pathways, or other means of access or laying in municipal services like water, gas, electricity or sewers. No statutory meaning is given to the adjective "material" added for the first time by the 1947 Act to qualify "change of use". It is clear from some of the illustrations that a more intensive use (which is a change of degree and not of kind) may amount to material change in certain circumstances. It was once supposed that "material" meant relevancy to planning considerations or to the planning requirements of the area but this view was discarded by the Minister in favour of the meaning "substantial" which however leaves the matter almost where it was.

10.6. From these operations or uses likely to come under the expression 'development' six are expressly excluded by the statute. They comprise internal or external improvements or alterations for maintenance which do not materially affect the external appearance of the building so treated ; road repair by a highway authority within the street boundary ; repair of sewers, mains, pipes, cables etc. by a local authority or any public utility service ; the use of any land within the curtilage of a dwelling-house for its proper enjoyment as a dwelling-house ; the use of any land or any existing building on such land for agriculture or forestry ; and lastly, the change over from one use to

another provided the new use is within the same class as the old in the Use Classes Order promulgated by the Minister. Barring the first and the last the other exceptions are of a routine nature. The first also is simple except that it may involve the decision of the tricky question as to whether the external appearance is materially affected by, say, the adoption of a new colour scheme or some similar face-lifting device. The last is important in as much as within the limits of any particular class, a use may "leap about or change itself to its heart's content".* The Use Classes Order of 1950 groups possible or foreseeable uses under 18 classes which are too elaborate to be quoted at length. The point to remember is that while by this Order some changes of use are statutorily declared to be not material and will not therefore attract the restrictions incidental to development, it does not follow that a change over to another class necessarily will. Whether it will or not would depend upon the facts and circumstances of each case and the view that the planning authority or the Minister takes of the change. The prospective developer, if in doubt, has the right to ask the local planning authority whether the proposed change is material and to appeal to the Minister in case he is not satisfied with the answer. The Minister's decision is final, subject to a further appeal to the High Court on a point of law.

10.7. The three changes of use which are technically development but do not require planning permission are really not very important. They arise from a temporary departure from current use or resumption of original permanent use after temporary discontinuance. More important is the last category of "permitted development", consisting of 22 classes in which they have been grouped by a General Development Order of 1950 which was last revised in 1960. It is difficult to summarise this heterogeneous assortment in a few words or deduce from them a few simple principles on the basis of which they may be said to have been selected. To take a few examples, a dwelling-house may be enlarged without permission up to one-tenth of its cubic space or 1750 Cft. whichever is greater (subject always to the maximum limit of 4000 Cft.) for extension of the main building or for the construction of garages, stables, coach houses etc., but dog kennels, dove-cotes, poultry houses, tool sheds etc. may be set up without limit so long as they do not exceed a certain height. Industrial undertakings may also, without permission, expand their premises up to one-tenth of their cubic space or 5000 Cft. of extra floor space and do whatever internal changes are necessary for transport of goods and raw materials and disposal of sewage. A host of works may be done by local authorities, educational authorities, or public corporations in connection with their work and no permission need be asked. Sundry minor operations like erection of gates and fences, temporary structures for authorised building operations, holiday camps by recognised recreational organisations etc, also come within this category. The point to remember in all these cases is that any such "permitted" development may lose its privileged position by a specific order of the Minister or of the local planning authority (with the approval of the Minister) and that the legal presumption of automatic permission does not extend to doing any act whose effect is to widen the means of access to a trunk road or obstruct the view of a passing vehicle near a bend or intersection of roads.

10.8. Special regulations have been framed for the control of advertisement and preservation of trees and historical buildings. The purpose of controlling advertisement is to ensure public safety and preserve amenity but the matters covered by the regulations and their exceptions are so detailed that one critic observed cynically that the effort was worthy of a better cause. The restrictions do not apply to displays within enclosed premises or on a moving vehicle. Bas-relief displays

*An Outline of Planning Law by Desmond Heap, 3rd Edn., p. 46.

forming part of the fabric of a building are also excluded. In a large number of cases consent is "deemed" to be granted, as for example, functional advertisements of local authorities and statutory undertakings and transport services such as "bus stop" signs, street directions etc; professional, business or trade plates; "to let", "for sale" signs; advertisements and posters issued under a statutory duty or during election times etc. Except in the cases of such "deemed" consent express permission is necessary for the display of other advertisements which must conform to certain criteria as regards size, site, safety and the manner of presentation. Advertisements may however be rigidly excluded from some 'areas of special control' which are determined by the local planning authority with the approval of the Minister, subject to periodical review of their boundaries which is necessary in order to keep in step with the march of progress in commerce, industry or building development.

10.9. Irrespective of whether a development plan has been prepared or not, a tree preservation order or an order for the preservation of buildings of historical or special architectural importance may be made by the local planning authority and confirmed by the Minister. The Minister may anticipate the local planning authorities by himself compiling such a list after giving a hearing to the owners whose rights are affected.

10.10. II. The broad outlines of the machinery of control is simple though the complex organisational structure at the top has sometimes baffled text-book writers. Briefly the position is that at the top level stands the Minister (now called the Minister of Housing and Local Government) with his hierarchy of officers for laying down the policy by a series of regulations, circulars, general development orders etc., and keeping a constant watch over the work of each individual planning authority in respect of the preparation of development plans and the exercise of planning control. At the other end are the county councils or the county borough councils which have been constituted local planning authorities by the 1947 Act.

10.11. The formal organisational set up of the Ministry follows the common pattern of all English government departments. There is the Minister at the apex with one eye turned towards the Parliament to which he is accountable for his policy and administration and another towards his permanent secretariat on whom he depends for the smooth working of the department and the meticulous examination of all aspects of a question before it comes up to him for final disposal. The permanent staff which remains in office despite all changes in the political scene is headed by a Secretary who is selected for his administrative, not for his technical, qualifications and background. Under him there are four sections of which three are administrative and one is professional. The three administrative sections divide between them a large volume of work which includes, among others, development plans which the Minister has to approve or reject; appeals against adverse planning decisions; acquisition of land by agreement or otherwise; New Towns administration with all that it implies; the preparation of regulations, orders and directions which are of the essence of policy-making and their consolidation into a series of planning codes and manuals; advertisement control; protection of historical buildings; and preservation of amenities etc. The fourth section is concerned with planning technique and research and is staffed by a varied group of experts under the control of a Director with the status of an Under Secretary. It has a close liaison with that part of the administrative section which deals with developments because without its expert advice decision as to whether a development plan deserves to be approved or modified or rejected can hardly be made. It is divided into three sub-sections of which the first deals

with planning techniques and standards and the drawing up of outline plans for New Towns; the second deals with basic survey and research into matters geological, economic, social and financial; and the third consists of the Inspectorate who are the Minister's representatives to hear appeals against the decisions of the local planning authorities.

10.12. By statute, the Minister is "charged with the duty of securing consistency and continuity in the planning and execution of a national policy with respect to the use and development of land throughout England and Wales" but his wings have been clipped by the restrictions placed upon him in his dealings with other government departments concerned with land; and the result of this is that unified control of land use is still a long way from realisation. The location of all new industry depends upon the Board of Trade and the Minister has simply got to toe the line. If a development plan shows an industrial site which the Board of Trade is likely to disapprove it is completely infructuous so far at least as the location of industry is concerned, and no development application for an industrial building can even be entertained by a local planning authority unless accompanied by a Board of Trade's certificate of approval. Secondly, although traffic movement is an essential part of the plan of an area and highway proposals and other proposals of a plan are necessarily closely inter-linked, it is the Minister of Transport who determines the routes of main trunk roads and their accessories and these routes must be deemed to be automatically incorporated into the development plan. The land requirements of the Defence Services and, for the matter of that, of all other government departments are immune from legal control and only capable of adjustment through formal or informal discussions. Government departments are all prone to pursue their own separate interests untrammelled by any consideration of the principles of planning or any control from the Ministry of Town Planning.

10.13. At the bottom rung are the 145 local planning authorities comprising 62 administrative counties and 83 county boroughs in whom is now vested the primary duty of drawing up development plans and exercising development control. This change over from smaller to larger planning units was made on the recommendation of the Barlow and Scott committees who found the smaller units to be far too ineffective because of their restricted area of operation and lack of necessary resources to employ qualified staff. Smaller local authorities can now exercise only delegated powers received from the county councils in the administration of planning control and have a right to be consulted when the development plan is being drawn up, but the primary responsibility for the preparation of plans and the administration of planning restrictions is placed fairly and squarely on the larger local authorities.

10.14. Nevertheless, the Minister has wide reserve powers over the work of these local planning authorities which is quite justified, for if the best possible use of a limited amount of land is to be made, the general plans must be co-ordinated nationally. These powers may be listed as follows: (1) The Minister is entitled to give direction to local planning authorities during the preparation or amendment of plans and to get a plan prepared himself or through some other authority if the local planning authority fails to do so. (2) All plans and subsequent amendments must be approved by him in order to be valid and he can make any change in them that he considers expedient. (3) He is the final authority to hear appeals against adverse planning decisions and enforcement notices, and in such appeals he can consider the whole case afresh and pass any order he thinks proper. (4) He has general default powers to act or force action if a local planning authority fails to operate its powers under the Act in a manner he considers satisfactory. (5) Finally, all financial

assistance from the government and all proposals to acquire land compulsorily for development or re-development flow from or through him and local planning authorities cannot afford to do anything which he would disapprove.

10.15. III. Every local planning authority is required under the 1947 Act to prepare a development plan for its entire area within three years from 1st July 1948 unless time is extended. The following procedure is required to be followed.

10.16. First, there has to be a complete survey or inventory of the existing physical, economic, and sociological conditions which is the starting point for an analysis of the potentialities and future requirements of the area. How, precisely, this is to be done has been explained in the circulars issued by the Ministry from time to time.

10.17. The next stage is the preparation of the plan itself which should indicate the manner in which the land covered by it is to be used (whether by the carrying out of development or not), and the stages by which any such development is to be carried out. It should, among other things, (1) define the sites of proposed roads, buildings, air-fields, parks, Nature reserves and other open spaces, (2) allocate areas for agricultural, residential or industrial purpose, and (3) designate land which should be subject to compulsory acquisition. It is not a single map or plan but consists of a whole series of maps of various kinds and scales (basic maps, town maps, comprehensive development maps, designation maps, proposed road maps, programme maps etc.) as well as a written statement which describes the plan, explains its nature and objective, and lays down the stages of execution. Trunk roads planned by the Ministry of Transport and New Towns established under the New Towns Act should be, and in case of omission, should be deemed to be integrated into the plan.

10.18. The smaller local authorities which had, prior to 1947, enjoyed the right of plan preparation have a right to be consulted and to make a representation at any stage but "the owner or occupier of land encompassed in the development has no right, as an individual, to be consulted while the plan is being prepared or to be given notice of the plan's contents or of the manner in which his land is affected by the plan. His first formal notice of what is happening comes when the plan is submitted to the Minister for approval. Only if the Minister decides to hold a local enquiry will he be permitted to support his objections by evidence and oral argument".* If an open enquiry is dispensed with an opportunity is given to the objecting owner to be heard by an Inspector appointed by the Minister for the purpose.

10.19. When the enquiry is completed, the Minister may either approve of the plan (with or without modification) or return it for fresh consideration. If the plan includes designation of land for compulsory acquisition he must satisfy himself that the acquisition is likely to be completed within a prescribed period. The Minister's action in approving or modifying or rejecting a plan is an administrative, not a judicial or quasijudicial, decision so that the fact that he holds further discussion with the local planning authority or any other authority "behind the back" of the objector does not vitiate it.

10.20. A development plan is, however, never final. It must be kept under constant review and resubmitted before the Minister at the end of every five years, if not earlier, for such alterations and modifications as may be called for by lapse of time or the emergence of new circumstances. Fear was expressed at the beginning that flexibility may have been achieved at too great a price, that the possibility of

* Land Planning in a Free Society by C.M.Haar, 1951, p. 186.

quick and easy amendment might result in uncertainty and confusion. Slap-dash plans, it was feared, might be prepared instead of one based on a careful and intelligent appreciation of all factors that needed consideration by too great a reliance on the ease with which future progressive amendments could be made. Even the need for a development plan which could be altered every five or ten years had been doubted. But the fear has proved groundless and the doubt is not shared by many. No developer, it has been rightly said, "should be left to the comparatively untrammelled control of any local planning authority when seeking planning permission for development. There must be something down in writing (or drawing) to which he can point and from which he can deduce argument. The development plan brings important conditioning influence to bear upon the doings of the local (planning?) authorities."*

10.21. After the appointed day, if the proposed development does not fall within any of the exceptions or permitted categories, an application must be made in a prescribed form together with such plans and drawings as may be required. When the prospective developer wants to have an idea of what chance he has of getting permission before committing himself to the heavy expenditure of investing in land and preparing detailed plans and drawings, he may submit an outline plan to the local planning authority. There are prescribed rules for service of notice on persons whose rights are directly involved but when the proposed development is of a kind that may be labelled a "bad neighbour" (as for example, when it means erection of public urinals or conveniences, refuse dumps, sewage disposal plants, slaughter houses or knacker yards, theatres, cinemas, music or dance halls, swimming pools, public baths, gymnasia, indoor pavillions etc.) wider publicity is required through press or otherwise for the information of the general public. Except in the case of a county borough, application has to be made before the district council which may proceed to deal with it if power has been delegated to it, or transmit it to the county council, if not. The decision is always in the name of the county council. After the amendment of 1959, district councils with a population of 60,000 or above may demand such delegation as of right.

10.22. Besides the local planning authority, consent of two other authorities may be necessary before development work is taken up. One is the local authority which administers the public health by-laws and whose sanction is necessary in all cases; the other is the Board of Trade without whose authorisation an industrial building above a certain minimum size cannot be erected. Before entertaining such an application and going into its merits a local planning authority would naturally like to make sure that the Board of Trade's approval has been or is likely to be granted. The filing of an application at the lower level is the usual rule but the Minister has power to order any application to be referred directly to him for determination and this he does generally either when the development is concerned almost solely with matters of national interest or involves delicate issues of policy or when the local planning authority is itself the prospective developer, as the latter cannot be both applicant and judge in its own case. In all such cases the applicant is entitled to a personal hearing by somebody appointed by the Minister.

10.23. Within a prescribed period after the receipt of an application, which is usually two months (but may extend in some case to three and in the case of mineral development to thirty), the local planning authority has to give a decision. It can no longer postpone it as it could do under the earlier Acts, and the tendency, occasionally

* 'Planning Legislation at home and abroad'—Speech of Desmond Heap, Sectional Chairman of 'Town Planning Institute's Summer School Seminar' at Reading, 1961.

noticed, of avoiding responsibility by 'passing the buck' to the Ministry immediately, or by giving a perfunctory decision which would inevitably lead to an appeal, has been disapproved by the Minister. The decision can be one or three kinds e.g. unqualified approval, conditional approval, or rejection. The local planning authority should usually be guided by the development plan but is not absolutely tied down to it. It has some discretion in the matter because it is permitted to take into account "any other material consideration". If a development plan is not yet in force the local planning authority should have regard to the provisions that are likely to be adopted in the plan. The decision must be in writing and in case of refusal or conditional grant the reasons for refusal or for the condition imposed must be clearly stated and communicated to the applicant. The conditions must not be arbitrary; they should be dictated by the requirements of proper planning, reasonably certain in their incidence, and intelligently and sensibly related to the planning schemes and proposals for the area. The effect of an invalid condition is to make the permission itself void, not to make it free of conditions. If no decision on the application is received within the prescribed period it should be deemed to have been refused. But if an 'outline' development plan has already been approved on principle the local planning authority's hands are tied and subsequent objections or conditions may only relate to siting or design or external appearance, not to the proposed development itself.

10.24. A development permission is not a right "in personam" but runs with the land and is available to whoever is lawfully in possession of it. The permission, however, is not irrevocable for the local planning authority is allowed to have second thoughts. It can, with the approval of the Minister, revoke the permission if such revocation is called for in the interest of proper planning, and in such case, if the construction of the authorised building has not yet been started nor the authorised change of use taken up, the compensation payable will be limited to the bare expenses incurred which have been rendered abortive by the revocation. When the revocation takes place after the development has been completed full compensation is payable.

10.25. When permission is refused or is hedged in with conditions, an appeal lies with the Minister which is to be filed within one calendar month from the date of communication of the order or from the notional date of refusal. This last is the date on which the prescribed period within which decision should have been given under the Act expires. The Minister's powers on receipt of an appeal are very wide for he is not restricted to any portion of the order appealed against but is entitled to take the whole application afresh and pass any order he thinks fit, including an order more unfavourable to the applicant than was passed by the local planning authority. He may allow or dismiss an appeal, or vary or reverse any part of the order appealed against, add still more stringent conditions, or even refuse permission altogether where the local planning authority was only content with laying down a few conditions. The decision is final in the sense that there is no formal appeal against it, but the usual right of challenging it in the High Court under the prerogative writs has not been taken away.

10.26. IV. When a person carries out development without planning permission or when advertisements are displayed in contravention of regulations or historical buildings are defaced or protected woodlands destroyed, the local planning authority (or some subordinate authority or committee to whom the power of enforcement may be delegated) may, if it considers it expedient to do so having regard to the provisions of the development plan and any other material circumstance, issue an enforcement notice on the owner or occupier of land and, in case of an advertisement, also on any other person known to be responsible for the display. The cautious

phrasing gives the local planning authority a wide discretion to ignore minor infractions. The power to issue such notice gets time barred after four years from the act held under objection. If on receipt of the notice its terms are complied with there is an end of the matter. If not, the local planning authority has the right to take action itself at the cost of the offender and sometimes even to institute criminal proceedings. A third possible course—institution of a Relator action for injunction through the Attorney General—is an equitable remedy and seldom, if ever, used.

10.27. There is no prescribed form of notice. It need not quote any section nor explain why the action complained against constitutes development. But it must clearly specify the development alleged to have been carried out or the conditions alleged to have been violated, and when restoration of the original condition is wanted it must state exactly what steps are to be taken and within what time. Two dates must be mentioned—first, the date when the notice becomes effective (and this must be at least four weeks after the date of service), and secondly, the date by which the period of taking the suggested corrective steps expires. The second period does not start till after the first has ended and if by the filing of an appeal the first period is automatically extended till the appeal is decided, there is a corresponding shift in the date of the second period also. Any vagueness or uncertainty in the allegations contained in the notice, any misquotation of the section, and any failure to mention the two dates specifically render the notice invalid and all subsequent action nugatory. The original enforcement notice does not now spend its force on compliance and no fresh notice is necessary in case of resumption of the prohibited use.

10.28. During the first of the two periods, i.e. before the notice becomes effective, the developer had two or rather three alternatives open to him. He might apply to the local planning authority for "ex post facto" permission so as to be able to retain the unauthorised building or continue the unauthorised use; he might appeal to the Minister; or lastly he might defy the notice and face the consequences. There were also parallel rights of appeal to the court of summary jurisdiction instead of the Minister in the earlier Act but the 1960 Act has done away with it because it was a dilatory procedure and a fertile source of conflicting decisions. The 1960 Act also deleted the provision about applying to the local planning authority for permission which has become redundant, now that the party can, in his appeal to the Minister, combine an application for planning permission as well. The procedure has therefore become very much more streamlined and time-saving.

10.29. If the appeal fails and still the party takes no action the local planning authority may enter the land, carry out the requirements of the notice, and recover all reasonable expenses incurred in this connection as a simple contract debt from the owner of the land. In an action for the enforcement of such a debt the owner is precluded from challenging the validity of the enforcement notice on any ground on which, under the 1960 Act, an appeal lies to the Minister. Obviously this remedy is available to the local planning authority only when a building or other work is required to be demolished or altered or reconstructed, not when a particular use is required to be discontinued.

10.30. Lastly, there is the remedy of criminal action. Development without permission or in violation of the condition is not by itself a criminal offence but the defiance of an enforcement notice is. Specific penalties have been provided both for the original offence and for continuing offences whether the breach is in respect of planning permission or display of advertisements or destruction of protected trees or buildings. It seems that such criminal action is the only remedy available when the

breach consists of a change of use and in most cases of refusal to comply with the conditions imposed.

10.31. V. It is necessary to see what, apart from the expected benefit to the community as a whole, the individual citizen gets in exchange for the curtailment of his right in property which the planning of land use involves.

10.32. (A) Under the 1947 Act, which had nationalised all development value, no compensation could naturally be claimed for refusal of planning permission. When by the Acts of 1953 and 1954 development value was restored to the owner the position became different; but even then a distinction was made between entirely new developments and developments falling within the ambit of the existing use of lands and buildings, compensation for restriction being more generous in the latter case than in the former. Ordinarily, no compensation is payable even now for refusal of permission to make any material change in the existing use of lands and buildings. This excludes a large class as most applications for development in built-up areas are for change of use. Nor is compensation payable (a) for restriction intended to control density, architecture, internal layouts, structural specifications and other matters which may be broadly called engineering standards and specifications; (b) for refusal on the ground that the area proposed for development is low in the order of priorities, lacks water supply or sewerage, or is liable to flooding or subsidence; (c) for refusal to the display of any advertisement.

10.33. Secondly, if any kind of development, industrial, commercial or residential is allowed compensation cannot be claimed because another has been refused. The principle, as the Minister said when introducing the Bill, was that provided some reasonably remunerative development was allowed, the owner was not entitled to compensation because he was denied the most profitable exploitation of his land.

10.34. Lastly, whenever the planning decision of the local planning authority gives rise to a legitimate cause for compensation, the Minister may review the planning decision after notice to both sides and vary the decision to avoid the need for compensation.

10.35. (B) It is clear that after 1954 when a refusal of planning permission (within the existing classes of use) is not backed up by permission for a nearly equivalent development, compensation is payable. But even under the 1947 Act compensation could be claimed in some cases and they are still preserved. Some of the cases arise from the fact that under ordinary circumstances permission would have been automatic (Cf. "deemed permission" cases or cases where the construction or change of use is not a 'statutory development') and refusal adds an extra burden not normally shared by others. Other cases arise from revocation of permission once granted which either renders some expenditures already incurred abortive, or destroys future expectations. Others are of a miscellaneous character and of comparatively minor significance.

10.36. (C) But instead of holding on to his property whose use and development is restricted, the owner may try to get rid of it by compelling its purchase—a sort of "acquisition in reverse" initiated from below instead of at the instance of the public or a local authority.

(i) When planning permission is refused or hedged in with conditions which make development an uneconomic proposition the owner may serve a purchase notice on the local authority (borough or district council) which becomes effective only on confirmation by the Minister. In the proceedings before the Minister there are representatives not only of the aggrieved applicant and the local planning authority whose order has given rise to the cause of action but also

the local authority on whom the owner proposes to unload his property. Confirmation is ordered only when the Minister is satisfied that the land has become incapable of "reasonably beneficial use" in its present state or if the conditions imposed have to be complied with, and would not be so capable by carrying out any other development for which permission has been or would be granted. Ambiguity about the phrase "reasonably beneficial use" has been cleared by the 1959 Act which says that the land should be taken in its existing state and apart from any potential value it might have owing to its proximity to an area undergoing a process of rapid urbanisation. The Minister's decision confirming or rejecting the notice or granting planning permission to avoid purchase is subject to an appeal to the High Court on a point of law.

(ii) A slight extension of this right has been made by the 1959 Act in respect of land which has been affected by "planning blight". This happens when lands which are designated in the development plan as liable to compulsory acquisition in future (or which, without being so designated, are likely to be acquired sooner or later on account of their allocation for the purpose of government or a local authority or statutory corporation) suddenly become unsaleable or nearly so. Whatever may be the bare use to which such land may be temporarily put it is obvious that no long term planning with regard to it is possible nor is it likely to find a purchaser with the prospect of acquisition hanging like a sword of Damocles over its head. In such cases the resident owner-occupier of the land may serve a notice upon the authority for whose use the land is ear-marked asking for immediate acquisition on the ground that in spite of attempts to sell the property he is unable to do so except at a price which is substantially lower than what it would have fetched if the shadow of acquisition had not been cast over it. If the authority objects and serves a counter notice, the matter is referred to the Lands Tribunal which is to order acquisition if the allegation of substantial depreciation in value is made out.

10.37. VI. In order that development within the country may proceed according to plan it is often necessary to acquire land compulsorily both in rural and urban areas because the private owner (or developer) may not be interested in the kind of development proposed for the area or may not be the suitable agency for carrying it out. This right of compulsory purchase, or of eminent domain as it is called in America, is of course an encroachment, though an inevitable one, on the freedom of the individual; and the extent of this right as well as the terms on which such transfers are effected are a measure of how far in any country the needs of the community supersede the wishes of the individual.

10.38. The extent of the powers of compulsory purchase is now very wide. For acquisitions made under the 1947 Act these lands have generally to be designated in the development plan, and the designation depends upon (1) what a government department or a local authority or a statutory undertaker requires for the purpose of any of its functions, or (2) what the local planning authority considers to be a proper "area of comprehensive development" or (3) what in its opinion should be compulsorily acquired in order to secure that it should be used in the manner proposed in the development plan. These three categories cover a very wide area. Lands in or contiguous to "an area of comprehensive development" include not only blitzed or blighted areas which require development but other areas which are necessary for the re-location of people and industry and the open spaces ousted from areas which are being re-developed. It also includes any other area required for a purpose specified in the development plan. It should

be remembered that absence of designation in the plan does not give any land immunity from acquisition, for government departments (particularly Works and Buildings, the Postal Department and the Ministry of Transport) and the local authorities must obviously have the right to acquire during the pre-plan stage when the question of designation cannot arise, and they have it. In fact, the general powers of acquisition given by the 1944 Act have not been curtailed or superseded by the 1947 Act, and all that may happen in the case of acquisition of undesignated land is that the particular need which gives rise to the acquisition proposal will be subjected to a more careful scrutiny at the time of the enquiry. Even without designation a historical building which is falling into decay through the neglect of the owner can be acquired by a local authority with generous assistance from the State. The normal procedure before a compulsory purchase order is passed is to hold a public enquiry or to give a private hearing.

10.39. The terms of transfer comprise primarily the compensation payable on such acquisition. On this point the law has undergone several changes till in 1959 the circle has been almost completed. The 1919 Act laid down the principle of market value which was subjected in 1944 to a ceiling equivalent to the market value of 1939. Under the 1947 Act the whole concept was revolutionised on the basis of the Uthwatt Report as already mentioned and only the existing use value was payable as compensation (plus a share of development value at 1947 fixed somewhat arbitrarily at £ 300 million). The system did not work well in practice and the 1954 Act introduced the much criticised two price system under which, for private sales, price was determined by ordinary market conditions, while for compulsory acquisition the present use value plus the 1947 development value was retained. The dissatisfaction caused by the two price system and the recommendations of the Franks Committee in 1957 led to the 1959 Act by which, from October 30, 1958, compensation has to be paid on the basis of market value subject to the usual safeguards. The determination of this market value is not however quite the simple thing that previous determinations were, for now every parcel of land has to be evaluated by reference to the possible form of development which it might be permitted to have by the planning authority—a somewhat speculative matter not always easy to foretell. The 1959 Act indicates some general and some special assumptions that the Lands Tribunal might make in this connection but to set them out even briefly would be to enter into too much detail.

10.40. In 1949, shortly after the 1947 Act was passed, Desmond Heap said in the preface to his Outline of Town Planning Law, "With an imperfect understanding of what is happening the little man in this country is now setting out on a planning expedition into what are to him uncharted seas. For the welfare of his ship as a whole he has surrendered a great deal of his own individual freedom. His voyage is one of discovery. *** He is going to weigh critically the gains with the losses and the gains must be substantial or the voyage will not be worth the price of the ticket." This weighing he does himself twelve years later in his speech as the sectional chairman of the Town Planning Institute Summer School held in the University of Reading in 1961. The verdict is not unfavourable though not enthusiastic in every respect. The Act he describes as a fine piece of draftsmanship skilfully engrafting and dovetailing old and new ideas into one composite whole. Development plans for all the local planning authority areas have been completed and a mine of invaluable information collected. Advertisements, specially those in the private sector, have been controlled to everybody's benefit with the voluntary co-operation of the advertising agencies, and historical buildings and trees have been preserved. Conspicuous success has also been achieved in "areas of comprehensive development" where piecemeal

development has given way to development on a broad-based canvas resulting in more convenient, efficient and better laid out cities. Among the failures he lists the financial provisions due largely to the fact that they were too ingenious for the common man to understand. Another qualified failure was the enforcement procedure which was too complicated and not quite satisfactory till it was streamlined by the Act of 1960. On a few other points his verdict is undecided. He is not sure how far the idea of planning has seeped down to and been accepted by the common man or woman, nor whether the limited right of compelling acquisition of properties affected by "planning blight" conceded by the 1959 Act really goes far enough. And lastly, he has some doubts whether planning decisions are getting enough publicity and whether local planning authorities can always resist the influence of vociferous pressure groups who have their own private axes to grind.

CHAPTER XI

Legal and Constitutional Aspects of Town and Country Planning Law

11.1. Before proceeding further it would be as well to have a clear idea about the legal and constitutional implications of a town and country planning law in a country like India whose Constitution bears a closer resemblance to the American than to the British system in this respect. Community planning, as an American writer has said, often raises points of constitutional law, and any adverse judicial decision may erect obstacles to effective action which can only be overridden by an amendment of the Constitution never to be lightly undertaken. This question of "vires" is no problem to a totalitarian state where the dictator's word is law and his executive fiat, decreeing the manner of land use, final. It is of particular significance in a democracy governed by the rule of law where power is more widely diffused, for even when such power tends more and more to be concentrated in fewer hands through the discipline of a party system or otherwise, the courts are there to act as a brake on its arbitrary or irregular exercise and pronounce on the validity of any law that may be passed. The position is simpler in England where there is no constitutional bar to the legislature passing any law. Parliament is the supreme law-making authority, limited only by the social and political climate of the day which determines the extent of control that the politicians will press for or the country will accept. In a federal form of government with its triple characteristics of a written constitution, the distribution of legislative power between the Union and the component States, and judicial review of alleged inroads on private rights guaranteed by the Constitution, the question is of more vital importance. Any law passed here must satisfy the twin tests of being passed by a legislature of competent jurisdiction and of not being repugnant to any existing law which the legislature is not authorised to override. It is therefore necessary to see—

- I. Which legislature is competent to pass such law ;
- II. What kind of control it can impose;
- III. Under what circumstances can it go beyond control and authorise compulsory acquisition ; and
- IV. What is the power of the judiciary vis-a-vis the Ministry in imposing legal restraints on plan implementation.

11.2. I. On the question of competency most witnesses have expressed themselves in favour of the State and against the Union but since this has generally been in the nature on a *ipse dixit* it is necessary to go a little more deeply into the matter and examine the arguments on which it may be based. Legislative competence would depend upon where this particular power has been, or may be deemed to have been, placed by the Constitution. Governmental power, executive or legislative, has been distributed by the Constitution among the three lists of the Seventh Schedule of which the first is the exclusive sphere of the Union, the second, of the States, and the third, of both the Union and the States concurrently, subject always to the condition that in case of conflict the Union law shall prevail. The division is not water tight ; it tends to get blurred at the edges so that in respect of certain matters there is what may be called a twilight zone where the dividing line would depend on what the Parliament of the day would consider to be matters of sufficient national importance to warrant

their inclusion in the sphere of the Union. There is also the provision, mentioned in the text and repeated in the Schedule, that all residuary matters come within the sphere of the Union. To which of these three lists can town and country planning be said to belong ?

11.3. It is somewhat unfortunate that the planning of land use is not in terms mentioned in any of the lists mentioned above. Economic and social planning is (List III—20), but though it is to some extent dependent on land use planning it is not identical with it. The facile conclusion that it must therefore be a residuary matter belonging to the Union would however be a *non sequitar* for the subject-matter, though not the name, may be found included in one or other of the entries in the lists if a careful analysis is made.

11.4. It is necessary to see then what exactly is meant by town and country planning and whether in some other guise it has found a place in any of the lists. The shortest and the best definition of town and country planning seems to be that given by Keeble who equates it with "ordering the use of land and the character and siting of buildings and communication routes so as to secure the maximum practicable degree of economy, convenience and beauty".* It brings out clearly, if somewhat succinctly, the subject-matter of planning as well as its aims and objects. The primary matter with which the physical planner is concerned is land—the home and workshop of man, the ultimate source of all his food and all his primary raw materials, and the source, also, of great aesthetic satisfaction through its various forms in which Nature reveals itself to us. The planner suggests "inter alia how much of the total available land of the country should be allocated to agriculture, forests, fisheries, mines, open spaces or national park etc.; where industries should be sited and urban centres grow up; what should be the alignment of major and minor communication routes; and how the use and development of land should be guided for ensuring the optimum economic and non-economic satisfactions of the people as a whole. Some of these matters bestride both the Union and the State spheres. Location of industries which may be said without undue exaggeration to be the hard core of planning is not the exclusive sphere of either, for while industries generally fall within the State sphere (List II—24), defence industries are the exclusive preserve of the Union (List I—7) as are some other industries declared by Parliament to be of national importance (List I—52). The re-organisation and co-ordination of traffic movement is an essential part of the plan of an area, for the siting of the major routes and intersections may uproot long established interests and create new centres of population; but while roads and other internal communication routes are within the State sphere (List II—13), the major ones like railways, national highways and airports and terminals are reserved for the Union (List I—22, 23 and 29). Local bodies, the more important of which are in U.K. the local planning authorities, occur in the State sphere (List II—5) but cantonments doing similar service in specially protected areas are under Union control (List I—3). Land, agriculture, forests, fisheries are in the State sphere (List II—18, 14, 19 and 20) but the exploitation of oil, the regulation of mineral development, and the control of inter-state rivers are within the jurisdiction of the Union (List I—53, 54 and 56). Ancient and historical monuments and archaeological sites which are among the things that a town and country planning law tries to preserve fall within the Union sphere if they are declared by Parliament to be of national importance (List I—67), and in the State sphere if they are not. In this medley of coalescing or conflicting jurisdictions and spheres of work it is possible to

*Principles and Practice of Town & Country Planning, 2nd Ed., p.9 by L. Keeble.

get confused unless attention is fixed firmly on what is fundamental in physical planning and what is only incidental.

11.5. We do not think that entry No. 5 in List II, i.e. local government, is of much help in deciding the issue, for town planning is not an inevitable function of local bodies in all countries which practise it in some form or other. Even in England, where historical reasons have accorded to local bodies an important role in planning, they are definitely subordinated to Ministerial control, and critics were not wanting who once suggested a complete withdrawal of this function from local bodies and vesting it in "ad hoc" regional bodies directly set up by government. Planning of the land use is thus conceivable without making it an adjunct of local authority administration and the inclusion of local government in the State list does not automatically bring town and country planning within the jurisdiction of the State.

11.6. It seems that the key-word is land (List II—18) which is the subject of planning control and the basis of all town and country planning law. Land in this context is not confined to mere rights in land as the expression "that is to say" (in Schedule II—18) might lead one to think but is the physical and material thing we understand by the word land, including not merely the surface of the ground but all that lies over or under it—the houses and buildings as well as the sub-soil. Within its broad sweep come all lands whether rural or urban; arable, woodland or forest; rivers or mountains; and the minerals lying underneath. The controversy now happily over, between the West Bengal Government and the Union as to whether the right to regulate the working of minerals gives to the Union also a controlling or semi-proprietary interest in the mines themselves is negated not only by the fact that land (which includes all that lies below it) is mentioned in the State list but also by the inclusion in that list of power to tax mineral rights (List II—50) which would have been inconceivable if the mines were Union property. It is probable that central jurisdiction in the subjects mentioned within the Union list relates not so much to their siting as to their control, conduct, and regulation, after the site has been selected with the consent of the appropriate authority. Since "land" falls within the State's sphere the State should presumably be the authority competent to determine on which part of its territory any particular activity should be carried on. *Prima facie*, the right of the State to prescribe the manner of use of every inch of land within it seems to us to be unassailable. If however it be held that the right to carry on a certain activity carries with it, by necessary implication, also a right to select the site on which the activity should be carried on, all we can say is that there exists here a theoretical possibility of conflict which should be avoided by the exercise of good sense and a spirit of accommodation on either side. No plan is inflexible and no government (which, in the last analysis, means the Minister and his officials) should be permanently unbending in its attitude. According to English Law and practice the President of the Board of Trade and the Minister of Transport overshadow the Minister in charge of Town Planning in prescribing industrial sites and trunk road routes but this has not impeded the framing of plans covering the whole country though it may have led to compromises, sometimes at the cost of the better alternatives.

11.7. II. The other test is even more important. The passing of a law by a legislature of competent jurisdiction does not take us out of the woods if the validity of the law is liable to be challenged on the ground of constitutional impropriety for contravening the fundamental rights incorporated in the Constitution. These provisions of the Constitution stand above and beyond the reach of the State legislature and are inviolable. Article 13 is very clear on the point. All laws in force at the commencement

of the Constitution which are inconsistent with these rights are automatically rendered invalid to the extent of such inconsistency, and all subsequent legislations which contravene these rights are void *ab initio*. A Town and Country Planning Law must necessarily impose fairly drastic limitations on the use of land owned by an individual or organisation and the question arises whether a State legislature (or even the Union Parliament) can pass such law without coming into conflict with the Constitution and the fundamental rights which are an integral part of it.

11.8. There would have been no need to pose this question if land had been public property and some thinkers, G.D.H. Cole for instance, hold that effective planning of land use is very difficult without public ownership.* (But the question of ownership may land us in a semantic booby-trap unless we keep its different shades of meaning clear in our mind. In a certain sense, as an esteemed witness observes in his written memorandum, all lands may be said to have been nationalised already, the right having descended from the East India Company to the British Crown under the Government of India Act, 1858, and passed on to the Government of India under the constitutional changes of 1935 till it vested in the successor government after the transfer of power in 1947. This, however, refers probably to the sovereign right in land rather than to the proprietary right as we ordinarily understand it. Even in England, if we recall the words of Pollock, "no absolute ownership of land is recognised by the law books except in the Crown. All lands are supposed to be held, immediately or mediately, of the Crown though no rent or services may be payable and no grant from the Crown is on record. The feudal lawyers forestalled to some extent...the modern socialist dream of the State as the universal landlord".† Yet this did not prevent Blackstone from mentioning the right of private property as one of the three absolute rights inherent in every Englishman, and a more recent writer from saying that the sanctity of property is, howevermuch it may be weakened by modern legislation, one of the cardinal principles of English common law. ‡ In considering ownership of land we must therefore consider not the superior sovereign right which must of necessity belong to the State, but the ordinary proprietary right recognised by the Constitution and regulated by the laws of the State. More pertinent than the transfer of sovereign right is the West Bengal Estates Acquisition Act of 1955 with its subsequent amendment of 1956 which applies to the whole of West Bengal except Calcutta and whose validity has been placed beyond question by Art. 31A of the Constitution. By virtue of it all estates and rights in land vest in the State free from encumbrances with this saving clause that persons previously holding any property (whether as landlords, tenure holders, raiyats or under-raiyats) are permitted to retain the whole or a part of such property as direct tenants under the State, subject to certain limits prescribed by the Act. If the land is agricultural it is held in occupancy right under the Bengal Tenancy Act, 1885.** If non-agricultural, the rights are governed by the West Bengal Non-agricultural Tenancy Act, 1949 in its application to tenants holding for not less than 12 years without a lease in writing, unless the previous occupation was on the strength of a lease from the ex-landlord in which case the terms of that lease (subject to such modification as the State Government may think fit to make) would survive and be deemed to be a lease granted by the State Government. In the case of tea plantations alone would fresh leases in writing be granted defining the terms of the tenancy. The result is that while

* Housing and Building, p.49 (1945) by C.D.H. Cole.

† Pollock's Land Laws (3rd Ed.) p. 13 quoted by C.M. Haar in Land Planning Law in a Free Society, p. 208.

‡ Fundamental Law in English Constitutional History, p. 54, J. W. Gough (1955).

**After the passing of the West Bengal Land Reforms Act 1955 which repeals the Bengal Tenancy Act 1885, he is a raiyat having owner's right in his holding subject to certain safeguards. [Cf. Chap. II of West Bengal Act X of 1956].

all previous rights over property situated within the municipal limits of Calcutta remain intact, very considerable rights still survive in other parts of West Bengal to the holders of property, however much their ceilings may be curtailed or the corpus of rights circumscribed by the conditions of the tenancy; and these rights, it is conceded, will enjoy the protection of Articles 19 and 31 of the Constitution. So far as agricultural land in rural areas is concerned the very slight safeguard against conversion to other uses contained in Sec. 4(4) (a) of the West Bengal Land Reforms Act (Act X of 1956) does not amount to much as it does not preclude sale to persons who want to use it for non-agricultural purposes. For other areas where a variety of uses is permitted under the existing law there is at present no restriction. A law imposing such restrictions would have to be tested in the light of the fundamental rights guaranteed by the Constitution.

11.9. The relevant Articles are 19(1) (f) and (5) and 31(1) (2) and (2A) which, for our present purpose, may be summarised as follows: "All citizens have a right to acquire, hold, and dispose of property subject to reasonable restrictions in the interest of the general public, and no person shall be deprived of such property except on the authority of the law. There is no bar to a person's property being compulsorily acquired or requisitioned if required for a public purpose, but he is entitled to compensation whose amount (or the principle of determining which) will have to be laid down by law. Partial deprivation of rights in property, so long as ownership is not transferred nor possession disturbed, would not however amount in law to compulsory acquisition of that portion of the right of which he is deprived." The question of the validity of the law would turn on whether the restrictions normally incidental to town and country planning can be regarded as reasonable and would be so regarded in a court of law.

11.10. We have not come across any Indian decision bearing exactly on the point, perhaps because planning, in India, has not yet passed its infancy and reached that adolescent stage when it begins to impinge frequently on people's private rights so as to yield a crop of cases for the courts to decide. A glance at what is happening in other countries may however be more rewarding.

11.11. In England, where the right of private property was developed by common law till it almost became an article of faith, there has been a gradual erosion of the extreme individualistic position over a number of years so that a well-known text-book on constitutional law has to admit that "the law does not allow a private owner unlimited and unlicensed use of his property", and another has said that although the Englishman's home is his castle, its outworks have been considerably worn down and even the inner keep is often in danger because of the greatly enlarged powers of compulsory acquisition assumed by the State. J. F. Garner has shown how legislation for public control of land started with a view to ensure public health and sanitation, spread over to the enforcement of building rules for structural safety as well as for a pleasing elevation, and ended by ushering in a welfare state in which the control of use by governmental agencies through the enforcement provisions of the Town and Country Planning Act has become a generally accepted necessity to enable human beings to live together in an over-crowded country.* To say that the analogy of English Law does not hold because the British Parliament is not hampered by a written constitution which it cannot touch would be to miss the point of this argument. It is not the legality of these laws but their reasonableness which is presently under consideration and on that point what is relevant is that a country with a traditional respect for the sanctity of private property has voluntarily accepted the position that the exercise of that right should be placed under fairly comprehensive control in the general interest. The vehicle through which such acceptance is expressed—the court or the legislature—is

* The Public Control of Land (1956), p. 7, J. F. Garner, LL. M.

beside the point. A thing which is necessary in the general interest cannot but be held to be reasonable.

11.12. But let us see what is happening in U. S. A. where also the common law legal system has given a high premium to individual property rights and between whom and us there is some amount of similarity at least in respect of the constitutional position. In America the acceptance of restrictions has been through the expanding common law in the hands of the Supreme Court which, "although it has emphasised that fair and decent procedures must be followed under the due process clause and that the regulations must be reasonable as applied to property involved in a specific case, has from the beginning regarded the constitutional validity of zoning and land planning and, indeed, now seems more firmly committed to this approach than ever."* This was done through giving a gradually extended meaning to "police powers" which have been evolved by the courts and tagged on to the Constitution as its unwritten major premise, forming a part of the inherent power of the State and federal executives in the discharge of their functions. There was originally a two-fold resistance to the extension of the controlling power of the State, one based on the extreme *laissez faire* doctrine that the State must not intrude into the sanctum of private enterprise even as a competitor; and the other on the respect for private property and rights to the maximum extent possible. The turning point in legal thought seems to have come in 1920 when for the first time public housing was declared to be a legitimate venture by a State or local authority. The next two years saw two very important judgments from Mr. Justice Holmes, one of the greatest of American judges of all time. In one he discounted "the notion that the former (i.e. private rights of property) are exempt from the legitimate modification required from time to time in civilised life" by saying that it "is contradicted not only by the right of eminent domain under which what is taken is paid for, but by that of the police power in its proper sense under which property rights may be cut down, and to that extent taken, without pay." In the other, apparently as a corrective to the last statement which was too general in its unqualified form, he observed that if regulation went too far it might amount to taking which must be compensated. The two judgments taken together are a strong affirmation of the right to control the use of property, generally without compensation, but on payment of some compensation if the control is unduly restrictive. A decision in 1926 enlarged the scope of 'police powers' by saying that the control of nuisance was not its only basis but merely a "helpful aid" and that changing conditions required a successive definition of that power. This completer definition came at last in 1954 when in an important and unanimous decision of the Supreme Court delivered by Mr. Justice Douglas (well-known in this country for his comparative study of American and Indian constitutional development, "From Marshall to Mukherjee") it was said that the police powers permitted a wide discretion in the acquisition and re-development of large blocks of land and that any attempt to hobble this discretion by limiting it to the elimination of slums (defined narrowly as the existence of conditions injurious to public health, safety, morals and welfare) must be brushed aside. It was held that the power was even broader, embracing as it did re-development for the general objective of achieving a better balanced, more attractive community. The traditional application of the police powers—public safety, public health, morality, peace and quiet, law and order—were merely illustrative of the police power, not limitations upon it. Aesthetic and spiritual values must also be sought through the exercise of these powers.†

*Law and Contemporary Problems [Spring 1955], Duke University [N. Carolina], Foreword by Robert Kramer, p. 197.

†Berman v. Parker [1954] quoted in an article on "Constitutional Law and Community Planning" by Corwin W. Johnson in Law and Contemporary Problems, [Spring 1955]—Duke University, N. Carolina.

11.13. The American cases afford strong support to the proposition that the control of use which a Town and Country Planning Law ordinarily contemplates for ensuring a better balanced community life should be regarded as reasonable. The occasions on which compensation could be claimed for restrictions as per Justice Holmes's observation in the second case mentioned above would be rare, for although at some undefinable point regulation of property might shade into the taking of property, instances in which the Supreme Court had determined that this point had been reached or exceeded were very rare. The Indian Constitution is more favourable to planning control than the American. The courts do not have to invent the existence of any "police powers" to help the government for there are built-in safeguards in the Constitution itself against untrammelled freedom in the exercise of any such right. Such rights are, under Article 19 (5), subject to reasonable restrictions in the public interest. Moreover, it has gone one step further than the American Constitution as interpreted by Mr. Justice Holmes by providing in its fourth amendment that restriction "qua" restriction does not involve a constitutional obligation to compensate so long as ownership is not transferred nor possession disturbed.

11.14. III. Another constitutional point has occasionally been raised questioning the propriety of compulsory acquisition of extra land when the intention is to recoup the cost or part of it (or, it may be, even to make a profit) by selling what remains over after the development is completed. A compulsory purchase of a person's land is a considerable encroachment on his private right to hold and dispose of property and only the existence of a public purpose could, under Article 31(2), be a valid legal basis for such compulsory transfer. The question has been raised whether recovery of cost or the making of profit comes within the purview of a public purpose.

11.15. In three cases in which the Calcutta Improvement Trust figured as one of the parties the legality of excess acquisition was under fire but the question whether recoupment of cost could be called a public purpose was not specifically raised in any of them. In the first, a very distinguished Indian judge was sceptical because it was an unusual, arbitrary and oppressive right which the language of the Act did not expressly confer. In the second, a very strong Full Bench held a diametrically opposite view and said that acquisition of adjoining lands for the purpose of recoupment was not only not arbitrary or inequitable but was quite a common practice in England and India. When the first case went on appeal to the Privy Council the second view was endorsed. Since then it has always been taken for granted that such acquisition of extra land was permissible, nobody bothering to apply the further test of "public purpose" to the motives which prompted such acquisition.

11.16. An earlier American view was against the legality of such acquisition. In Cooley's Constitutional Limitations it is said that although compulsory acquisition was applicable where private property was wanted for public purpose use or demanded by public welfare, no instance was known in which it had been taken for the mere purpose of raising revenue by sale or otherwise. The existence of such purpose would be utterly destructive of individual right. * It is doubtful if this is the state of law in America to-day. The question of acquisition of more land than is strictly necessary for a scheme for the purpose of recoupment of cost by the procedure known as excess condemnation was left undecided by the Supreme Court in 1930, but the observation of Douglas J. in *Berman v. Parker* (1954), already referred to, considerably narrows the role of the judiciary in determining whether the power was being exercised for a public purpose. An English decision of 1958 on a somewhat analogous point as to what is and what is not a charitable organisation may also be of some help. Certain rating reliefs

* Cooley---Constitutional Limitation vol 2, p 1139

can be claimed by charitable and similar organisations provided they are "not established or conducted for profit". The question arose in connection with The National Deposit Friendly Society which carried on a mutual insurance business among its members and ran a Convalescent Home for them whether it came under this category even though it had earned large profits and built up a substantial reserve fund. The judgment of the Court of Appeal was in favour of the Society and its effect was thus summarised by R.E. Megarry in *The Law Quarterly Review*, "The focal point must be the affairs of the organisation viewed as a whole rather than that of any particular section of it. A perpetual inescapable obligation to plough back any profit that may accrue would preserve its character as a public charitable organisation and entitle it to the benefits which such organisations can have under the law".* Since a public charitable organisation serves a public purpose the tests considered sufficient for such an organisation should also be sufficient in any other case to establish a public purpose. A system of ploughing back the receipts from sale or lease of land, either for recovery of cost or for further development, would therefore justify compulsory acquisition under Article 31(2) on the ground that it is made for a public purpose. This seems more or less in line with the argument which found favour with the Full Bench Case mentioned above† where it was held that while acquisition of land for the engineering works of the scheme was in pursuance of the direct purpose of the Calcutta Improvement Trust, acquisition of surplus land for recoupment of cost also served that same end indirectly by providing the means of carrying out that purpose.

11.17. Another possible line of argument is as follows. Complete re-development, which should be the object of improvement schemes whenever possible, cannot be confined to streets, parks and occasional housing estates, leaving large areas as insanitary enclaves where flimsy huts, congested and insecure buildings and vacant waste lands with the accumulated garbage of the neighbourhood are a constant menace to the health and safety of the people. But a complete cleaning up of the area must inevitably leave in the hand of the public authority, after all these developments are carried out, considerable surplus lands whose only use, unless that authority itself embarks on large scale building construction for all purposes, would be to be disposed of by sale or lease in small building plots or in large parcels to those who wanted to develop them. In *Berman v. Parker*, Mr. Justice Douglas, it may be recalled, expressly lent his support to the legality of such development through private agencies. It is this cleaning up process which is the public purpose and the sale is an incidental by-product. The fact that in the course of such sale or lease some recoupment of cost or profit follows does not vitiate the argument.

11.18. IV. When we come to the last topic of this chapter, namely the role of the judiciary in the planning process, we are on very uncertain ground because of the existence of an extensive no man's land in which the exact boundary between the area of judicial interference and the extent of exclusive ministerial discretion may be constantly shifting. The judges may, through their interpretation and application of the all pervasive Article 226 of the Constitution, greatly help or thwart the process and purpose of planning. Their responsibility to the public as the guardian of their legitimate rights is great; so also is their responsibility to the community in the promotion of the goal to which, after due thought, it may have committed itself. It is hardly likely that they will all speak with the same voice for temperamentally some

* *The Law Quarterly Review*, April 1959, P. 171-72

† *Manilal Singh v. Trust* [1916]

may feel bound by the letter of the law interpreted by reference to the past, and others may be moved by the spirit of the age, reinterpreting the Constitution in terms of the future. On this point we can do no better than summarise with slight verbal alterations a some what long but interesting note from a penetrating American study of the English Act of 1947.

11.19. "If a Minister's decision on planning appeal was regarded as quasi-judicial it would have the important practical consequence that the rules of 'natural justice' could be invoked in an appeal to the court not merely on procedural matters but also on the substance or merit of the decision. This was sought to be avoided by a drafting device which gave such decision an administrative, not a quasi-judicial, character. But this would not have been of much use if the judges had not largely recognised the social philosophy and accepted it; for, as Ivor Jennings has shown, with a far less statutory rope to work with, the courts have been able in the recent past to read the requirements of 'natural justice' into a statute. So amorphous is the dichotomy between 'judicial' and 'administrative' that the courts have been able to pigeon-hole a particular function largely according to the particular consequences they wish to see flow from such classification. On the other hand, a judge more amicably disposed towards the underlying social aims of town and country planning legislation will find sufficient basis in the Act to warrant the conclusion that the rules of 'natural justice' were not intended by Parliament to apply to this appellate function of the Minister. This is more in keeping with the latest English judicial trend of self-abnegation which indicates a great change in the relationship of the judiciary and the executive. The reason is that behind technical doctrines lie views of ultimate social philosophy. With the advent of socialism the subject-matter of State action has been widely extended; it is also more technical and difficult. The remedy for bad planning, or the bad carrying out of any major policy, lies with the Parliament responsible to the electorate, not with stray cases that may crop up in the courts. Unless the Minister has gone completely beyond the statutory grant of powers, acted in bad faith, or failed to conform to the rules of 'natural justice' in the limited period when he is conducting an enquiry, the call for judicial review will remain unanswered. The cases even indicate that so long as there is a substantial compliance with the statutory requirements the Minister's action will not be interfered with. The talk of 'judicial sabotage of socialist legislation' merely represents a cultural lag and is a thing of of the past".* This was written in 1951 but even as late as 1955 Lord Goddard came down heavily on local planning authorities and quashed ill-drafted enforcement notices with the observation that persons affected by the notice had a right to know exactly what was complained of and what they were required to do; and Lord Denning, known for his liberal and progressive views, gave unstinted support to the same.** It is reasonable to conclude that while the English courts would not generally interfere with policy they do not show any disposition to tolerate any dereliction in the matter of procedure which might prevent the citizen from presenting his case as convincingly as possible before the appropriate forum, viz. the local planning authority or the Minister. The role of the judiciary in the American States has been even more forthright. While the Supreme Court has accepted planning restrictions with a good grace, "state courts have been somewhat less tolerant, no doubt because they are in a better position to see more clearly and frequently the possibilities, in the day to day routine operations at the local level, for abuses and inequities resulting from poorly devised or improperly executed zoning and planning schemes".† What attitude the Indian judiciary will adopt it is too early to say.

* Land Planning Law in a Free Society [1951]. notes in page 193-94 by Charles M. Haar.

** [1955] 2 QB 178 & 623

† Law and Contemporary Problems [Spring 1955] foreword by R.Kramer, P. 197

CHAPTER XII

The Model Town and Country Planning Act prepared by CRUPO*

12.1. No account of the current Indian laws on Town and Country Planning can be complete without a reference to the Model Town and Country Planning Act prepared and circulated by the Central Regional & Urban Planning Organisation with the imprimatur of the Ministry of Health, Government of India, for the guidance of different Indian States. Based on an earlier draft prepared by the Institute of Town Planners (India) it has, as the explanatory note says, profited by the experience gained from the working and the shortcomings of current Indian Acts and tried to avoid the complexities and pitfalls of similar legislations in U. S. A., U. K. and the continent. It is the clearest and the most readable of all the drafts made up to date and whether one agrees with all its provisions or not, no new legislation on town and country planning in India can ignore it or fail to profit by the form in which the principles of town planning and the mode of their enforcement have been embodied. We shall, therefore, start with a summary of the provisions of the proposed Act in non-technical language before offering our comments.

Development and the Machinery of control

12.2. Development is described as the carrying out of building, engineering, mining or other operations in, on, over or under land or the making of any material change in any such building or land or in the use thereof. After the Act comes into force within any local planning area no such development can be carried out without permission from a local planning authority, such permission being given either on the basis of a development plan already drawn up or of a contemplated plan whose lineaments are present in the mind of the planning authority though the details have not yet been worked out or put down on paper or maps with the seal of approval from government. The machinery proposed for the purpose are local planning authorities, a State Planning Board, and a Chief Town Planner who is the principal permanent officer of the town planning department of government.

12.3. At the top of the hierarchy, but below the governmental level, is the State Planning Board with jurisdiction over the entire State, consisting of a chairman, other members numbering between 3 and 13, and the Chief Town Planner who will be the (ex-officio) secretary of the Board. All (except, of course, the Chief Town Planner who is a permanent official) are appointed by government for such term and on such emoluments as it may fix, and all are dismissible at any time if government thinks fit. The constitution of local planning authorities may vary. If the planning area coincides with the area of a local authority and government, in consultation with State Board, considers it a suitable agency for the exercise of planning functions it may constitute the local authority into the local planning authority over its own area and some adjacent

*The comments were prepared on the earlier draft before its revision by the Committee appointed at the Bangalore Conference. Attempt has been made to bring it up to date in the light of the revised draft which anticipates some of the defects we had pointed out and corrects them. If there are still some comments which have become unnecessary on account of this later revision we crave indulgence because the revised draft was received so late that a thorough revision was not possible.

areas and vest it with necessary powers.* If not, a separate planning authority is to be set up consisting of a chairman, a vice-chairman† a town planning officer, and three other members—all appointed by government, and some representatives and officers of local bodies falling within the planning area who will come either through indirect election or by virtue of their office. The town planning officer is to be the statutory secretary of the local planning authority as his counterpart, the Chief Town Planner, is of the State Board. The terms of office and conditions of service of the members are to be prescribed by rules but government may terminate any appointment at any time if it thinks fit. The local planning authority is given the right to employ its staff and fix their salaries in accordance with the rules framed by government.

Functions

12.4. The functions of the State Planning Board are (1) to advise the government in planning matters and to perform other functions or duties that government may assign to it ; (2) to guide, assist and supervise local planning authorities, especially in the preparation of development plans ; (3) to collect statistics, and publish bulletins and monographs on planning and planning methods, and (4) to perform other acts that may be "entrusted to it under the Act". These other acts appear on a careful scrutiny of the Act to be limited in number and classifiable either as executive or appellate. The executive jurisdiction arises when a local planning authority fails to prepare a development plan (interim or comprehensive) within the prescribed time and it is prepared by the Chief Town Planner under orders of government. The function of the State Board is to publish the Chief Town Planner's plan, hear objections that may be filed, and submit a report to government with its recommendations. Its appellate power can be invoked either when a planning permission is refused or when an enforcement order is passed for demolition of an unauthorised construction or discontinuance of an unauthorised use or when the quantum of development charge is impugned. Obviously it can also be invoked when the demolition or discontinuance order relates to what is not an unauthorised construction or use. How these appellate powers are to be exercised will be dealt with when we offer our comments.

12.5. By contrast, the functions of the local planning authorities are of primary importance and much more elaborate. They have (1) to prepare the development plans, both interim and comprehensive, and take all steps that may be necessary in that connection ; (2) to deal with applications for permission to carry out developments—often a most difficult decision involving a consideration of a variety of circumstances ; (3) to assess the development charge that will be payable in case development permission is granted ; (4) to assess the compensation that may be payable for loss or damage suffered in consequence of refusal of or the restrictions imposed on development ; and (5) to take effective steps against unauthorised development by instituting criminal proceedings or by direct action with or without the help of the police.

Preparation of development plans

12.6. The preliminary step to carry out the first of these functions is to prepare an "existing use" map of "every piece of land in the local planning area". Six months are allowed for this but there is provision for extension of time. This is followed by

*This occurred in the first draft of the Model Act as sub-section 2 of section 9. In the revised draft this sub-section has been omitted so that at present there is no provision for empowering local authorities with the functions of a local planning authority. Yet, curiously enough, section 20 of the revised draft reproduces the same section of the original draft which was based on the assumption that local authorities could be local planning authorities.

†This is optional.

a public notice inviting objections if any, within 15 days. The town planning officer is required by the Act to hear the objections and submit a report to the planning authority on the basis of which the latter decides whether the map should be adopted as it is or any modification made. The adoption of the map by the planning authority with or without modification gives finality to it and it then becomes available for inspection by the public at different places specifically named in another public notice. If the planning authority defaults, the land use map is prepared by the Chief Town Planner under orders of government and at the cost of the local planning authority.

12.7. Then come the most important stages of the preparation of the interim development plan and of the comprehensive development plan in consultation with the local authorities falling within the area. For the first, one year's time is allowed and for the second, three, counting from the date when the local planning area was demarcated and the Act put into force, but in either case time may be extended if necessary. The plans should contain as many maps and as much descriptive matter as will make their scope and purpose intelligible. The interim development plan should (a) indicate broadly the manner in which the land within the area should be used; (b) allocate areas for residential, commercial, industrial and agricultural use, or for use as public or semi-public open spaces, parks and playgrounds, or for any other purpose; (c) show the alignments of existing and proposed national highways, arterial and other major roads as well as other lines of communication (railways, airports, canals etc.); and (d) contain zoning regulations about height, size and the ratio of unbuilt land to the total area of the plot. It may also (e) indicate public and semi-public buildings, and (f) incorporate, if it thinks fit, any additional matter that belongs more appropriately to a comprehensive development plan.

12.8. The comprehensive development plan includes all these and a few things more, viz. (a) areas of future development and new housing, (b) matters which may be suggested by the State or the State Board for incorporation into the plan, (c) phasing of the implementation of the programme of development, (d) detailed plans for housing, shopping centres, industrial areas, civic centres etc. in respect of some specific areas, (e) architectural features and standards, and (f) designation of land for compulsory acquisition for various purposes and needs of the different authorities.

12.9. The development plan is then submitted to government and the State Board—the latter for information, and the former for suggesting modifications, if any. After incorporation of the modifications suggested by government, a public notice is issued inviting objections. A period of not less than two months is allowed for such objections which are then heard in the presence of parties by a three-man committee of the planning authority (of which the town-planning officer must be one) and the plan is then finalised with or without modification as the case may be. Apparently it is then submitted to government though the Model Act does not actually mention this step but leaves it to be inferred.* There are consultations between the government and the Board about the plan and fresh directions may issue from the government to the planning authority for preparing or modifying it in a certain way, but ultimately the plan in its final form receives the approval of government and a public notice is issued informing people of the fact that a development plan has been approved and of the places where it may be inspected. The comprehensive development plan, when approved, naturally supersedes the interim plan. The validity of the plan (interim or comprehensive) may be questioned in the High Court only on the ground (a) that it is ultra vires the Act, and (b) that the appropriate procedure has not been followed, but the right is forfeited if

* This omission has been rectified in the revised draft by incorporating a new sub-section [5] to section 23.

such application is not filed within a month. After every ten years, if not earlier, all development plans must be reviewed and, if necessary, revised; they may also be suspended by the State government at any time in case of grave national emergency.

12.10. If the local planning authority is unable or seems unlikely to prepare the development plan within the prescribed time government may ask the Chief Town Planner to do it and the objection hearing will then be done by a committee of the State Board. The cost, as in the case of land use maps, will have to be borne by the local planning authority.

Planning control

12.11. The development plan comes into operation on the date when the approval of government is notified by publication in the official gazette, and from that date all development operations and all uses of land or building must be in accordance with the plan. The only exception is that a ten years' moratorium may be granted, if applied for, to existing non-conforming uses in order to enable them to wind up or adjust themselves to the new pattern of development within the period. But control starts even before the development plan is ready, for from the date a local planning area is constituted and the Act comes into operation all developments, changes of use or institutions of new uses must be on the basis of a written permission from the local planning authority backed by a certificate that the development charge has either been paid or is not leviable. Exemptions from the obligation relate to a few minor types of development more or less akin to what one finds in the English Law though the latter is more elaborate. The planning authority (or the authority, officer, or person to whom it may delegate its powers) may grant permission without reservation, or grant it subject to conditions, or refuse permission; but whatever it does it must have due regard to the provisions of the development plan if already prepared or to its probable provisions if it is not, and it may also take into account any other material considerations which appear to it to be appropriate. In case of refusal or imposition of conditions, reasons must be recorded.

12.12. Against the decision of the planning authority an appeal lies to the State Board, but the right to give a hearing to the aggrieved party belongs statutorily to the Chief Town Planner or his nominee and only his report comes before the Board for passing such order as it may think fit.* The order may be one of dismissal, or of full or partial relief by the grant of permission or the softening of the conditions imposed, or there may be a substitution of new conditions for those originally imposed. The language is neutral and does not say in so many words whether these new conditions may be more onerous than those appealed against. This power of passing the order may be also delegated by the Board to the Chief Town Planner.

Compensation or other reliefs

12.13. Only in three cases is the owner of land entitled to some relief or compensation on account of the restrictions imposed on his property by the development plan. (1) Firstly, when on account of refusal of permission to develop or of the conditions imposed on such development the land becomes "incapable of reasonably beneficial use" the owner may, within three months, serve a notice on the State government asking it to acquire the land, and if the contention is proved the government has either to confirm the notice and order acquisition or direct the planning authority to give permission so that the conditions, if any, will not render it incapable of reasonably beneficial use. If no decision is given within one year acquisition should be deemed to have been

* In the revised draft the Chief Town Planner's right is not statutory but delegated.

ordered. (2) Secondly, when by the proposed re-building of a demolished structure or the improving or altering of an existing structure the probable extent of enlargement is not more than one-tenth of its original cubic content, or when the proposed extension of use does not cover more than one-tenth of the cubic space previously put to such use, or when any construction on agricultural land is intended for carrying out agricultural activities and there is nothing in the development plan against such extension or construction, a refusal of permission entitles the aggrieved party to claim compensation but the compensation is limited to the difference between the present value of the land without such permission and its value with permission granted. (3) Thirdly, when permission already granted has to be revoked in the interest of better planning, compensation equivalent to the abortive expenditure already incurred should be paid. But if the permission has already been utilised and the development carried through it should not be revoked.

12.14. In cases (1) and (2), relief can be claimed only after the remedy of appeal has been exhausted. In cases (2) and (3), the assessment of compensation is made by the town planning officer on whose report the planning authority passes the order. If the aggrieved party is not satisfied, the planning authority has to refer the matter to court for adjudication.

Enforcement of planning control

12.15. (1) Any development without permission or in contravention of the conditions imposed or in contravention of the development plan in force is an offence. Similarly, any continuance of a non-conforming use without permission or beyond the ten-year moratorium that may be allowed is an offence. Both are punishable with heavy fines and subsequent daily breaches are also punishable. Prosecutions for such offences can be launched only by the planning authority or the Board and are compoundable by them. They are triable by magistrates of the first class whose powers of imposing fines are extended by this Act beyond the limits set by the Criminal Procedure Code.

12.16. (2) If any development of the above descriptions has been carried out by anybody and four years have not yet expired since its completion, the planning authority may serve a notice on the owner or the persons responsible for the development to restore the "status quo" within a reasonable time which must not be less than one month from the date of the service of the notice. Within this period the person on whom such notice is served may either apply to the local planning authority for permission or appeal to the Board, and the notice remains suspended pending its disposal. In case an appeal is filed the Chief Town Planner is to give a hearing to the party and the local planning authority and prepare a report on the basis of which the Board passes the necessary order. If the notice is upheld by the Board and is still not complied with by the party, (a) the planning authority may prosecute him, or (b) it may itself demolish the unauthorised construction, restore the "status quo," and secure compliance with the conditions that were imposed—all at the cost of the owner or person responsible for deviating from the development plan or acting without permission. The penalty for disobedience of notice is the same as the penalty for contravening a development plan mentioned in (1) above.

12.17. (3) When a development is being carried out in contravention of the plan but not yet completed, the planning authority may serve a notice to stop work. Whether an application for fresh permission or an appeal for cancelling the notice can at this stage be filed is not specifically mentioned but from some of the later provisions it can be inferred that at least an appeal lies, although the notice is not kept in abeyance

pending its disposal. Continuance of the development work as long as the notice is in force is an offence punishable with heavy fine not only in the first instance but also for every daily breach. The planning authority is also entitled to police help for forcible removal from the land of any person carrying on unauthorised development and for posting guards so that there is no resumption of such work. The cost is realisable from the offending owner as arrears of land revenue.

12.18. (4) There is a fourth category which is described as removal of authorised development or use. The section does not refer to authorised or unauthorised use but merely says that if the planning authority thinks, having regard to the plan already prepared or in contemplation, that a particular use of land should be discontinued, or that conditions should be imposed on its continuance, or that any building or work should be altered or removed, it may serve a notice on the owner to that effect. Within the time limit allowed, the owner may file an appeal to the Board (which as usual is, to be heard by the Chief Town Planner though the final order is to be passed by the Board), but if the notice is not cancelled and the owner suffers damage through depreciation of land values by complying with it he may claim compensation for such damage as well as for reimbursement of the expenses incurred. The quantum of damage is to be assessed by the town planning officer and approved by the local planning authority subject to appeal to the court. If the land becomes incapable of "reasonably beneficial use" he may also ask for acquisition of his land by the government. The section is silent as to whether non-compliance with the notice is punishable in law or whether the planning authority can take recourse to direct action to give effect to it.

Development charge

12.19. All permissions for development are conditional on the payment of a development charge to the planning authority by the person who undertakes or carries out the development. The Union and the State governments and the local authorities are exempted from filing applications and paying development charge, but they have the duty to notify one month ahead of taking up any construction work. The State government may also exempt any particular kind of development from liability to pay development charges. The Model Act lays down the framework for fixing the maximum charges leviable (on area basis) for development, institution of new use or change of use. There may be a different schedule of rates for different local planning areas and even for different parts within the same local planning area, and all such schedules must have the prior sanction of government before being effective. The liability to assessment and the amount assessed is determined by the planning authority on the report by the town planning officer, and if there is an appeal to the Board against the assessment it is decided by the latter on the basis of the report of the Chief Town Planner who alone is entitled under the Act to give a personal hearing to the appellant. A development charge is, after the prior claim of the land revenue is met, the first charge on the land and recoverable as an arrear of land revenue.

12.20. The other two chapters of the Act relate to finance, account, audit of the funds of the local planning authorities, and supplemental and miscellaneous provisions which are mostly matters of procedure and do not raise any question of principle.

12.21. On three points the Model Act of the CRUPO is a distinct improvement on the draft which the Institute had prepared. Instead of applying the Act to the whole State all at once as the Institute had suggested, the Model Act empowers the State government to select and define the areas to which it should first apply and then

gradually to extend it to other areas in course of time. This will enable areas most in need of attention to be tackled first while others not so urgent are later brought within its scope as and when the machinery of control is perfected to shoulder additional responsibilities. Its other advantage will be to make people used to the idea of physical planning, for there will be few grumblers when the worst affected areas are tackled, and once the experiment is successful there, resistance from other areas will lose both in volume and intensity. The example of the Calcutta Improvement Trust which was looked at askance in the beginning and resisted but later welcomed and asked to extend its activities into areas where it had not yet penetrated may be cited as a case in point.

12.22. The second departure, also for the better, is the separation of planning from implementation and setting up a separate and independent body for the first except when a local authority is considered competent enough to discharge the dual functions.*

12.23. Lastly, the draft has gained by its omissions. It leaves the law relating to compulsory acquisition severely alone and is silent about the implementation of that part of the development plan which relates to construction of public buildings and the provision of public utilities because they are really ancillary matters which deserve to be dealt with by separate legislation. Land acquisition is necessary also for purposes other than the successful carrying out of a programme of physical planning, and a separate Act applicable to all cases would be infinitely preferable to a syncopated version of the Land Acquisition Act tagged on to town planning legislation for its special purpose. Plan-making and its implementation also really belong to separate spheres, and one capable of doing the first is not necessarily the most suitable agency for doing the second. The control implicit in physical planning has got two aspects, one negative and the other positive. The negative aspect consists in preventing development (generally by private parties) in a way other than what is envisaged in the plan; the positive aspect consists in carrying out the engineering and other works (e.g. roads, sewers, public housing, schools, hospitals, civic or community centres, parks and playgrounds, Nature Reserves etc.) which must be done by some public authority or agency. The model Act leaves the first i.e. plan enforcement to the planning authority as it is likely to know better than anybody else up to what limit the rigidity of a plan may be relaxed to make it less oppressive without prejudice to its fundamental character and purpose. Implementation of the plan it leaves by implication to some other agency more adequately equipped for the purpose. That agency may be a municipal authority, or an improvement trust or a town development corporation.

12.24. The first criticism of the model Act must relate to the machinery proposed for the purpose. Below the government at the top there is to be a State Planning Board, below which—though the extent of subordination is not very clear—there will be a local planning authority for each local planning area. The State Board is an advisory body with certain residuary executive or appellate jurisdictions. It “must perform such functions and carry out such directions as the state government may assign to it from time to time.” Its advice is not necessary when some major decisions are taken, e.g. (1) when a local planning area is demarcated and the Act put into force, (2) when, under Sec. 18, a local planning authority is asked to prepare a development plan not only for its area but for contiguous areas as well, (3) when the Act is withdrawn from any planning area, (4) when in default of a local planning authority, the land use map and the

* This, as we have already said, has been omitted from the finally revised draft of the Model Act though in several sections it is still assumed to exist.

development plan are directed to be prepared by the Chief Town Planner. The matters in which it is to be consulted are (1) when boundaries of local planning areas are re-distributed and their assets and liabilities divided, (2) when on withdrawal of the Act the assets of the defunct planning authority are to be distributed between the local authority and the government, (3) when the members of a local planning authority have to be selected, (4) when it is to be decided whether planning powers should be entrusted to a local authority, * and (5) when government has to decide whether a draft development plan prepared by a planning authority should be approved or not. Of these, the first two are really the job of an Accountant and hardly involve any question of policy. The third is not unimportant but the opinion can only be required in selecting a minority of the personnel as the majority will be elected by the local bodies or their officers. The fourth is a matter in which the Minister or the secretary of the local self-government department should be more competent to advise and give authoritative opinion. † The fifth alone is a matter of considerable importance, because development plans are not merely the basis of planning but they are *per se* planning. The Board's right to 'guide, direct, assist, and supervise' the work of a local planning authority 'shall be as entrusted to it under the Act' but except the general wording of Sec. 19(2)(b)(viii) which requires the plan to include such matters as the Board may direct or of Sec. 69(1) which says that the planning authority should carry out such directions as may be issued from time to time by the Board, there is no specific provision indicating at what stage in the long-drawn programme of a planning authority's activities its advice or direction may be sought or given. In fact the scheme of the Act is to establish a direct and immediate relation between a local planning authority and the government. When a local planning authority defaults in the preparation of a land use map or a development plan it is not the Board but the government which gets it done by its Chief Town Planner. The function of the Board in either case is to duplicate the role of the local planning authority at a higher level,—i.e. pronounce on the correctness of the map on the report it receives from the Chief Town Planner, or submit a report to government on the merits of the development plan after hearing objections through a committee appointed by it. In the exercise of its appellate functions its dependence on the Chief Town Planner is even more complete. Whether the appeal is against an order refusing planning permission or for demolition or discontinuance of an unauthorised development or non-conforming use or an assessment of development charge it is the Chief Town Planner or his nominee to whom the aggrieved party must produce his evidence and it is only on the basis of their report that the Board has to pass an order. This ignores the healthy principle, known to all judicial or quasi-judicial tribunals, that by listening to evidence in person, observing the demeanour of witnesses, and clarifying obscurities through questions and cross questions, one is in a better position to come to a correct finding or from a proper decision than he would be able to do by relying on evidence recorded at second hand. Without any fresh materials before it and without the advantage of personally seeing and hearing objectors the Board can hardly do anything but rubber-stamp the Chief Town Planner's report. In the case of the first kind of appeal (viz. against refusal of planning permission) even this fiction is quietly given the go-by by a provision enabling the Board to abdicate its function in favour of the Chief Town Planner.

12.25. The last function of the Board is mainly concerned with research : collecting statistics, writing monographs and bulletins on methodology, and preparing reports on

* This has been omitted from the latest revised draft.

† This criticism has now become redundant.

different aspects of planning—all very admirable objects but unfortunately beyond the competence of a Board which has not got the necessary apparatus for conducting it. If there has to be a regular establishment for carrying on such research work—the Act, by the way, provides no staff for the Board—it would be much simpler to place it directly under the appropriate department of government where, provided the man at the top of the governmental hierarchy really knows his job, it will work under continuous expert guidance which is impossible under a Board whose meetings are infrequent and whose members have presumably other work to attend to. Experience of the work of several ad hoc boards and committees does not justify any optimism in their ability to produce results which can only be achieved by hard, continuous and concentrated thinking.

12.26. In fact, the Board is merely a facade behind which the work will be done by the Chief Town Planner who is the pivot round which the whole machinery turns. He is the ex-officio member-secretary of the Board. He will provide out of his own establishment whatever staff assistance the Board will need. All that has been said before about the preparation of land use maps and development plans, the hearing of objections and appeals, the absolute dependence of the Board upon the report of the Chief Town Planner in all controversial matters etc. are sufficient to prove the latter's complete domination over the working of the Board. If anything more is needed, it is supplied by the relation between the Government and the Board. The Board is subordinate to the government and the Chief Town Planner is the chief technical expert of the government responsible for advising the Minister of Town Planning in all matters that come up to him for final decision. What the Chief Town Planner fails to do at the Board as its member-secretary he can easily get done at the governmental level if he has the confidence of the Minister. It is doubtful whether a Board of this description will attract men of the right sort—geographers, economists, social scientists, architects, town planners, engineers, administrators, public health experts etc. whose presence alone will make such a top level Board worth having. If not, we may follow the U. K. model of not having a Board at all but strengthen the headquarters organisation of the government so as to act as the final sieve through which the matter reaches the Minister. To have an anaemic Board which has the trappings but not the reality of power will be an ornamental appendage to the bureaucratic machinery—a sort of fifth wheel to the coach—which will merely cause delay without making any significant contribution to planning thought or practice.

12.27. But possibly it is expected that despite the general wording of the Act, the Board will consist—as the original draft of the Institute had suggested—of the Minister in charge of Town Planning as the chairman and the departmental heads as members, with a leaven of three non-official members so as to give it a composite character. The explanatory note to the Model Act in its revised form shows that this is still the dominating idea of its sponsors. This will render superfluous many of the provisions of the Act relating to appointments and dismissals and emoluments except in so far as they apply to the three non-official members. But a Board constituted in this manner is open to objection both on principle and on practical grounds. To make a Minister chairman of a Board which is subordinate to his department is not only slightly illogical but may, in case he does agree with the majority opinion of the Board, confront him later with the invidious choice between over-riding a decision passed under his chairmanship, or accepting a decision passed against his better judgment. This may be called a theoretical objection, for the possibility of senior government officers maintaining a stubborn opposition to a particular proposal on which a Minister's heart is set or his mind made up may be rare. It is the practical objections to this composition of the Board which seems to us

to be insuperable. The heads of departments are all busy officers tied down to their own heavy duties which are not merely of a routine character, for on them devolves the duty of studying the requirements of the State and suggesting policies to meet the needs of a fast growing population in an under-developed economy. They are, most of them, touring officers moving not merely within the State but also outside it, and it will be very difficult to get them all together at a meeting at a particular time. Although experts in their own line, they are hardly likely to have any specialist knowledge of town planning or much time to spare from their heavy routine duties to make a study of it afresh. It is difficult to imagine them with their eyes glued on maps, plans and descriptive texts with a plethora of statistics, mulling over development plans which they are hardly interested in and which they would therefore hardly care to scrutinise in detail except in so far as they affect the working of their own departments. In spite of the wide ramification of governmental activity under the current five year plans, the vast bulk of development in a mixed economy will still be in the private sector in which the interest of the departments can at best be paternal and indirect. Even in respect of governmental constructions the co-ordination expected from trying to bring all the departmental heads together into the Board will hardly work because it may be impossible to make them meet and evolve a common pattern of development. The probability should not be ignored that unless previously briefed, the departmental Director may fail to make his Secretary or Minister agree to the points he was forced or persuaded to concede at a meeting of the Board. Much better co-ordination can probably be achieved if the persons responsible for planning hold separate discussions with each departmental head and try to evolve a pattern which achieves the maximum amount of agreement, any marginal differences being referred to the Cabinet which is the ultimate decision-making authority.

12.28. The composition of the local planning authority, as originally contemplated, was unwieldy and unworkable because everyone of the numerous local authorities within the local planning area was entitled to be represented by one elected member and its chief executive officer. This number has now been rightly cut down to five though it is not clear how the selection is to be made. The local planning authorities are the primary agencies in the framing and enforcement of plan and almost everything will depend upon how they are constituted and in what manner they utilise their powers. The stages suggested for the framing of a plan omit some important particulars and the time allowed is too short. Considerable delay may be caused by the absence of basic maps on which the entries are to be made or shown by colour or symbol. The collection of data about current land use is not so simple as it is surmised, for there are ambiguous uses which it may be difficult to fit into any particular category. When the area is large it will require an army of trained men to compile the data as Sir Dudley Stamp found when he had started his first land utilisation survey in England. A congested area in the heart of Calcutta whose heterogeneous admixture of uses was surveyed some years back by the Calcutta Improvement Trust with the help of four of its trained surveyors took nearly six months because of its high density and the extremely complex character of the uses to which the lands and buildings were being put. It is not clear why the fact finding task of recording existing use has to be re-checked by inviting objections. If the idea is that the land use map should have the presumption of correctness attaching now to a cadastral survey map because all future decisions on planning applications will depend on whether the proposed development is or is not a departure from existing use and that it is necessary to protect it from deliberate or careless mistake, 15 day's time to file objections after publication in one local paper seems all too short, particularly as the maps can only be inspected at stated places but

not purchased. The Act does not mention anywhere that either the land use map or the development plan will be a saleable document which persons interested may purchase in order to be able to inspect them at their leisure. The steps suggested in the Act for giving proper publicity to the land use map as well as to the development plans (interim or comprehensive) and enabling persons interested to file objections seem to be inadequate. If the area of a local planning authority is large or if it contains congested urban areas which the development plan is likely to alter drastically or if zoning is fairly rigidly done (as a development plan should do if it is to be of any use), the planning authority will be snowed under an avalanche of objections whose volume may baffle any ordinary local planning authority.

12.29. The finance of planning authorities is to be derived from (1) grants, loans and advances from the State government, (2) development charges, and (3) any other source. We may disregard "any other source" which is vague and included probably to regularise any possible windfall receipts. Loans and advances are to be repaid and are therefore not an independent source of income. They can be useful only in those kinds of positive planning and their implementation where the loan is used for a productive purpose, as when a New Town is established expecting to recover all its expenditure from sale or lease of land, or utility services (houses, water supply, electricity etc.) are provided with the expectation of fixing the rents or charges at a rate which is sufficient not merely for the cost of management and maintenance but also for the amortisation of the loan. There remain grants and development charges of which much is expected from the second, but even on going through all the arguments advanced in its favour we are unable to agree that it will be a legal exaction unless it is realised as a tax. The State's power to impose a restriction on the use of property in the interest of general public welfare which, we have elsewhere said, is perfectly valid and constitutional does not give to the State the right to the property itself. The property, however restricted its use, still belongs to the owner and the right to it is a fundamental right guaranteed by the Constitution. This being so, there can only be two bases of a claim for payment by the State, viz. by way of taxation or by way of "quid pro quo". The second alternative does not apply for the State is not the owner of the land and by permitting its use in a particular manner (e.g. by allowing construction or a material change of use) it is not parting with any of its own rights for which it can demand payment by way of "quid pro quo". If the proposed development is in conformity with the plan, the applicant is not asking for any extra advantage beyond what he is entitled to in carrying out development on his land, and no question of "quid pro quo" arises. If it is non-conforming and the charge is levied in exchange for a concession that the applicant was not normally entitled to, the plan becomes arbitrary as its features are liable to be rescinded for a price and the restrictions cease to be reasonable. It cannot even be said that the planning authority could have placed a ban on all developments and that by lifting the ban in any particular case it is offering the "quid pro quo" that is wanted to justify the charge, for such an omnibus ban also would not be a reasonable restriction as contemplated in the Constitution. The analogy with betterment fee is misleading for such fee is leviable when, on an improvement scheme being carried out by a public authority, lands appreciate in value so that there is a "quid pro quo" which has to be paid for. Neither an interim nor a comprehensive development plan *ipso facto* leads to an appreciation of land values though it is bound to lead to general social welfare in the end. In fact, some lands may depreciate in value if they are placed in less remunerative zones or if development permission is hedged in with conditions which reduce their income-yielding capacity. It is said that high land values within a city or on its peripheries, are due to social and economic

progress to which the contribution of the individual owner may be minimal so that society is justified in taking a part of it, when the owner wants to take advantage of such high values by developing it or building on it. Put that way, it is an admission that it is a tax, not a charge or payment for something which the State has given in exchange. The State of course has a right to impose a tax on lands and buildings and also on the manner in which such lands and buildings are used, and a development tax would from that point of view be constitutionally unexceptionable. Whether it would be wise or not to impose this tax on all developments is a different question, depending primarily upon the rate of the tax and the number of exceptions allowed. If the owner has to pay a heavy tax for planning permission and another heavy fee to the municipality or Corporation for sanctioning the plan of the building, the cumulative effect of too much taxation may impede economic progress. If the development tax becomes the principal source of the planning authority's income, the temptation to drag all kinds of development, howsoever trivial, into the net would be irresistible.

12.30. Other criticisms of some of the detailed provisions of the Model Act will be found in Appendix II which accepts the framework of the Act and the machinery. More fundamental objections are raised in Chapter XVIII when giving reasons for some of our recommendations.

CHAPTER XIII

Plan or no plan

13.1. Planning, Lady Barbara Wootton says, is the conscious and deliberate choice of priorities by some public authority.* The choice of priorities is also the basis of economics which "studies human behaviour as a relation between ends and scarce means having alternative uses."† If the means were in plentiful supply there would have been no need either to plan or to study the economics of demand and supply. Since they are not and since all means are capable of alternative uses, each act which involves the use of some scarce means for the achievement of one end implies simultaneously a relinquishment of their use for the achievement of another; and if the ends are capable of being distinguished in order of importance, the question of choice assumes primary significance.** There is here a tacit assumption that the importance of different types of use or consumption is capable of being precisely determined and arranged in order of preference and that there are commonly accepted yardsticks by which to measure the degree of such importance. This is by no means the case, but there may be less difference of opinion if it is stated broadly that among alternative uses that which leads, on balance, to the maximum social welfare is to be preferred to one where such welfare is less. What leads to maximum welfare is, however, a matter on which pundits differ.

13.2. There are two ways in one or other of which the question of priorities is generally settled. The first is the settlement through the mechanism of the market—"the ballot box of the market" as Mises called it—in which innumerable individual buyers and sellers, supposed to be freely competing with one another and consulting their personal preferences, reach an equilibrium whose ultimate effect is to ensure the maximum of economic satisfaction and consequently of social good. The other is the conscious and deliberate determination by a superior ruling authority which may be either the state or an 'ad hoc' body or a local authority to which power is specially delegated. The first is supposed to leave every individual free to follow his own inclinations. The second, translated into terms of physical planning, involves an encroachment on his personal freedom to do what he likes with his land. By making a deliberate discrimination between the particular rights, needs and desires of different individuals or groups on the basis of a scale of values in the determination of which the individuals and groups have no deciding voice, it introduces an element of coercion which, according to the definition adopted by Prof. F.A. Hayek, is the antithesis of liberty.

13.3. Physical planning, like all economic planning, can therefore be attacked on two grounds: first, as robbing an individual or group of liberty which has come to be regarded as one of the most precious fruits of culture and progress and an almost indispensable condition of happiness; and secondly, as an inefficient machinery even for the achievement of the purpose which it deliberately sets out to achieve. Professor Hayek, one of the most incisive and persistent critics of planned economy, chooses to base his attack on the second ground. In his recently published book "The Constitution of Liberty", acknowledged as the most significant modern re-statement of liberal (?) democratic thought, he observes: "It is not because we like to be able to do particular things, not because we regard any particular freedom as essential to our happiness, that

* Barbara Wootton, "Freedom under Planning", p. 10

† Lionel Robbins, "The Nature and Significance of Economic Science", p. 16 and 18.

we have a claim to freedom. The instinct that makes us revolt against any physical restraint, though a helpful ally, is not always a safe guide for justifying or de-limiting freedom. What is important is not what freedom I personally would like to exercise but what freedom some persons may need in order to do things beneficial to society.** Benefit to society is thus, by common consent, the criterion on which the alternative systems are to be judged.

Freedom as an absolute right

13.4. But since with some people the inviolability of liberty is a value judgement without the need of proof it is necessary to examine a little closely whether it is really inviolable in all spheres and under all circumstances. It is at once clear that nobody, not even its strongest advocates, has argued for complete and unfettered freedom for man in society, for such freedom is bound to be affected in various complex ways by nearly every kind of organised social activity. Freedom for everybody to do what he wants is not necessarily the sole purpose of organised society; there may be other admirable social ends which conflict with or demand a limitation upon freedom. It is a recognition of this fact that has led to the idea of reasonable restrictions being woven so firmly into the texture of our Constitution when dealing with fundamental rights and freedoms. The sphere where restriction of freedom is justified and where it is not was clearly brought out by Bertrand Russell in the first Reith lectures where he distinguished between liberty which led to chaos and control which led to stagnation. A healthy and progressive society requires both central control and individual or group initiative. Where the line should be drawn may be a matter of very delicate judgement but speaking very generally it may be said that control should be applied to curb the predatory instincts while liberty should have full play in encouraging the creative impulses. The essential function of control by governments should be to ensure security, justice and conservation. The significance of the first (security) is more or less political and administrative and of the second, both political and economic. The significance of the third (i. e. conservation) is, however, primarily economic and it has a direct bearing on the question of the utilisation of the land resources. Economic justice requires a much greater amount of governmental control for ensuring a more even distribution of the opportunities of work and prevention of exploitation, while conservation means preservation of natural resources and other primary raw materials from wasteful exploitation and of the soil from exhaustion and erosion through thoughtless over-use.†

13.5. Even in the wider sphere of planned economy of which the planning of land use is almost** a part, Lady Wootton has shown convincingly that it need not necessarily destroy those liberties which really matter to the individual or whose deprivation he would miss. His civil liberty consisting of various legal and judicial rights summed up under the title "The Rule of Law" remains unaffected; so is his political liberty or the right to choose, change, or influence the government in power. At least in neither respect need his position be any worse than what it is at present. In the matter of cultural liberty which includes varied forms of action and expression in which free speech and religious freedom rank high but freedom to pursue literature, arts, science, sports and recreations etc. rank scarcely less, a planned use of land may, in fact, enhance its area or scope by providing space and creating conditions which may not be plentiful in a completely price-controlled economy. Economic freedom is primarily concerned with

*F. A. Hayek, "The Constitution of Liberty", p. 32.

†Bertrand Russell, "Authority and the Individual", Chapter V.

**We say 'almost' because there are types of land use recommended by the planners which may not be admitted by economists to be strictly economic in character.

the getting and spending of one's income and with the use and ownership of property, and it cannot be gainsaid that part of such freedom will have to be surrendered under a system of planned economy. The property interest of the individual, it has been said in slightly question-begging phraseology, consists of 'rights' to keep others off his land, 'powers' to transfer his land to others, and 'privileges' to use his land as he likes.** It is the land owner's 'privileges' to use his land as he likes that are most often affected or limited by the planning measures while his other rights and powers remain intact. If the inviolability of liberty as a value judgement is discarded the only test that remains is whether such curtailment (and how much of it) is necessary for overall social welfare.

Freedom as a condition of social welfare

13.6. As already observed, Prof. Hayek who would not have freedom at the cost of social welfare thinks that freedom is the prerequisite of such welfare. He would not mind such minimum interference from the state as is necessary to clear the obstacles that impede the free play of the mechanism of the market but is of opinion that the pricing system, working through a freely competitive market, is the best known method of ensuring the maximum common good, any attempt to substitute which by central control is bound to be disastrous to the economy and demoralising to the people. Since no human mind can comprehend all the knowledge which guides the action of society there is a need for an impersonal mechanism, not dependent on individual human judgment, to co-ordinate the individual efforts. "It is his concern with the impersonal processes of society in which more knowledge is utilised than any one individual or organised group can possess that puts the economists (i.e. of Hayek's way of thinking) in constant opposition to the ambitions of other specialists who demand powers of control because they feel that their particular knowledge is not yet given sufficient consideration."*

13.7. (A) Town and Country planning. — Holding this view it is surprising how large a concession Hayek has to make to the advocates of control when dealing with urban land not merely in the matter of building regulations (to which we shall come later) but on the broader question of the manner of land use. The principle of private property which raises comparatively few problems so far as movable things are concerned does raise exceedingly difficult questions in respect of property in land. "The effect which the use of any one piece of land often has on neighbouring land clearly makes it undesirable to give the owner unlimited power to use or abuse his property as he likes".† On account of the close contiguity of city life it is not true except to a limited extent that what an owner does affects only him and nobody else. In fact, such action necessarily affects the usefulness of all other lands in close proximity while the usefulness of his own land will also depend in part on what his immediate neighbours do and in part on what is done on communally owned land such as that used for streets and public amenities which are so essential to city life. The price mechanism which does not usually take this into account is unable to bring about an efficient co-ordination of individual endeavours. The general formulas and assumptions of private property or freedom of contract do not therefore provide an immediate answer to these complex problems raised by the mutual interaction of property values in cities. But if a price does not reflect all the effects of the use of a property made by the individual or by a public body it is a defective index of value and the defect cannot be cured unless the owners are so placed as to enable them to take into account all, or at least the more important, effects of their action on one another's property. Without special arrangements this condition (i.e. one in which the private owner is able to see the total effect of his act) will hardly exist, and there is a

** Local Planning Administration published by the International City Managers' Association, Chicago, 3rd Edn., Ch. II.

*F.A. Hayek, "The Constitution of Liberty", 1960, p.4.

† Hayek — Op. cit., P. 229.

strong case for taking whatever practical measure is possible to enable the owners to do so. How this is to be done is not clearly stated but sufficient hints are dropped that it may involve the surrender by the owner of a part of his property rights to a superior authority to whom may also be delegated the right to determine the character of the district to be developed.* That the geographical jurisdiction of this superior authority should be much larger than the area of the particular plot involved in the transaction follows as a corollary from the need of judging the total effect of the transaction on the particular plot and its neighbours. There will have to be a framework of more or less detailed rules to which the owner should conform. What the owner is left with is the residuary or 'inferior' right, the right, that is, to use or dispose of his property as he thinks best subject to the general control of the superior authority so that he is not able to gain at somebody else's expense.

13.8 Such town planning, Hayek says, operates largely through its effect on the market and not in supersession of it. The laying down of general conditions to which all developments must conform but which leave the decision to the individual owner so long as these conditions are not violated is only a part of the effort to make the market mechanism more effective. The issue is therefore not whether there ought or ought not to be town planning but whether the measures to be used are to supplement and assist the market or to supersede it and put central direction in its place. What is particularly abhorrent to him is the kind of town planning, supposed to be favoured by architects and engineers, which dispenses with the price mechanism altogether and replaces it by central direction, because even where it is not aimed at tying future developments to a pre-conceived plan which prescribes the use of every piece of land, such central direction has a tendency to lead to this result by making the market mechanism increasingly inoperative.

13.9 It is obvious that in spite of clothing his argument in terms of economic value and market mechanism Hayek has practically accepted the case for town planning. The minor reservations he makes are merely attempts to salve a 'laissez faire' conscience when so much ground has to be yielded to the inexorable logic of facts. To the uncontrolled operation of the market as a factor in the evolution of cities his support reads very much like an apologia.† His assumption that it is merely lack of knowledge on the part of the owner of the total effect of his act which prevents him from taking the right decision is not only naive but contrary to facts and experience. His preference for a private developer as a possible alternative authority for exercising the functions of co-ordination and control is also most surprising. Whether conditions are different in U.S.A. one does not know but under conditions prevailing in this country, to entrust development control of urban areas to private estate developers would be like 'handing over the baby to the witch' as the Bengali saying goes. Developers with a transient interest to acquire, develop and dispose of their properties as quickly and as profitably

*"Some of the aims of planning could be achieved by a division of the contents of the property rights in such a way that certain decisions would rest with the holder of the superior right, i.e. with some corporation representing the whole district or region." Hayek, *Op. cit.*, p. 352.

†"It is probable that even if there had been no authority with coercive powers, the superior advantage of larger units would have led to the development of new legal institutions - some division of the right of control between the holders of superior right "to determine the character of a large district to be developed", and the owners of inferior rights to the use of smaller units who, within the framework determined by the former, will be free to decide on particular issues. In many respects the functions which the organised municipal corporations are learning to exercise correspond to those of such superior power." Hayek, *Op. cit.*, p.341.

†"We must not overlook the fact that the market has, on the whole, guided the evolution of cities more successfully, though imperfectly, than is commonly realised."

as possible are not likely to duplicate the role of the great landed aristocracy of 19th century England who took a pride in developing their domain with loving care because it satisfied both their aesthetic sense and their aristocratic vanity besides yielding a good return on their investment.

13.10. Having regard to the large amount of control of urban land use which Hayek has accepted it is difficult to understand why he is so hard on the English Town and Country Planning Act of 1947. Writing in 1960, he should have considered the law as it stood at that time, but his severest condemnations are reserved for the repealed provisions relating to expropriation of development rights and valuation at the time of compulsory acquisition which looks very much like flogging a dead horse. On the more pertinent question as to whether the provisions of the Act as it stands after three or four successive repeals are necessary and desirable it is difficult to make out what his views are. He sums up the present position in England in the following words :— "What remains is a situation in which all development of land is by permission of the planning authority, which permission, however, is presumed to be obtainable if the development is not contrary to an announced overall plan. The individual owner thus again has an interest in putting his land to better use. The whole experiment might be regarded as a curious episode and an illustration of the follies of ill-considered legislation. * * * * The abortive British experiment has not attracted wider attention because, while the law was in force, the mechanism which its administration required never came into full operation." One would have liked his clear verdict on the current town and country planning law at least in connection with urban development, but he does not give it.

13.11 Building regulations do not, according to him, raise any question of principle. He regards them as unquestionably desirable both as an insurance against risk and as a means of enforcing certain structural standards which should be regarded as part of the unwritten clauses of all building contracts between the builder and his contractor. The risk to be avoided is the risk not merely to the inmates but to neighbours, customers, clients and all other persons who visit the premises or have to do it in the course of transaction of business. They relate to structural soundness, fire hazards, health conditions, accessibility and all other matters which make life in cities bearable. A 'performance code' is preferred to a 'specification code' in spite of the risk of conferring undefined powers on the authority on whom would rest the decision as to whether the building satisfies the requisite test, because such a code would encourage new experiment and research which a strict adherence to a rigid 'specification code' would not. His remedy against arbitrary decision is a panel of experts with an ultimate appeal to courts.

13.12. Though town planning as such is not objected to, Hayek would have no truck with planning on a regional or national scale, even when admitting that there will always be some factors in planning which only larger units can consider. The reasons for objection are first, that as the area of unified planning is widened, particular knowledge of local circumstances will necessarily be less effectively used ; and secondly, that a nationwide planning organisation will eliminate competition. He does not explain how the factors which even according to him only larger units can consider will be brought to bear on the decision-making process but observes by way of excuse that "there is probably no perfect answer to the real difficulties which the complexity of the problem creates". Similar vagueness runs through his discussion of the location of industries which is an important element of town and country planning, though on this point at least one was entitled to expect much fuller treatment from so eminent an economist as the matter is largely economic in character and as the present

irrational position brought about by unregulated competition and haphazard growth of industrial settlements is the target of attack by most physical planners. That many decisions about location taken in the past were unwise he admits. All that is said in extenuation is that with the knowledge then available a different decision could not be expected and that there is no guarantee that central planning would have guided development more successfully or even as successfully as the market did. This is only a reaffirmation of faith, not a reasoned statement justifying a case. The relevant question is not what a central authority would have done in the past but whether to-day, with the resources of information at its command and its developed sense of responsibility for national well-being, its decision about location will be the same as that of a private industrialist who is guided by the market. That would depend upon whether the central authority and the industrialist start with the same premises and want to reach the same goal—which is very doubtful. The horizon of the one is limited by his desire to make as good a success of his industry as possible in the narrower sense of obtaining the largest amount of profit regardless of its effect on the general economy of the state and its social life. The outlook of the other is national well being of which economic progress is only a part, though an important and integral part. Admiration is expressed by Hayek at "how much the market does accomplish by making individuals (i.e. industrialists) take into account those facts which they do not know directly but which are merely reflected in the prices".* This can only mean that largely without knowing what they are doing the industrialists are led to make a correct choice of location by consumer reaction to the price fixed on the basis of their cost of production in a competitive market. The connection is not obvious. The consumer does not bother about the conditions of production or about the factory site; all he cares for is the quality of the product and the cheapness of price, and it is doubtful if he gets even this for meretricious goods are passed off in these days of highly commercialised industry because profits may often be secured more surely by advertisement than by improved workmanship.† As regards cost the site of the factory is important only through its relative accessibility from the source of supply of raw materials and labour and from the market. Hayek has himself said in the same chapter how labour prefers staying in slum conditions because of its cheapness so that there is no guarantee that the price to be paid for labour will stimulate a movement away from slums or congested urban areas. High rents or land values may be a deterrent but if there are other compensating advantages in the form of external economies, the industrialist may prefer to stay put. Even the authority (A. Losch) quoted in support of the theory that the market forces are the best available determinants of location says no more than this that "the free market mechanism works much more to the common good than is generally suspected, though with certain exceptions".

13.13. The only items of country planning which Hayek would agree to is preservation of places of natural beauty, places providing amenities and opportunities for recreation, historical sites, and places of scientific interest. Here the price mechanism would obviously not apply and may in fact act adversely to national interest. Many places of natural beauty have to be zealously guarded against speculative builders and caravan campers whose profit-inspired activities could easily spoil some of the best sites in the countryside. "The kinds of services that such amenities render to the public at large (which often enable the individual beneficiary to derive advantages for which

*It is noticeable that only in the previous sentence the author had said that this was a problem "wherein the price mechanism operates only imperfectly and does not take into account many things we would like to see taken into account". Hayek. *Op. cit.* P. 358.

†Bertrand Russel — "Authority and the Individual", P. 56.

he cannot be charged a price) and the size of the tracts of land usually required make this an appropriate field for collective effort".*

13.14 (B) Rent-control, housing, slums.—Hayek objects to rent control because it perpetuates housing shortage by discouraging investment in new buildings and in maintenance of old ones. It weakens respect for property and the sense of individual responsibility, arms administrators with arbitrary powers over the movement of men, and prevents redistribution of people between districts and types of dwellings which could have been brought about by the device of manipulating rent according to the scale of demand. †

13.15. The result of public housing too may be as bad, according to Hayek, unless very carefully limited in scope and method. These houses should be strictly limited to the poorer classes; they must not be both cheaper and substantially better than the houses they had before as "otherwise the people thus assisted would be better housed than those immediately above them in the economic ladder."** It would then be difficult to resist pressure from the category next above in the economic ladder for inclusion or to stem the in-coming tide from rural areas. Public house-building is less economical because of absence of competition. If the supply does not meet the demand in full there is a risk of nepotism; if it does, people become dependent upon government and lose their independence which is politically undesirable, especially if such persons constitute a very large part of the population. "If as a result of pressure, practically the whole of the housing of a city is regarded as public service and paid out of public fund, it will mean that not only will the people be forced to spend more on housing than they are willing to do but that their personal liberty will be greatly threatened." ††

13.16. On slums Hayek's views cannot but be regarded as reactionary for it almost amounts to saying that things should be left to take their own course through the operation of the market without interference from will-meaning but short-sighted public authorities. This argument he develops in the following manner. Slums are those large buildings in the central city core (the blighted areas) in an advanced stage of dilapidation which have been deserted by the owners but allowed to remain as standing structures because the extreme density of slum occupation yields a sufficiently high total income from rent though the burden on each slum family is not high.*† The slum dweller (generally an industrial worker who has migrated from the village) prefers this squalid condition to better houses elsewhere because of the cheapness of the rent and proximity to his urban work place where his income is much higher than it would have been in the village he has left behind. The land itself is so valuable that once the slum is

* Hayek, *Op. cit.*, p. 375

† This is not correct. Arbitrary power stems from requisitioning powers, not rent restriction powers. The free movement of families from one type of dwelling to another according to their size and need is only a dream under conditions of inequality of income and acute shortage of houses. Rent restriction is only a stop-gap arrangement till the supply rises to meet the demand.

** But if they are not better what is the point in building them? If not cheaper for whose benefit are they built?

†† In our opinion Hayek has got the wrong end of the stick. Inviting tenders makes it competitive. If the demand is fully met, the apprehension about loss of independence will be unfounded. The tenant of a government or local authority housing has two strings to his bow—as a tenant and as a voter. He will regard housing as a right and not as a favour, and his demands for services and amenities may be peremptory in spite of the moderate rent he pays. Many tenants of publicly provided houses at moderate rent think they have a right to what they have got and demand larger privileges.

*† This is not the manner in which slums in Calcutta have grown.

cleared it would be lost to housing as industry and commerce would at once compete for it and grab it for their use. If these slums are demolished the measure intended to benefit the slum dweller would actually harm him for he would lose the twin advantages of proximity to worksite and cheapness of rent. * Moreover, if better houses are built and offered at a cheap rent it will attract large-scale immigration from the countryside and stimulate the growth of the city beyond its optimum limit. A class dependent on the community for the provision of better housing which they are "presumed to need" will be created and the authorities will have to decide how much influx should be allowed and who should be admitted to the privilege of such subsidised housing. "The solution of the problem would be either to let the economic deterrents act or to control directly the influx of population; those who believe in liberty will regard the former as the lesser evil. **** The solution would be delayed if we subsidise people to move from where their productivity is still greater than the cost of living to places where it will be less, or if we prevent from moving those who believe that by doing so they can improve their prospects at the price of living in conditions which to us seems deplorable." †

13.17. So in the blessed name of 'liberty' we should allow slums to remain till in the long run poverty is eliminated and there is a general rise in income. The existence of two Nations within the same state was never more clearly illustrated than in this attitude which contrasts the fastidiousness of 'us' which dislikes and deplores squalor and presumes a need for better conditions for ordinary people with the cheerful indifference with which 'they' would accept such conditions, provided it allows them a *pieu a terre* in the city and gives them an increased income. That poverty is at the root of the problem is only partially true. It is poverty in the congested city where living is costly and space limited which is at the root of the trouble. ** If by spatial redistribution congestion can be eliminated without affecting economic productivity, slums may go even if incomes do not rise appreciably. To wait till poverty disappears through the long run effect of economic progress would [merely add point to the famous saying of Keynes (which has now become almost a cliché) that "in the long run we are all dead."

13.18. (C) Conservation of agriculture and national resources.—Hayek is an out and out anti-conservationist as regards agricultural land. Although on account of technological improvements fewer men cultivating a smaller quantity of land would be able to supply all the food requirements of U. S. A., a mistaken notion about the maintenance of a proper balance between agriculture and industry has led to more men being engaged in it with the result that the less productive lands have not gone out of cultivation but are kept under the plough by adopting expensive methods to save them from deterioration. The increased marginal cost of production has to face an inelastic and possibly declining demand for primary foodstuffs because a rising standard of living generally replaces cereals and starchy foods by high protein and processed food like meat and milk products. The combination of an increased food supply and decreased demand was bound to be disastrous to agricultural prices, but powerful agricultural interests persuaded governments to maintain agriculture in its present state by subsidy and price support so that the ordinary market forces cannot operate. If they could, there would have been an initial period of rapid fall in price attended with some distress to agriculturists, but it

* Because the new houses, howsoever subsidised, cannot compete in rent with structures built a century ago when costs were cheap and sanitary arrangements rudimentary.

† Hayek—Op. cit., pp. 348-49. As against this, see the comments of J.B. Cullingworth in 'Housing Needs and Planning Policy' (1960), P. 167-68.

** Hayek himself has said that a level of poverty which is still bearable in the country is scarcely tolerable in the city and produces outward signs of squalor which are shocking.

would have stimulated a drift of men from agriculture to other pursuits, eliminated wasteful cultivation, and by limiting cultivation only to the economically productive margin and by an internal structural reorganisation which would lay stress on preferred food (meat and dairy products) rather than on cereals, would have made it possible for a new equilibrium to be reached. U. S. A, would then get all the food it really needed for its consumption without producing a large surplus which in now a menace to the world. There was no point in reviving exhausted land by putting in fertilisers for recuperation whose cost was greater than the value of the difference in yield. The central authority's function in relation to agriculture should be (a) to improve the legal institutions about land tenure, prevent fragmentation, ensure an economical size of units etc. in order to make the market mechanism more effective; and (b) to collect and disseminate information about market statistics and improved methods.

13.19. The conditions of an affluent society with a continued agricultural surplus are so different from ours where there is a chronic food deficit that it will serve no useful purpose to discuss in greater detail the steps and measures suggested above. Here the case for control and conservation of agricultural land stands on much firmer ground as we shall see later.

13.20. Hayek's unorthodox views about natural resources and minerals can hardly be accepted. He admits that most consumption of irreplaceable resources rests on an act of faith, namely, that by the time the resources are exhausted something else would turn up. It is an attitude which one may approve or disapprove but not disprove. But when he goes on to say that if the private owner is allowed to function freely the market will take care whether a particular stock of minerals should be exploited or conserved he is on much more controversial ground. According to him, "if the owner can get a higher return by selling to those who wanted to conserve he will do so. There will normally exist a potential sale price of the resources which will reflect opinion about all the factors likely to affect its future value, and decision based on the comparison of its value as a saleable asset with what it would bring if exploited now will probably take into account more of all the relevant knowledge than could any decision of a central authority."* This means, if we have rightly understood it, that different people competing with one another and offering prices, some for immediate exploitation and others for exploitation at a future date, will enable the owner to decide whether the mineral deposit is more valuable as a present asset or as a future asset and this decision, based as it is on the diffused knowledge of several developers or would-be developers who make it their business to know the market, is more likely to be a correct guide than the decision of a central authority. But is not there a great deal of fallacy in this type of reasoning? Is the timing of the act of exploitation ever the subject matter of competition? People competing with one another may offer prices for the product i.e. the coal or iron ore that has been dug up or will be dug up in the immediate future in which case no question of postponement of exploitation arises. Or, they may offer prices for a mining lease i.e. for the right to exploit the mines; but if they do they reserve the right to exploit the mines whenever they like. The offers are not made, some on the basis that they would exploit the mines immediately and some on the basis that the exploitation will be made 20, 50 or 500 years hence so as to enable the owner to find their relative value as present or future assets and the relative urgency of present or future exploitation. In fact, all offers are intended for immediate use, for since the stock does not increase with age it would be foolish to pay good money as mine rent and do nothing. The only cause of postponement may be the expectation of a rise in prices in future, but hardly anybody will look beyond the near future or to periods beyond the normal span of one's life. The market for

* F. A. Hayek--Op. cit, p. 372

determining the relative value of a mine as a present or a future asset simply does not exist. Russel's assesment of the position seems more correct than the conclusions arrived at by Hayek on the basis of unwarranted assumptions of human motives and character. "During the last 150 years mankind has used up the raw materials of industry and the soil upon which agriculture depends, with an ever increasing velocity. The most striking example is oil. Already the need for it has reached the point on which there is a risk of its contributing to a third world war. Industry as it exists at present depends upon the expenditure of natural capital and cannot long continue in its present prodigal fashion. Even more serious is the situation in regard to agriculture. The growth of the dust bowl in America is the best known example of a destructive process which is going on in most parts of the world. Only government can take the drastic steps necessary to avert the disastrous food shortage that is otherwise inevitable."*

13.21. The weakness of Prof. Hayek and other critics of the conscious determination of economic priorities is that they are constantly comparing an ideal theoretical world (in which demand corresponds precisely to desire and all production is competitive) with the actualities of planning in a world of imperfect institutions. In this theoretical world 'it is part of the ordinary nature of men that they make the welfare of other people their chief aim'; 'members regard it as right that each individual occupy the position that results from his action and accept it as due to his own action'; rent restriction 'weakens the sense of individual responsibility' (whose responsibility? the house-owner's to provide a cheaper house, or the tenant's to improve his economic condition so as to be able to pay higher rent?); and 'if the individual owners of urban property are so placed as to enable them to take into account at least the more important effects of their actions on other people's property' they would do so and refrain from harmful or anti-social uses voluntarily.† "One would be in a better position to assess the value of his (i.e. Prof. Hayek's) diatribes against the planners if he showed any appreciation of the evils which have given rise to a demand for planning. Prof. Hayek is inclined to argue that the defects of a system in which economic priorities are not consciously determined are not inherent and could be overcome by resort to measures which are well within our grasp. It is greatly to be hoped that he will write another book elaborating this constructive aspect of his thesis."** This was written by Barbara Wootton in 1946 in connection with Hayek's 'Road to Serfdom'. Unfortunately, even after the publication of 'The Constitution of Liberty' that book still remains to be written.

* Bertrand Russel— "Authority and the Individual", p.5 (slightly abridged). One is tempted to quote a long extract from a book which made a very wide appeal at the time it was published. "The method of free competition and the application of the profit motive have been disastrous to the land. Railroads received great areas of land on which they settled the men and women whose grand children created the Dust Bowl. Cut throat competition in forest exploitation has long since turned us from a creditor to a debtor nation in terms of forest resources; we are forced to import timber and wood pulp while our own lands best suited to its production are being washed into the oceans and the gulf of Mexico. To-day 'free enterprises' forestry is one of the greatest dangers to Latin America. Industry has been allowed to treat our underground water supplies as though they were inexhaustible, and the prosperity and possibly the existence of many of our cities have been jeopardised through waste of water."—William Vogt, 'Road to Survival', p. 34-35.

† F.A. Hayek—Op. cit., pp.72, 71, 343, 349.

** Barbara Wootton—"Freedom under Planning", pp.61 & 62 (and footnote).

The Case against Laissez Faire*

13.22. We may now summarise in one place the arguments against uncontrolled "laissez faire" which will be found scattered throughout this chapter. If the market mechanism worked perfectly and all its assumptions were realised there would perhaps have been no need for extraneous control or plan; but there are serious imperfections in this mechanism which prevent it from always working to the social advantage and requires intervention for their correction. The principal assumptions of the theory of "laissez faire" are (1) that the wants and desires of consumers are a proper measure of social utility; (2) that the individual consumer is able to judge and evaluate the commodities he buys; (3) that the distribution of income is fair; (4) that private enterprise is competitive; and (5) that the cost to the producer is a measure of the social cost of producing the commodity. None of these assumptions are hundred per cent correct.

13.23. If the first assumption was fully given effect to and 'consumer sovereignty' given full play there would have been no compulsory education, no compulsory vaccination or other health measures, no compulsory old age insurance. No modern society can permit this. It attaches great importance to certain needs and cannot leave their satisfaction to the decision of the individual. For example, it feels a responsibility for the education of the next generation and cannot leave it to the voluntary decision of the father of the family. Its responsibility for the health of the present generation and the next compels it to enforce some building regulations which the owner would have gladly ignored if he was left to his own devices. If consumer demand (i.e. demand backed up by willingness to pay for it) was the only measure of social utility and supply was regulated by it there would have been no parks and open spaces in cities and no national parks and nature reserves in the countryside.

13.24. The second assumption credits the consumer with more technical competence and information than he can possibly possess. It makes the unwarranted assumption either that he is able to judge the technical excellence of the food, the clothing or the housing he buys without being swayed by advertisements which are mainly false or exaggerated or that he will be able to secure the technical advice needed to reach a sound decision.

13.25. The third assumption is obviously incorrect and 'consumer sovereignty' dependent on the income of the individual breaks down for the simple reason that under the present socio-economic arrangement some people can exercise plural voting while others can exercise no votes at all. On account of this disparity of income the desires and needs of large numbers of men do not crystallise into what the economist would call an 'effective demand' and the society has to redress the balance sometimes by subsidies and sometimes by providing free public services financed through taxes. Equally obvious is the fallacy of the fourth assumption which has led to the study of imperfect competition being given an important place in the range of economic studies.

13.26. But it is the invalidity of the fifth assumption which really proves the case for planning and against "laissez faire." The owner of a city plot who wants to construct a tall building would not normally give any thought to the shadow it would cast on his neighbour's plot or the air it would obstruct. The value of the adjoining plot may be greatly diminished by the loss of light and air but this loss does not enter into the calculation of the cost of the builder nor is it reflected in the price or

*Adapted from Local Planning Administration, 3rd Ed., 1959 (Chap.1, pp.14-16). Published by the International City Manager's Association, Chicago.

rent of the accommodation he provides. The price in this case is therefore not an accurate measure of the cost to the community of the facilities provided, and 'consumer sovereignty' cannot be counted on to bring about a proper allocation of resources.

13.27. "The need for city planning, and the need to implement planning through public expenditures and exercise of regulatory authority, stem from the failure of urban conditions to satisfy these five assumptions upon which the 'laissez faire' theory is based. Planning is needed to provide for wants that the community thinks important and that not all consumers will provide for themselves. It is needed to protect the consumer from his own ignorance and lack of information; to correct disparities in income and buying power that the community considers excessive; and to provide a substitute for competition where that is lacking. Planning is also needed to intervene in cases where the cost reckonings of the individual are not accurate reflections of the social cost. These require a wide range of planning activities for that area of society in which the unregulated economic mechanism does not function correctly."

CHAPTER—XIV

The case for planning

14.1 We have already found in the course of our previous discussions that the supply of land in West Bengal is absolutely inelastic, that it has the highest percentage of land under the plough and the second highest density, that the proportion of unutilised land is minimal, and that the search for lebensraum in other States has proved abortive. Assam has closed its door with a bang, Andamans were always inhospitable and are now resentful even of the small Bengali population settled there, other States like Orissa have proved equally uncongenial, and even Dandakaranya has space only for a fraction of the people who have come away and none for those who are still likely to come. The stark fact is that the land available per capita in West Bengal, small as it is, will get progressively smaller as population increases in each succeeding year. It is obvious that the exiguous land resources should be utilised to the best possible advantage so that there is no waste, no under-utilisation, and no conflict of incompatible uses detracting from the value of each individual use.

The argument of balanced use *

14.2. The essence of land planning is the right and balanced allocation of land between rival needs or uses in order to secure for the people the maximum advantages possible from an intelligent use of land. There are at least six basic needs of man which involve the use of land for their satisfaction viz. food, shelter, work, recreation, movement, and security. We need space for living but our livelihood depends upon scientific cultivation of land as well as on the right location of industry and commerce. We need space for recreation but, if possible, without sacrificing food production or the cultural heritage of the past enshrined in historic buildings. Whenever population is dense and land is in short supply these needs become competing demands. However good and strong the case of the rival claimants may be, each may be required to lower its demand if all the reasonable interests and needs of the community have to be fitted in. In U.S.A., where on present population basis the per capita allotment of land is 14 acres, many needs may be satisfied without a careful calculation or conservation of the land required for the purpose and a little prodigality or extravagance would do no harm. In England where there are only 0.8 acres of land per head to satisfy all the needs of the people such conservation is a matter of vital importance. In West Bengal with only 0.62 acres per head and without England's commercial and industrial supremacy which enables her to import food from abroad, the necessity for a careful husbanding of land resources is greater even than in England. Where shortage of land is the dominant consideration the three cardinal principles that should be observed are (a) the principle of optimum use, (b) the principle of multiple use, and (c) the principle of avoidance of waste. The last two are quite easy to understand. If a piece of land is capable of multiple uses (e.g. a forest as producer of timber and other forest products, as gathering ground for water supply to the neighbouring area, as a National Park and hiking place for rambles etc.) it would be an economic loss not to use it simultaneously for all the purposes. The third principle means that no land should be allowed to remain idle without serving some purpose useful to the

* L. Dudley Stamp—'Applied Geography, Chapter VII.

community, which is why it has been suggested later in this chapter that even derelict and worked out mines should, if possible, be converted into sources of material benefit or aesthetic pleasure. The first is the most difficult principle to translate into practice, for opinion is bound to differ on what is the optimal or the most advantageous use of land at any particular time. But taking a fairly long period into consideration it may be possible to say of any good piece of land that there is a use for it which is not only of great importance at the present time, but also of the greatest importance when the future is considered. The essence of land planning is the attempt to find this optimum use.

14.3 Among the human needs that require the use of land for their satisfaction the first in importance is food, but food or rather agriculture which is the primary source of all our food, is in a sense the residuary legatee of all other uses. All the other essential uses of land we have just indicated—industry, houses, recreation, communication and defence—tend to bite into what is at present the open land of the country used for the production of food and raw materials by the farmer and the forester. Aerodromes expand and swallow up extensive, flat and well-drained lands which are intrinsically valuable for agriculture. National highways cut across the country and leave farm units dismembered. On the urban periphery and for many miles beyond, arable lands and orchards recede before the advancing tide of brick and mortar. ‘*De facto*’ green belts disappear and are transformed overnight into human settlements; while vacant lots, previously used for market gardening, are bought up by speculators and subdivided into narrow strips for sale to a land-hungry middle-class anxious to build a house which they may call their own. Richer people escape into the comparative isolation of the suburbs only to find themselves engulfed once again by the city’s overspill crowding into the intervening gap of agricultural or horticultural land. Industries spread out into open country but not too far from the main city, and shops, markets, schools, and other service institutions spring up, to make further inroads into land formerly used for growing food, vegetables or fruit. The number of interlopers into the countryside is legion and grows apace. A new menace has appeared in the scene in the form of brick pits and kilns which quarry into good agricultural land for earth to make bricks with, leaving water holes which breed malaria and permanently disfigure the landscape. The riparian brick fields on either side of the Hooghly only disfigured the landscape but did little injury to agricultural land as they were perpetually filled with river silt; those which spring up in the flat countryside are like mines, quickly exhausted and left in a derelict state which neither Nature nor man does anything to restore to their original condition. For saving some small transport cost to the builder and the contractor the nation pays dearly in loss of valuable agricultural land. The apparent ease with which these lands pass from the hand of the farmer to the builder or the brick-maker shows how in the unequal contest agriculture is invariably pushed to the wall. It would be necessary to discuss this phenomenon again after we have made a rapid survey of the needs and requirements of other uses.

14.4. We take industry and mining next because of the prominent part they play in the economy of the State. As observed previously, mining industries are tied to the location by the occurrence of the mineral and cannot be shifted; if these and other metaliferous ores or clay yield valuable raw material for industry or export provision must be made for their extraction howevermuch the land may be wanted for other purposes. Mining, however, is not always a serious rival to agriculture, first because the known mineral belt in West Bengal is not noted for the quality and value of its

agricultural land, and secondly because surface cultivation can go on *pari passu* with mining operations except in the vicinity of the pit heads and dumps or where open cast method is followed. There is however a real conflict between mining and building developments of all sorts (residential, commercial, industrial) and it is one of the headaches of the Mining Branch of the Department of Industries, Government of West Bengal, that haphazard surface development in the Asansol and Raniganj area, permitted years ago by the then owners of mines, coupled with inefficient underground support of the ceiling during mining operations; has practically sterilised many of the mines by increasing the risk of subsidence and making any further extension of mining under the built up areas extremely precarious. The cracked walls, the warped floors, the ill-fitting doors and windows of houses in the older mining areas tell their own tale of subsidence that has already taken place and are forebodings of further trouble ahead.* Here is an example of a choice that has to be made after balancing the relative advantages or disadvantages of different modes of use. If the minerals are in such abundant supply over a wide stretch of land as to be practically inexhaustible or if the veins or seams are so thin as to be practically useless for economic extraction it may be permissible to ignore them in allocating land use, but in other cases the emphasis should be not on preventing working of the mine but on restoration of land to serve some other purpose after it has been worked. For, it cannot be denied that the aftermath of many of the mining operations is the existence of much derelict land strewn with scraps, slag heaps, coal dust or ash—the jetsam of worked out mines which disfigure the landscape and render the land useless for any other purpose. A country where land is in short supply cannot afford such waste and means should be found to put even worked out mines to some form of profitable use by afforestation or the laying out of park lands of irregular but shapely contour enclosing lakes or playgrounds—in fact, anything which the ingenuity of the botanist or the landscape architect or the engineer may devise to cover the jagged ugliness with well-covered rocks, trees, plants or bushes on flat or undulating land. The license to work the mines should not be a license to leave a legacy of ugliness behind.

14.5. When we turn to industry it might seem that the boot is on the other foot. Industry in West Bengal is confined within a small area so that it may be plausibly argued that far from encroaching on agricultural land it is not expanding in space as much as it should have done. Leaving aside Durgapur which, in spite of its potentialities; is yet too small in size and employment capacity to count as a major industrial zone, most of the registered factories of West Bengal are concentrated in 154 sq. miles of the Calcutta industrial area and 148 sq. miles of thanas Asansol, Kulti, Raniganj and Salanpur in the district of Burdwan, while only about 950 factory units with a little over 12 per cent of the registered industrial employees are scattered over the rest of the State.† We need not here go once again into the causes that led to such industrial concentration—the physical and psychological factors that prompted entrepreneurs to select one zone rather than another; what is clear is that in respect of the quantity of land involved the invasion of industry into the countryside has not been on anything like as alarming a scale as one might have expected. But to infer from this that industry has spared

* The following appeared in the Statesman (Calcutta edition) on 19th December 1962. "About 15000 square feet of Barakar town subsided today, causing heavy damage to a tube factory. A 70-year old abandoned colliery is under the area which caved in. The entire town was declared unsafe by the Mines Inspectorate in 1956 and people were repeatedly asked to vacate it. But Barakar is an important market centre and the people ignored the appeal. There are over 8000 people in Barakar"

† Figures supplied by the Directorate of Industries, West Bengal.

agriculture would not be correct, for even in the Calcutta industrial area there are still sizable remnants of agricultural land between clusters of conurbations which are being rapidly swallowed up by factories so that within the next few years even these vestigial agricultural lands, market gardens and orchards may cease to exist. Some new industrial firms have, it is true, been started on entirely new townships, built out of scratch by the industries themselves,† but to what extent this was at the expense of good agricultural land was never calculated. If there is no restriction the suitability of the land for the purpose of agriculture is not one of the considerations likely to influence the entrepreneur when he tries to set up his factory in new areas or townships. What he considers is its suitability for the purpose of starting and running the factory and, unfortunately, flat level land suitable for the purpose of agriculture is also, often, the most suitable land for construction of the factory buildings.

14.6. The third need is shelter i.e. housing, and this raises a complex question which must be answered differently by people with different social habits and economic standards, and living under different climatic conditions. There can be no doubt that the standard of housing which a country considers desirable and can afford to have has a great bearing on the allocation of land considered satisfactory to meet this particular need. It is mostly in towns and cities that problems of accommodation appear in an acute form. But it would be wrong to think that it is an exclusively urban problem, for whatever steps may be taken to provide for the urban people accommodation on a more generous standard than now obtains is bound to have its repercussion on the country and involve the difficult task of finding a compromise between the needs of urban dwellers and the demands of agriculture, mineral extraction, and other important uses of land. The essential conditions of a good residential area have been summarised in a British Ministry of Housing and Local Government's handbook as follows :—“(i) There must be enough living accommodation arranged in a suitable variety of buildings. (ii) The dwellings themselves must be so arranged on the ground that the rooms get sufficient light, air and sunshine, and there should be some open space near the dwellings which can be used for casual exercise and sitting out and as a visual relief from bricks and mortar. (iii) The dwellings should be conveniently sited in relation to shops, schools, open space, and other places that the residents have frequent need to visit; that is to say, certain other land uses will normally be required within a residential area for the general convenience of residents. (iv) The residential area as a whole should be conveniently related, in both position and scale, to the rest of the town, allowing reasonably good access to the town centre, the main areas of employment, and other residential areas.”* The last two conditions are the basis of the “neighbourhood principle” which is explained in the next chapter. The first two have been interpreted differently by different experts since people's ideas differ as to what constitutes sufficiency or suitability, what density can really be said to be oppressive, and what tastes and hobbies must be provided for to give a sense of fullness and satisfaction to the dweller in the town. Should the net residential density be between 10 to 12 houses or 45 to 60 people per acre? Should it be low density open development as is suggested by garden city enthusiasts? Or high density development by building upwards to economise in the amount of land (and more particularly in the cost of service connections) as well as to reduce the journey from home to work? Can we with our present resources and in the under-developed state of our economy go in for the high standard of not allowing more than one person per habitable room, which is considered by many British town planners to be a reasonable density, anything beyond which would be

† Batanagar (24-Parganas); Sahaganj (Hooghly); J.K.Nagar (Burdwan); Chittaranjan (Burdwan); Rupnarayanpur (Burdwan); Kanyapur (Burdwan).

*The Density of Residential Areas', (H.M.S.O.), p.2.

called overcrowding? what about the proportion of flats and houses or should the first be eliminated altogether in favour of the second? People are sharply divided as to their relative merits, and protagonists of detached low-density housing point not only to the quietness and privacy of the latter but to the vegetables produced in the garden of each house which are alleged largely to offset the loss of farm produce. Admitting that every occupant of detached house would be pottering about in his garden in spare time, given the opportunity, (which however is far from certain), we have still got to consider whether we can spare the enormous amount of land which such generous allocation of space for the purpose of residence and ancillary services would involve us in.

14.7. The fourth need is for recreation space out in the open for toning up the physical and mental health of the nation which is no longer regarded as the luxury of the favoured few. What the urban requirements are if all classes of people and all age groups are to have their needs satisfied will be discussed in detail in the next chapter, but it is obvious that if 'something of the order of 7 to 10 acres per 1000 of population is a desirable minimum' quite considerable inroads have to be made into the surrounding country to provide this minimum while a wide distribution of parks and open spaces inside the city for young children and elderly people would lead to a considerable thinning out of the density of the population with a corresponding obligation to accommodate the overspill on extra space which too must be carved out of the open country. In rural areas little attempt has been made up to date to measure this need or provide for it. † Probably most villagers in our country are not fully games conscious yet. Probably some make do with indigenous games which, though they do not enjoy the prestige of soccer, can be both exciting and strenuous and have the additional advantage of requiring much less space and no expenditure on outfit. Others may use the village green if any exist or put into commission the farmer's fallow land with the farmer's tacit consent. But these make-shift arrangements are not likely to last forever. With urban culture penetrating into the villages the demand for sophisticated ball games will increase. If villages pulsate with new life as is the professed objective of the Panchayats and the community development schemes, if a diversified economy replaces their exclusively agrarian economy and keeps more people within their borders, the demand for football grounds will be hard to resist and undesirable to suppress. To that extent there will be another claimant for the exiguous land area available in the countryside for miscellaneous purposes.

14.8. At a different level stand the much larger space requirements for National Parks, demands for which are occasionally heard. The two tests for selecting large areas for such Parks are first, that they must be places of great natural beauty or capable of being made so with small extra expenditure, and second, that the quality of land should be poor enough to make their intensive farming out of the question and therefore entailing little sacrifice to the country in leaving them open for picknickers and ramblers. Sometimes smaller areas within National Parks or outside are exclusively earmarked as Nature Reserves to preserve and protect wild life or specimens of rare flora and fauna which would otherwise be doomed to extinction.* In a country where

† The playgrounds subsidised by the Education Department with funds received from the Central Government are attached to schools in the smaller towns only.

* According to the Julian Huxley Committee Report, Nature Conservancy should not be a question merely of amenity which is within the province of Town and Country Planning, but a scientific problem primarily directed to the advancement of knowledge for its application to the affairs of the nation. The idea is to enable man to control Nature so as to maintain or establish a series of varied and most delicately balanced

(contd.)

wild nature alternates with good agricultural land or is widely diffused it is not difficult to select several such areas; in West Bengal where all wild nature is gathered in the extreme northern or western margin the choice is more difficult. It must be remembered that although situated in the countryside National Parks and Nature Reserves are meant both for town dwellers and country folk, more in fact for town dwellers than for country folk as the former derive keener pleasure from visiting such Parks and coming face to face with wild nature or life. A site which is inaccessible from a nearby railway station or beyond the reach of a good motor road reduces the number of visitors to these National Parks. The conflict here is likely to be with other uses such as hydro-electric installations, hotels, houses etc. but not agriculture if the principle of placing such Parks in agriculturally unproductive land is adhered to.

14.9. But it is not much use having industries located in right places, houses built, or wide areas laid out as National Parks if they are not easily approachable by rail, road or aeroplane, and this brings us to the fifth use mentioned above—communication and transport. 'Rail transport is notoriously slow in India. If more efficient signalling and organisation generally could enable the trains to go faster this would * * * enable more traffic to be transported along existing tracks where otherwise there would have to be additional tracks laid'. * But inefficiency is not a disease that can be cured in a day and in the meantime the demand of an increased movement of goods caused by an expanding economy must be met by extending the permanent way and laying down extra tracks. Even that is not enough, for in spite of expansion railways can meet only a fraction of the demand and motor trucks are being increasingly utilised over roads for long distance traffic because of their flexibility and reduction of extra haulage and transshipment. The adaptation from slow moving bullock carts to modern high speed motor traffic and heavy tonnage lorries has revolutionised transport and caused a reorientation in our thoughts both about traffic routes and about road engineering. The old roads joined village with village, village with town, town with city; and even where a few long distance traffic arteries were laid down by far-seeing emperors or administrators they were gradually immobilised by a gradual growth of settlements on either side so that their character changed into that of an internal road though the burden of through traffic remained as before. In fact, the need of isolation is greater for arterial roads than for railways, for whereas trains in large units pass along fixed tracks at fixed and relatively infrequent intervals at a fairly constant speed, hordes of motor vehicles traverse arterial roads in no special order or rhythm and at constantly varying speed without any fixed track to keep them on the straight narrow path. Yet rows of buildings are allowed to flank their sides with frontages opening into them, towns grow, and markets spring up with dealers spreading their wares or their farm produce on the verge or in close proximity to it. The new concept is quite different. Arterial roads are designed to avoid large nucleated settlements and go through the least populated part of the country and yet to provide ready access to important towns that lie *en route*. The land requirements of good arterial roads are quite large, for with three lanes of traffic *each way*, provided to allow for varying rates of speed and occasional lay-bys,

ecological conditions which are fundamental to agriculture, forestry, horticulture game preserving, fisheries etc. National Parks where people have free access are not the best places for the purpose of such conservation as the larger forms of animal life are shy of human contact and many of the more attractive and beautiful plants will tolerate only a limited degree of disturbance.—(Report of the Wild Life Conservation Special Committee, 1947, p.1-3, 10).

The subject is too wide to be dealt with here but if this means that separate areas will have to be earmarked for National Parks and for Wild life Conservation this will mean one more claimant for land use.

* W.B. Reddaway—"The Development of Indian Economy", 1962,p.42—43.

filling stations, hedges and trees and a fairly wide central verge intended to avoid dazzle at night, a minimum width of 120 ft. or 15 acres per mile is necessary even without the elaborate clover leaf and figure of 8 junctions fancied in U.S.A. to enable traffic to join or leave the main highway without actually stopping for light signals or roundabouts. In a new country where roads have still to be completed and neither land nor money is in short supply this is easy and roads can be designed and built to suit modern conditions without disturbing existing uses. In a densely populated country, already served with a road network of sorts, this means making fresh demands of land from the open country for rationalising the road system because the old roads must continue to function as means of internal communication. The golden rule is to secure the maximum efficiency from new roads but cause the least possible disturbance to existing uses and users of land. This is possible if the new route passes along the poorer land and does not dismember compact farm units. The road may be all the better for occasional deviations or adjustments, for gentle curves lined with trees and hedges of varying heights are the best antidote to the sleepy feeling which dead straight monotonous roads tend to induce in the motorist.

14.10. The problem of roads in West Bengal, always somewhat unsatisfactory, became acute after partition which left a 600 mile long border exposed to smuggling or other illegal and hostile activities and disrupted the normal communications. The building of new roads and the taking over and improvement of old local authority roads made rapid strides so that the original 1181 miles of government owned roads on the date of partition have now increased to 5800 miles of fully completed and 1900 miles of half completed roads while another 1000 miles are awaiting completion during the Third Five Year Plan. This is a creditable achievement but it nevertheless raises the question of the land that has to be sacrificed to secure internal mobility and order.

14.11. Airways too need land for their airports and connecting roads, and the increasing size, weight and speed of modern aircraft for long distance operations make large demands upon land for runways in different directions according to the state of the wind. This sterilises large areas of land for agricultural and other purposes, and the expansion of the Dum Dum Airport now under way is the nearest visible evidence of this. If further scientific progress brings vertical take off within the range of probability demand for land for airports will be greatly minimised, but so long as it does not there is no alternative to sacrificing large areas of good flat well-drained land, suitable for agriculture, for airstrips and runways. But in a closely settled country where sites are obviously limited, it would be an unnecessary extravagance for each major town to have its own airport.

14.12. Another major means of communication in prepartition days was the network of canals but after partition they have ceased to have any importance. The function of canals in West Bengal is primarily to help irrigation and drainage. Fairly large areas have to be earmarked for this purpose and still more will be needed if the network spreads, but this is a price that must be paid for draining off water from waterlogged areas or supplying parched lands with irrigation water which alone can make them fertile and productive. There is, however, no reason why some canals should not serve a multiple purpose and the D. V. C. may show the way by widening them to the extent necessary and laying out a tree lined tow-path along the banks. Canals in England have become in many areas so much a part of the essential rural pattern that their preservation is defended strenuously on amenity grounds,—easy shady walks along the tow-path, the quiet fishing, the presumed romantic nature of life in a barge when out on a holiday. In the muddy or turbid waters of many of our canals much of the romance will vanish but the utilitarian aspect will still remain.

14.13. Lastly, one cannot forget, especially in these days, the needs of defence for none of the various advantages expected from different kinds of land use can be enjoyed without security from external aggression. Apart from cantonments and barracks, the mechanised army of the present day requires large land areas for training in the use of tanks and anti-tank exercises, for training of lorry drivers, for artillery practice with live ammunitions, for battle training areas etc. The Fleet Air Arm requires larger and larger air-fields on account of the ever-increasing size and speed of planes. In times of war the services have virtually the last word as to what they require. Even in times of peace the essential minima for service needs are a matter which it is very difficult for a layman to judge, but whatever it is, it has to be fitted into whole of the general picture. Fortunately, defence training is concentrated in other States which have ampler lands to spare and the demand on West Bengal's scarce land resources on this account is not likely to be high in peace time.

14.14. We must now revert to the question of food and raw materials which was only briefly touched upon at the beginning of these discussions. All food is derived directly or indirectly from agriculture and fisheries, for even milk and meat are agricultural products at second remove, being directly obtained from animals and poultry which have to be fed on what grows on the land before they are able to convert them into food. For this purpose, agriculture in the narrower sense and fruit farming, stock breeding, poultry raising, fish rearing etc. must all be lumped together in considering the quantity of land required to satisfy these needs. Apart from mines, agriculture and forests are also the source of all our primary raw materials, and unless these needs can be reasonably satisfied the economy of the state will remain precariously unbalanced. A balance has therefore to be struck between land which has to be reserved for food production and production of raw materials in the above sense and for forestry on the one side and land that may be allocated to the remaining needs and uses on the other. According to the national forest policy enunciated in a conference of departmental heads and experts the proportion of forest land should be at least 60 per cent of the hill and 20 per cent of the plains areas. So far as West Bengal is concerned this is quite a tall order because of the rival claims of agriculture and other uses, but the present coverage of roughly 13.8 per cent, distributed at the rate of 20.8 per cent in the hills and 11.5 per cent in the plains, is insufficient, and a larger coverage suitably distributed between different regions and planted with the better specimens of timber seems to be an imperative necessity. In any case the thoughtless denudation of forests which had been going on in the past and rendering large areas barren and unproductive through erosion of the top soil must be stopped even it means some curb on agricultural extension.

• 14.15. The insufficiency of our food production as regards rice and other cereals, meat, milk and fish can hardly be overemphasised. The per capita consumption of fish is only 11.35 lbs per year which is much too small for a dietary which can hardly afford to include meat, eggs and milk; and even for this proportionately low consumption much more than one-third of the supply, as we have already seen, has got to come from

outside. As regards cereals, the position during 1958-61 will be clear from the following figures supplied by the Secretary, Department of Food and Supply :—

	(Figures in thousand tons)			
	1958	1959	1960	1961
1. Gross yield of cereals				
(a) Total Rice (Aman, Aus, Boro)	4232.8	4186.9	4220.5	5249.7
(b) Other cereals	<u>83.6</u>	<u>111.3</u>	<u>104.3</u>	<u>83.1</u>
Total	4316.4	4298.2	4324.8	5832.8
2. Net yield (after deducting 10% for seed and wastage)	3884.8	3868.4	3892.3	4799.5
3. Estimated population (in lakhs)	319	329	339	349
4. Consumption requirements (at 16.5 oz. per day)	5360.4	5528.5	5699	5876
5. Deficit	1475.6	1660.1	1807.4	1076.5
6. Total known import by Govt. and private dealers	935.1	1235.9	1305.7	856.0

For 1962 a much larger deficit of 1687.9 thousand tons has been estimated out of which only 383.7 thousand tons have been covered till May 1962 by imports on government and private account.

14.16. Two things are obvious from these figures—first, that left to herself West Bengal produces barely 75 to 80 per cent of her food requirements within her borders and that too at a minimum nutritional standard, while for the balance she has to depend upon imports from other States or abroad ; secondly, that these imports do not cover the entire deficit and a considerable proportion of people have to remain underfed for inadequacy of food supply at reasonable prices. As the Secretary of the Food Department frankly admits, “usual underconsumption under high market prices explains imports being lower than deficits”. A huge deficit between food requirements and indigenous food production is no problem to a manufacturing and commercial nation which can import much of her food from abroad, but in spite of her so-called industrialisation West Bengal cannot be said to be in the same happy position. Both on the capital owning and management side and on the labour side her industries are manned by people whose affiliations are with other States or countries to which much of the industrial income is remitted. The State does not possess the taxing power which might have deducted part of this industrial income at the source before remittance abroad so that when government buys food to meet the deficit it has to do it on the basis of its other resources without deriving any direct benefit from the income traceable to industrialisation. Also, the facile assumption that food can always be imported if one is prepared to pay the price does not hold good in an age when prospects of control are always in the offing in times of scarcity and each State tries to conserve its food resources as best it can at the first hint of danger as was the case between 1957 and 1959. The amount of land per head required for the production of a sufficient quantity of food supply has been put down by Dudley Stamp at a little over 1 acre. * In our state the overall allowance of land per head is 0.62 acres and of cultivable land only 0.37 acres. It is an illusion to think, as some appear to do, that we can circumvent our shortage by altering our dietary habits and laying more accent on protein food than on cereals and vegetables, for that will require more land per head, not less. Animals too have to be fed and all animal food comes from farm produce or pasture and they are generally inefficient converters of such food. “Much more land is required to produce one standard nutritional unit of animal origin than one unit of cereals. When a nation, enjoying an increase in the standard of living, changes from a diet

* L. Dudley Stamp—Our Developing world”, p. 78.

basically of bread or rice to one in which meat and milk play a large part much more land is needed. In such countries, notably Japan where land is in desperately short supply, meat is a luxury not so much because of price as because the nation cannot afford the land for its production." **

14.17 It is necessary to take a synoptic view and see where we stand. Prof. Reddaway has observed with reference to India that the strategy in national economic planning cannot be divorced from securing "a proper balance between supplies of different goods and services. **** The consuming population needs a proper balance in the goods and services which are made available for them to buy. **** The very fact that incomes are so low means that more manufactured goods are no substitute in India for more food even if they would be much easier to supply."* What has been said of India as a whole applies to West Bengal with greater force. The accent must be on keeping a sufficient amount of land for food production which, if not designed for self-sufficiency (for autarchy in food may not be possible nor probably necessary in any particular Indian State), should be something very near it so that in case of overall scarcity, when we may be thrown entirely on our own resources, the margin between production and requirement may not be too wide. There are two ways which singly or in combination may lead to this result—extension of cultivable area or increased yield from improved methods and more intensive cultivation. The fixed quantity of land limits the scope of agricultural expansion while it should be obvious from what was said in connection with agricultural soil and the slow rate of improvement that it may be too optimistic to put the probable increase in yield at a high figure.†

14.18 The majority Report of the Scott Committee leaned heavily in favour of agriculture, apart from other reasons, on the ground that good mixed farming of the kind followed in England was responsible for much of the scenic beauty of the English landscape which it would be a vandalism to destroy by allowing industry and other uses to penetrate without restraint into the innermost recesses of the country. For West Bengal we prefer to base the case for agricultural priority not on a nostalgic desire for beauty but on the more utilitarian ground of feeding the population who are already living on inadequate rations. We may agree with Dudley Stamp when he says with reference to Britain that "there is an overall shortage of land, particularly good agricultural land, capable of producing food; and so, other things being equal, we should avoid building on good agricultural land and seek to conserve as much as possible for food production. This would logically lead to two things. The first is to try to select the poor qualities of land for the siting of our new towns or extension of existing towns. The second would be to regard very open densities such as 10 persons to the acre as being an extravagance we really cannot afford in the country." This was said with reference to housing, but the argument would apply equally to industries, communications, recreation space or any other use besides agriculture.

* L. Dudley Stamp—*"Our Developing world"*, p. 11.

* W.B. Reddaway—*"The Development of the Indian Economy"*, 1962, p.36.

† Dudley Stamp thinks that in countries like India where crop yield is very low and agricultural revolution scarcely begun it does not sound such a formidable task to increase the yield of rice from, say, 28 bushels an acre to 30 bushels—which is over 7%, more especially as Egypt already produces over 100 bushels an acre. (*"Our Developing World"*—p.79). But according to Prof. Reddaway only a modest progressive rise should be possible under present conditions, and further increases by allocating more capital and organising ability to the undertaking of major irrigation projects can only come after a very considerable time lag. The reaction of 60 million independent cultivators (in India) to any educational propaganda that may be carried on for imparting a knowledge of improved technical know-how is unpredictable. (*The Development of Indian Economy*, pp.39-40).

We have seen before that for some years there was a progressive decline in yield rather than increase though 1961 figures were more reassuring.

14.19 Agricultural use of land has also another advantage in that it does not debar other uses if circumstances suggest a change of policy in future, whereas once a land is built upon, it is for ever sterilised for agriculture or forestry. This is not to say that the other needs should be ignored and that room should not be found for new industrial locations, sites for new towns or expanded old towns, national highways and parks etc. In fact, new towns may sometimes stimulate agricultural and dairy production by bringing a market within reach and a claim has been made for low density housing in the new towns of England that the produce of the garden vegetables compensates largely for the loss suffered by the professional farmer or the professional market gardener. The choice is not easy but the general principle should not be difficult to lay down. It is that good agricultural land should not be allowed to be turned to other uses and that these other needs should be satisfied from lands of poorer quality.

14.20 All this discussion has now narrowed the question to one thing only. When a scarce means has alternative uses who decides to what use it should be put ? The *Laissez faire* doctrine of allowing the choice to be dictated by the uncontrolled competition of the market has not worked to the national advantage in respect at least of land. We have already seen that even brick-making can push out agriculture and secure a footing on agricultural land when competition is unrestrained. The only way in which all foreseeable short term and long term land uses can be taken into account to evolve a coherent system in which various uses and needs are reconciled as much as possible is by setting up some national or public agency whose business it is to take these factors into account and assess them wisely, disinterestedly and without being swayed by profit or personal interest. That is the case for planning, judged from the standpoint of balanced development.

Argument for co-ordination of land use.

14.21 There is another case for planned use of land which may be stated here quite frankly. It arises from the necessity of co-ordination of land use in the activities of different departments of government so that the pattern that emerges ultimately as a result of each department going its own way in pursuing its separate objective may not be mutually conflicting. On account of the very large extension of governmental and local government activities in a welfare state the quantity of land likely to be used by government is continually on the increase. The influence of market competition which, according to orthodox economists like Hayek, generally determines what is the most profitable use is absent here, for when government decides on a certain plan of action requiring the use of any particular piece of land, it does not stand in the queue as one competitor among many but shuts out all other competition by exercising the right of eminent domain. But government departments are notoriously ego-centric and have a natural weakness to magnify the importance of their own particular need. We have seen that even in U.K., in spite of the passing of the comprehensive Town and Country Planning Act in 1947 and the setting up of a separate Ministry of Town and Country Planning, large reserves of power have been retained in the hands of different Ministries so that co-ordination is achieved more by diplomacy and tact than by the exercise of authority by the Planning Minister. The Board of Trade has the last word in determining industrial location; and the Ministry of Transport, in laying down main traffic routes. For defence services, the land requirements of the War Office cannot be whittled down unless they voluntarily agree to a cut, and other departments too may successfully put up claims which distort the general plan of the county or borough.

14.22. This is likely to occur here in a more aggravated form because of the existence of not one government but two—the Union and the State, each having its own programme of work involving the use of land. Many projected road alignments of the Calcutta Improvement Trust had to be shifted because departments of the Central and State Governments, unaware of the project (and sometimes even when aware of it), had set up an installation or built a structure right within the alignment. There is occasionally a latent antagonism between departments or their officers which makes co-ordination difficult. Another cause of aggravation is the manner in which budgets are framed annually with the expectation that all the amounts provided in the budget should be spent within the financial year. The result is that frantic efforts are sometimes made to find land anywhere in order that the projected work may be carried through within the time, regardless of whether in the larger interest of the community that land should be used at all or at least used for that particular purpose. The Housing Ministry, for example, allots funds for building houses about whose need there can be no question. It would be a confession of inefficiency if the money cannot be spent within the budget year—a stigma which all the Ministers and their officials are naturally anxious to avoid. As land is the first desideratum for housing the question was seriously discussed in one Housing Ministers' conference whether vacant spaces or compounds attached to houses within urban areas should not be heavily taxed to compel the owner either to build on them or to sell them to government to enable it to build. In Indian towns where public and private open space is already far too small and congestion is a by-word such a proposal would be suicidal from the point of view of the city's health and amenities, howevermuch it might solve the limited problem of the Housing Department to build the required number of houses within the scheduled time. Other examples of thoughtless building on the wrong sites (not all of them because the budget grant must be spent within the year) are furnished by the large number of housing blocks lying vacant in spite of departmental attempts to coax industrial labour to occupy them, by the huge Telephone Bhavan which shuts out a magnificent vista from the Writers' Buildings to Raj Bhavan, and by the creeping paralysis which makes the Maidan shrink in size through a clutter of permanent hawkers' stalls or more substantial buildings supposed to cater to the cultural needs of the city. Occasionally, an impecunious land owner wants to unload his property on government and even if government purchases at a bargain price it feels bound to put the land into some immediate use in order to avoid a charge of favouritism, even though that particular area or site may not be the most appropriate one for the use to which it is put. The limited objective of a department and its need to exercise economy in its execution may lead to other harmful effects which an overall plan could have avoided. The Ministry of roads, in laying down its alignment, is not likely to be over-sensitive about how it cuts up the countryside to have as straight a road as possible, and the engineers, in accepting the lowest tender, are not likely to be squeamish about the fact that the contractor's tender rate could be low only because he plans to burn bricks on the spot at the cost of despoiling good agricultural land. The injury to agriculture is not likely to be his concern so long as he gets his road metals cheap. The various ways in which a departmental outlook may clash with an overall plan which takes into account all possible effects of any action relating to land should be too obvious to need any further elaboration.

14.23. Apart from this departmental myopia which blurs the general picture by focussing the spotlight on the particular objective, there is another aspect of the question which we may be permitted to refer to with respect. In all governments there may be certain dominating personalities whose word is law in matters of administration—the Minister whose express wishes his colleagues dare not contradict nor the officials to

disobey. In fact, some officials may even develop a knack of anticipating the wishes of such Ministers and framing their suggestions in line with their undeclared wishes.* This is not to suggest that the Minister's wishes are arbitrary or harmful but only that in setting his heart on one particular idea or scheme he may not have been fully aware of all its implications and repercussions on other spheres of life. A Ministry of Town and Country Planning with a hard core of officers possessing the requisite knowledge and vision will at least ensure that snap judgments do not commit the State irrevocably to a course of action from which retreat is impossible even when its harmful effect begins to be apparent, and that before any step is taken involving the use of considerable quantities of land and large expenditure of money, all possible consequences of such action affecting the welfare of the community are foreseen. Such a Ministry will be a clearing house of thought, a sieve for separating the essential from the non-essential, an instrument for placing each particular land using scheme against the general background of the needs of the community. The decision of the Minister will then be based on full knowledge, not on a 'hunch' which may have served him well in the majority of cases but which may also let him down badly in others.

* In conference after conference one occasionally got sick of suggestions emanating from officers 'because Punditji wanted it so'.

CHAPTER—XV

The Case for Planning (continued)

Town Planning

15.1. Whatever be one's views about the necessity of country-wide planning of land use in the interest of balanced economy, there should be little disagreement about the necessity for planning the city or town. The idea that free competition would choose the correct location of industries and other centres of activity, provide the correct time-sequence in development, and create out of a thousand uncoordinated efforts of separate individuals or bodies a coherent urban pattern has proved a myth; and even confirmed believers in the virtues of competition and market mechanism like Hayek have, as we have shown, admitted the need of such control. But Hayek considered the question only in terms of value as reflected in price which is not an argument likely to have much appeal for the general reader. It is necessary to consider the question in terms of our ordinary and everyday experience to enable us to see what it is that we miss without planning and what advantage we gain by adopting it. Our towns and cities have grown up without any serious attempt at planning, many being little better than over-grown villages with an urban facade, and even the planning of Calcutta has been sporadic, piecemeal and geographical rather than functional. Whatever control was exercised was limited to the imposition of the minimum municipal regulations regarding height, side space and structure, the prevention of noxious trades in residential localities, and the abatement of nuisances, which are a far cry from the positive control of growth and development with a view to create a good physical environment that is the object and *raison d'être* of modern town planning.

15.2. The elements of a good physical environment have been analysed by Abercrombie into beauty, health and convenience, a just equipoise between which is necessary to avoid lopsided development. According to him 'beauty' comes first and stems not so much from the architectural features of a single building as from the composition of a whole group of buildings and the setting in which these buildings are placed. "The quality of design is not limited to buildings; it should inter-penetrate every aspect and enter into every stage of the plan; the direction or curve of a road, the treatment of an intersection, the conformity to or contrast between natural features and human additions, the siting of a group of houses, all these and many more are matters requiring, in addition to engineering skill, 'Design', in which the claims of natural and artificial promptings are duly respected". * Uncompromising extremists would go further and control trees, bushes, gates, walls, fences, hedges, pillar boxes, road names and traffic signals whose design and integration in varying colours and textures are regarded by them to be of great importance in contributing to the whole resultant visual effect. †

15.3. In our under-developed state we are, however, inclined to lay more stress on 'convenience' which is what affects the life of the individual during the major part of his waking hours, once a minimum standard of health has been achieved. 'Convenience', however, is a shorthand expression with a multitude of meanings according to the context. When applied to means it must have reference to the ends which the means lead up to and must therefore have as wide a ramification of meanings

* Patrick Abercrombie, "Town and Country Planning", p. 163

† L. Keeble, "Town Planning at the Crossroads", 1962, p. 8.

as there are ends and functions requiring the use of land which an urban dweller may legitimately and fruitfully pursue. His primary necessities are a house to live in with his family, a place to work in for earning his livelihood, shops to make his purchases from, schools and colleges to send his children to, parks and open spaces for exercise or relaxation, and open country to refresh his spirit; while at a slightly different level stand the institutions and paraphernalia of a complex and progressive civilisation—libraries, universities, art galleries, theatres, clubs, cinemas, hospitals, banks, post and telegraph offices etc.—all dependent on their proper siting for their maximum usefulness and serviceability. A town-planner's vision as to how all these uses and functions can be spatially arranged in a town with due regard for convenience has been stated as follows:* It will be a town with a clear structure whose internal communication system—a well-articulated minor road system within a general framework of the major roads—is so designed as to ensure maximum accessibility and minimum congestion and risk. Its pattern and distribution of houses are so designed that homes and open spaces whose juxtaposition improves living conditions are placed together and homes and industries whose close contiguity are offensive to sight or smell are separated. Factories are set up so as not to cause any avoidable destruction of beauty or infliction of smoke or contamination of air within a housing district. The arrangement of business quarters, manufacturing districts, railway facilities, and residential quarters is such that it saves money to the businessman and enables citizens to move between home and work with the least loss of time and energy. The town centre, schools, playing fields and subsidiary centres for shopping and other facilities are located, designed and related in such a way as to meet fully and conveniently the daily needs of the users. Open spaces are so distributed that those who wish to play outdoor games can have a reasonable opportunity of doing so without exhaustingly long journeys while others who want to stroll into a park and spend an odd half hour for taking their morning or evening constitutional or enjoying a quiet rest after a hard day's work may do so without going far afield. The residential area, apart from being separated from industrial, commercial and business areas, would contain houses of such kinds and in such proportions as will enable every family to have a reasonable chance of securing a home of the size and kind it wants whether in houses, flats or bungalows. The most important requirement of all is the balancing of population and employment which, though more a matter of sound and effective economic policy than of physical planning, is so intimately connected with it that it is hardly possible to consider one without the other. The daily journey to work over long distances of large masses of men causes so much discomfort and inconvenience to those who have to make the journey that unless town planning helps to minimise these ills either by providing more housing space for workers within the town or finding more employment centres in the vicinity of areas whence the workers are drawn it may be said to have failed to deal with one of the most cruel and repressive of contemporary ills of modern industrial cum commercial society. Visually, the town should, looked at from outside, have a pleasing silhouette and clear, clean edges without peripheral clutter at the approaches. To put the matter briefly, a town or city should have an optimum population whom it can maintain, avoid a juxtaposition of incompatible uses with worksites (specially factories) separated from residence but not so far as to require long exhausting journeys, have a rational road system and adequate housing accommodation suitably sited with enough open space properly distributed for all age groups, and be compact in structure without excessive linear proliferation.

15.4. How do our unplanned towns measure up to the above standard? To take the last point first, do our towns have a clean edge or boundary where

* L. Keeble, "Town Planning at the Crossroads" 1962, p.6-8.

it can be said that the town ends and the country begins? The answer obviously is, 'No'. There is an endless suburban sprawl, mostly in the form of ribbon development, whose final culminations are the conurbations on either side of the river Hooghly to which reference has already been made. But the ribbon affects all roads radiating out of Calcutta to north, south-east and south-west and bulges out into a clotted mass of brick and mortar or flimsier local material whenever for some reason or other a nucleated human settlement tends to grow. Of the four methods of external growth—concentric spread, ribbon, satellite and scatter—the ribbon follows the line of least resistance, both topographically and economically, and is therefore the most natural form of evolution. It saves the builder the land needed for the approach road and the expenses of constructing it; where the road is already laid with sewers, water mains, gas or electricity it minimises his cost of connection; and it places the owner or occupier right on the major transport route and saves him the discomfort of walking a long distance to catch the bus. The arterial road is also the most convenient venue for a grand advertisement display to entice the passing crowd into the shop or the workshop or the factory. This tendency to ribbon development, latent in all kinds of unplanned growth, has been greatly accentuated by the advent of the motor car whose flexibility of movement, wider reach, and time-saving speed give it an advantage over all other forms of transportation, including the railways which can deposit suburban passengers only at fixed places and at infrequent intervals. But to say that a thing is natural is not to suggest that it is desirable, and the case for control was never more clearly demonstrated than by the ribbons which spread their tentacles from the city and hold the surrounding regions in their strong octopus grip. The longer they spread the less compact does the town become and the costlier the services because of the greater depth of drainage with a continuous fall instead of a series of short lengths; there is risk of trespass on agricultural back lands over a wider area; the houses facing noisy traffic routes are uncomfortable to live in and risky to children; the heterogeneous uses and people which the ribbon attracts because of its accessibility hampers social intercourse which a compact grouping of more homogeneous interests might have achieved; and even accessibility which was the strongest original attraction of the ribbon is very greatly reduced by the large number of vehicles of all descriptions which ply on a road not really built for such miscellaneous traffic. The spiritual deprivation is no less important. For miles and miles the ribbon blankets out the open country from the user of the road by a solid wall of drab houses and so large an area of almost continuous human settlements cannot but produce a desolating effect on man. It may even, though this is an unproved assumption, produce harmful ecological effect on human, animal and plant life in all kinds of ways. The ribbons and the conurbations are the unhealthy growth of a planless development. Even if it be impossible to rub them out altogether and start on a clean state it may have to be considered whether it is not possible to humanise them so as to make them physically, psychologically and economically more tolerable by driving a wedge of open space between their main constituent parts and interposing a gap between masses of human dwellings. But this means a decision about the intended future structure of these conurbations and imposition of rigorous control on all future development.

15.5. The ribbon is the natural (we may almost say, the illegitimate) offspring of the more important urban roads and it is time we considered generally the desirable pattern of the network of urban roads which is the ground plan of a town or city. In a perfectly balanced town the road system should incidentally reflect the zoning of land for different kinds of use which we shall deal with later. Here we confine ourselves to its natural function which consists in providing access to dwellings and other places

and routes of long distance traffic. The traffic load which the roads have to bear vary in their character and composition (goods or men or both), in their origin and destination, in their timing and frequency, and in their means of locomotion. Prior to the invention of the motor car there was no conflict between long distance and access roads and the same road could do duty for both. Now, as Sir Alker Tripp has said, pedestrian and fast motor traffic can hardly safely mix and should be separated. "The goods traffic movement of a great city involves the import of raw materials for industries, building materials, and food stuffs, and the export of manufactures for the international, national and the regional markets. There is a vast inward movement of goods in bulk—among which coal, sand and building materials are the bulkiest—and a much smaller outward movement of manufactured goods, smaller in bulk, higher in value and varied in consignment. Further, there is the inward and outward movement of traffic to and from the city core. Thirdly, there is an enormous internal daily movement of goods to and from goods depots, and to and from the central business districts, and to and from the sub-commercial centres".* What has been said above of goods traffic is also true of the movement of men; only in this case pedestrian traffic is more numerous and scattered, the rest use vehicles of all types and speed, and there is a daily swelling tide of traffic at the rush hours which occurs as rhythmically and regularly as the swelling tides of the ocean. The trams and buses groaning and creaking under the huge human load they carry during these hours; the long wait; the discomfort, fatigue and personal risk of the vast majority of people who have to use public transport because they live a long way off and have no cars, the difficult parking of cars (often at a distance which defeats the very purpose of using a car) even for the fortunate car owners whose number is gradually increasing—all are evidence of the congestion with which the city roads are faced. As more people pour into the cities and more residential building are erected, industries set up or commercial houses established, there is an inevitable increase in the number of pedestrians and of cars and heavier vehicles crowding into the narrow streets and choking off the traffic. The desperate remedy of earmarking some roads as 'one way' for some part of the day is a palliative which breaks down under increased pressure. In fact, if imposed without previous notice and publicity, it often drives the motorist crazy by making him move from pillar to post in a frantic attempt to get out of the labyrinth in which he finds himself trapped. A great deal of this confusion can be averted by a better planning of roads. Not that planning will make all road accidents impossible, for even under the best of plans brakes will still fail or mechanical defects develop, drivers will still be rash or incompetent, jay walkers will still move about in utter disregard of other people's conveniences, and confused pedestrians of slow physical and mental reaction still behave as if they were the pre-destined victims of a suicidal mania. But good road planning may make traffic control easier by reducing the bottlenecks, and substituting in many places automatic inhibitions and stimuli for man-made restraints and traffic lights. The two steps which are fundamental in this connection are first, to minimise the traffic load on roads, and second, to facilitate a smooth movement of the traffic that must inevitably be on the road. The first can be achieved by setting a limit to the inordinate expansion of the town and by so placing work-places and houses in relation to one another that either the journey to work may be done on foot

* R.E. Dickinson—"The West European City", 1962, p. 530. Whether the author means that the outgoing traffic (in terms of the number of vehicles) is less than the in-coming traffic is not clear, but if he does, his assumption is not correct. All the vehicles that come in must necessarily go out, whether they are fully loaded or not at the time they go. For the purpose of density of traffic it is the number of vehicles that ply which matters, not the weight or volume of the loads they carry. The points of attraction are also the points of repulsion.

or, if public transport must be used, the movement is not towards the same nodal point but in different directions. The second would follow from a road system which splits up different kinds of traffic in such a way that fast traffic is separated from slow and long distance from short distance, while lateral movement is encouraged by inner ring roads which avoid towns centres and other nodal points where traffic is likely to get bogged. Both are matters within the special province of town planning.

15.6. What constitute a rational road system? Obviously one which fulfils its functions smoothly, economically and with as little chance of aberration as possible. For the latter, a system which gives most streets an individuality and can be easily memorised is better than one where repetition of geometrical patterns produces a uniformity which requires consultation of the map or street plan at frequent intervals. For the former a distinction must be made between (a) arterial or radial roads for through traffic, (b) major roads of a neighbourhood and (c) minor residential roads within the neighbourhood whose primary function is to give access to dwellings. The defect of the present system is the presence of what Sir Alker Tripp calls the 'nondescript' roads which have to combine a number of distinct functions and are unable to do any one very satisfactorily. There is a hopeless congestion at the town centre or centres where the radial roads converge and too many junctions and intersections on these radial roads to make them reasonably good 'express ways' for the purpose of fast traffic. There is an absence of by-pass roads for traffic that need not enter into the city at all and of convenient lateral roads for long distance journey within the town. And the minor road system within a residential area is crazy and incoherent and made dangerous by interloping vehicular traffic.

15.7. It is, however, possible to carry the remedy to absurd lengths and produce results which are the reverse of what is wanted. To stop all or most of the junctions and intersections on the radial roads in the interest of through traffic may not be feasible or easy but the suggestion that all buildings on such roads should be compelled to turn their backs on the roads seems so utterly unrealistic that it is surprising that it could have been seriously made.* It would be an outrage on one's aesthetic sense, even apart from the loss of economic value, to see a long succession of high blank walls lined with a serried mass of drain pipes descending from roof to bottom, and even the pleasure of driving uninterruptedly at maximum speed along a wide stretch of radial road would be a poor compensation for such intolerable ugliness. Or, is it the intention that the shop fronts should remain as they are and only the access should be from the back? This however would mean two roads for one row of shops.

15.8. This ridiculous apotheosis of speed symbolised by the fast-moving car has been described by Lewis Mumford in his latest book† with such lucidity and restrained emotion that we are tempted to quote long extracts from it for which, alas, there is no space. He points out that there is a risk of throwing away the baby with the bath water if we put speed on such high pedestal to the exclusion of everything else. Once wheeled traffic is treated as the chief concern of planning there will never be enough space to keep the city from being congested or high enough residential density to provide taxes sufficient to cover its exorbitant demands. The role of traffic is to facilitate meeting and human intercourse and speed in locomotion must be a function of this purpose, not its master. The notion that power and speed are desirable for their own sake and that the latest type of fast-moving vehicles must replace every other form of

* The suggestion was made by Keeble in his 'Principles' and repeated in his latest book 'Town Planning at the Crossroads'.

† Lewis Mumford--"The City in History", 1961.

transport is therefore a fallacy ; an adequate transportation system cannot be created in terms of any single means of locomotion however fast its theoretic speed. An effective network requires the largest number of alternative modes of transportation at varying speeds and volumes for different functions and purposes, for if a hundred thousand people have to be moved within a limited urban area, say a half mile radius, the slowest way would be to put them all into motor cars.††

15.9. "The only effective cure for urban congestion is to so relate industrial and business zones to residential areas that a large part of their personnel can either walk or cycle to work or use a public bus, or take a rail-road train. By pushing all forms of traffic onto high speed motor ways, we burden them with a load guaranteed to slow down peak traffic to a crawl ; and if we try to correct this by multiplying motor ways, we only add to the total urban wreckage by flinging the parts of the city further away in a formless mass of thinly spread semi-urban tissue. * * * * Good urban planning must provide a place for the motor car. But this does not in the least mean that the motor car must be permitted to penetrate every part of the city and stay there even though it disrupts all other activities. Nor yet does it mean that the manufacturers should be permitted to flout the requirement of the city by designing ever broader and longer vehicles. The time has come to discriminate between two functions of the motor car—urban movement and country-wide movement. For the latter, a big car with plenty of room to house a family and hold their baggage is admirable. In the city, however, such cars should be encouraged to stay on the outskirts and be heavily taxed for the privilege of parking within it. Moderate speed, quiet, ease, and compactness of parking—these are the characteristics of a town car. It is an absurdly impoverished technology that has only one answer to the problem of transportation ; and it is a poor form of city planning that permits that answer to dominate its entire scheme of existence."*

15.10. But the rejection of the dominant role of high speed motor car in dictating the plan of the city does not invalidate the proposition that a good plan, adopted with due regard to the reasonable requirements of the motor car and implemented in advance, avoids many of the difficulties and problems of traffic which an unplanned town has to face in the course of its growth. For a brand-new town, planned and built up from scratch, this should be fairly easy. It becomes enormously more difficult when a town has already grown up round an old and unsatisfactory road system and much capital already invested in buildings, industrial plants and other institutions on both sides of these roads. To widen and straighten them and to integrate them into a coherent system with due regard to their location and use would require a colossal expenditure in land acquisition and construction and a vast destruction of existing capital from which even the richest country might quail. But even here a time comes sooner or later when the step has to be taken if not for the town as a whole, at least for sizable sections of it. If there is a sound master plan prepared in advance there is no harm even if the execution is piecemeal and spread over a fairly long period. Looking at the matter from the national level one has to take stock of the requirements of a really satisfactory road system and then find out how to obtain it as quickly and economically and with as little interim chaos as possible.

15.11. From a well-planned road system to a well-planned town is but a step for the two are mutually interdependent. A well-planned road is meant for smooth traffic circulation but smooth flow of traffic cannot be ensured unless the volume or density of traffic is controlled. This, as we have already said, depends upon two factors

††One is reminded of the 'Punch' cartoon where a motorist, on seeing a friend walking home, offered her a lift 'if she was not pressed for time.'

* Lewis Mumford, "The City in History," 1961, pp.508-09.

viz. the density of population and the distance of the journey from home to work. To be strictly accurate, the last portion of the foregoing sentence should read as "distance of the journey from home to any other place where men and women have to go for work or on business or in search of pleasure or recreation" since every activity which brings a man on to the road adds to the potential load on the internal road system. Men (and often women) go out daily to their work unless unemployed or retired. They go to markets for their daily bazar and shops for their occasional purchases, visit friends and relations, go out for a breath of air in the parks or to the open fields or playgrounds for more vigorous exercise, attend libraries, universities, or academies or meetings to improve their minds (or to improve that of others), join clubs, flower shows or convivial gatherings, go to courts, banks and offices, visit doctors and clinics, go to cinemas or theatres etc.—in fact, to hundred different places for hundred different purposes which cannot be achieved at home even when the use of the television becomes more widespread. The children must go to schools and colleges and also play games and very young children may prefer a green patch outside their house on which to run and romp about. One of the primary principles of good town planning is that while for journeys that have to be undertaken occasionally or for pleasure distance from home need not be a paramount counter-argument, for all journeys that have to be undertaken daily or at frequent intervals in connection with the ordinary needs and duties of life—especially journeys by children and young persons—proximity from home and the elimination of a risky or a fatiguing journey to and back should be an important consideration. This, and the provision of adequate space for housing with due regard to sunlight, air, convenience and privacy, the creation of a milieu where the individual feels himself to be more a member of a community than a mere atom in an anonymous mass of undifferentiated humanity, a balanced allocation of space for different functions and an opportunity to renew one's contact with unspoilt open country whenever one wants to, are in a nutshell the case for and a justification of town planning. The provision of the right amount of land for each use in the right place and on sites physically suitable for such use is the objective of town planning, and right place in this connection means the proper spatial relationship between homes and work-places, between homes and schools, between homes and shopping places of various levels and between homes and places of entertainment both indoor and out.

15.12. How can this be done without conscious planning? Without planning there is no check on the growth of population density through migration, except the natural check of geography but even this is continuously being circumvented by filling up all empty space with houses of all kinds, squatting on lands not fit for human habitation, reclaiming peripheral swamps and cutting down orchard lands in the outskirts to form one long continuous suburban sprawl which is without plan, without minimal municipal services, and without any of the conveniences of urban life except a feeling that it is within the ambit of the metropolitan centre. Anybody who steps off the beaten track and penetrates on foot into the mass of human (and sub-human) dwellings which have sprung up for miles and miles in the Greater Calcutta region will see how appalling may be the result of piecemeal development without control or plan. The optimum residential density in a town which Mumford puts at 100 per acre while others put it at much less has long been exceeded in Calcutta and in almost all other cities. Unlike 19th century English cities which regarded mere size as a desirable attribute Calcutta, without conscious volition or desire on its part, just 'grew' because it could not help it. †

† Calcutta successfully resisted the Rowland Commission's suggestion for inclusion of Garden Reach, South Suburbs and Tollygunge. The subsequent inclusion of Tollygunge in the fifties was forced on it probably because vested interests wanted it so.

But there was no attempt either by the city-fathers or at governmental level to do what Sir Patrick Abercrombie was commissioned to do for London and Greater London viz. to transform a shapeless sprawling metropolis into something different by a planned dispersal of the surplus population. The reduction of population density of overcrowded cities cannot be done without planning.

15.13. But such reduction is not enough if there is a confused welter of uses in close juxtaposition while men live under the shadow of factories assailed by noise, vibration, smoke, soot or grime; or industries are scattered all over the city disturbing a quiet residential area and intensifying its traffic; or residence and employment centres are so located in relation to one another that long journeys are impossible to avoid; or the exiguity of open spaces drives old men, women and children to the "paved desert, adapted primarily to wheeled traffic, to serve also as park, promenade and playground; a grim park, a dusty promenade, a dangerous playground". *

15.14. The broad classification of uses of urban land is into residential, industrial, administrative, commercial and open space, and, when a university with its constituent and affiliated colleges is situated in a compact area within the town, also educational. It is generally assumed that all these different uses should be segregated as far as possible, though commercial and administrative uses are expected to congregate in the town centre, together with some aspects of the social life of the town in their highest and most complicated forms such as shops for the most important purchases, offices, banks, town hall, libraries, museums, theatres and cinemas. There is, however, no logical reason why all of them should be crowded into one town centre.

15.15. How much land should be allocated to each kind of use is a matter which depends upon the purposes which a city is intended to serve and the population it expects ultimately to provide for. Both are matters which have to be envisaged in advance if the right allocation is to be made and this is the very essence of planning. Assuming that both are known, the next question is to decide the quantity of land for each kind of use and its distribution. In a capitalist economy where land is a commodity for sale or hire, every parcel of it is likely to go to the highest bidder if there is no restraint on use and free competition alone determines location so that uses which yield little or no profit to the investor tend to be pushed to the wall. Schools are not sited close to where the residential houses are but on the outskirts or where cheaper lands are available. Exclusive playgrounds are out of the question, and municipal open spaces are extremely exiguous. In most towns they seldom exist except on sufferance.† In well-planned towns open spaces are placed between two neighbourhoods or between a neighbourhood and the surrounding country so that they may cushion the impact of the main roads on the residential area or prevent trespass or damage on agricultural land. Open spaces meant for playing field are gathered together and not diffused but they are not lumped together with parks whose uses are different.

15.16. In an unplanned town the houses are put up not in response to need but in response to ability to pay rent for them, and big palatial air-conditioned houses exist simultaneously with bustees whose classic description by the Royal Commission on

* Lewis Mumford—"The City in History". p.427

† Even in the biggest city of this State, Calcutta, the proportion of open space is far less than the 7 acres per 1000 persons which is the standard accepted in U.K. but not yet realised. What little there is is being constantly nibbled at by hawkers and sports clubs or bitten off in large morsels as has happened to the Maidan (with the acquiescence of those whose duty it was to protect the Maidan) without much audible protest from the public. (It may be observed, however, that the above is only a theoretical standard and the utmost that London proposes to provide is 2.5 acres per 1000 persons).

Indian Labour is still worth quoting. "Houses are built close together, eaves touching eaves, and frequently back to back, in order to make use of all the available space. Indeed space is so valuable that in place of streets and roads, narrow winding lanes provide the only approach to the houses. Neglect of sanitation is often evidenced by heaps of rotting garbage and pools of sewage, while the absence of latrines enhances the general pollution of air and soil. Houses, many without plinths, windows and adequate ventilation, usually consist of a single room, the only opening being a door often too low to enter without stooping. In order to secure some privacy old kerosene tins and gunny bags are used to form screens which further restrict the entrance of light and air. In dwellings such as these human beings are born, sleep and eat, live and die." But bustees are not the only slums in Calcutta for conditions of overcrowding, dilapidation, absence of ventilation and light, inadequate municipal services and the narrow airless lanes on which they stand would bring about a quarter of the masonry houses in Calcutta under this label. Town planning is concerned with the space requirements of residential houses and how they are to be distributed. What kind of dwellings (detached, semi-detached or flats) are best for people and whether they should be subsidised are slightly beyond its scope, but without some idea of the type and number of dwellings of different kinds needed as well as the permissible occupation density the calculation of space requirement is hardly possible.

15.17. 'Neighbourhoods' mentioned in a previous paragraph are the result of the segregation of uses and the requirement of avoiding long journeys to work. Their principle, as Mumford explains, is to bring within walking distance all the facilities needed daily by the home and the school, and to keep outside this pedestrian area the heavy traffic arteries carrying people or goods but having no business within it. Once a walking distance is established as the very criterion of a face to face community, it follows that playground for school children should not be more than a quarter of a mile away and the same principle should be applied with variations to the distance from home of the primary school and the local marketing area. Both the population and the peripheral spread of such a community are limited and might be physically defined by either a road system or a green belt or both.* The American Perry who formulated the neighbourhood principle placed the population of such units at about 5000 but others would have the higher figure of 10000 or thereabouts. The exact population figure is however less important than the requirement that it should be segregated from other areas by means of radial roads which give to it a physical identity while its system of internal roads meant for local use secures safety for pedestrian traffic. In such an area it is possible to support and distribute within reasonable reach of the whole population all the services required for day to day living except of course the main employments which, as concentrated in offices and industrial areas, must be sited in relation to the town as a whole. Such a unit contains schools of different descriptions—nursery, primary, secondary—of which the first two are for obvious reason more numerous than the third. It should have open spaces distributed in the manner already mentioned, at least one main shopping centre and groups of shops within a quarter of a mile of every house, and community centres or places of assembly of a more modest scope. And there should be all the necessary service industries of a commercial or quasi-commercial type which cater to the fairly common daily or periodical needs of citizens. A neighbourhood is not a sealed-in unit designed to prevent intercourse with the rest of the city but a fundamental social cell within which the primary needs and activities are contained while big centres are reserved for higher purposes and larger gatherings. It promotes solidarity and fellow-feelings but to turn it into an instrument for bringing about social

* Lewis Mumford, *Op.cit.*, p. 801.

homogeneity by throwing all classes and conditions of people together on the same street is unwise and has not worked well in practice. The appropriateness of making social mixture an object of urban planning is, to say the least, doubtful.

15.18 It cannot be questioned that the physical environment in which a man lives has considerable effect upon the completeness of his enjoyment from participating in the various activities in which he is interested. The accessibility of public places and shopping centres, the layout and distribution of open spaces, and the arrangement of communication routes both vehicular and pedestrian, can be such as will either promote or hinder a relatively harmonious and frictionless way of life. The conscious pursuit of visual beauty in the environment can add immensely to the positive pleasures of life. Houses, roads, factories playing fields etc., are costly and have a longer span of life than that of an individual. Their cost and the relative slowness of their replacement makes it all the more important that they should be as well co-ordinated as possible, in accordance with the best available contemporary opinion, and likely to remain reasonably suitable and sufficient for a long time ahead.

15.19. How can this be ensured ? The answer of course is that it cannot without firm control by public authorities specially empowered by law to exercise such control and competent to exercise it. Dr. W. A. Robson has so lucidly summarised both the need and the scope of town and metropolitan planning at the end of his long introductory essay in "Great Cities of the World" edited by him that no apology is needed for quoting him at some length.

15.20. "Many of the most difficult problems which confront the great city can only be solved by far-reaching and imaginative planning. The elimination of overcrowding in the densest quarter ; the provision of reasonable amount of land devoted to park, playing fields and other outdoor amenities ; the opening up of suffocating alley-ways in the older parts of the city ; the reclamation of slums and derelict residential, commercial and industrial areas ; the avoidance and elimination of high population densities in the central areas in order to exploit the enormous land values which accrue in the great metropolis ; the reduction and prevention of long exhausting and expensive journeys to work which waste the money, health, energy and time of those who live in the outlying suburbs of a great city ; these and congate aims to cure the maladies which are commonly found in the metropolis can only be achieved by well considered, drastic and creative planning.

15.21. "Such planning must secure control of the whole metropolitan region which is centred on the great city. It must comprise both town and country within its scope. It must be positive as well as negative ; it must prescribe what should done and not merely what is forbidden. ****

15.22. "Effective planning of a metropolis is impossible unless a limit is placed on its maximum size and population. The essential instrument for enforcing this limit is control over the location of industries. If new industry is permitted to enter in the metropolitan area freely and existing industries are allowed to expand indefinitely no real control over either the ultimate size of the metropolis or its design is possible. The abolition of slums, the clearane of overcrowded tenements, the widening of narrow airless streets, and the rehousing of people at a reasonable standard, inevitably produce a big problem of urban dispersal and overspill. This can only be solved on rational lines by redistributing the population between overcrowded quarters of the central city and the suburbs, towns, villages and housing estates in the outlying parts of the metropolitan region. De-congestion means decentralisation ; but it is senseless to move people out to the suburbs or semi-rural housing estates if they are obliged to work in the great city and to make costly,

exhausting and time-consuming journeys to and from their work. It is far better also to move out the factories, warehouses, offices and work-places or to encourage new industrial developments in satellite towns or garden cities where the work-people can enjoy not only good housing conditions but agreeable environment and easy access to the countryside. By doing so, we can once more bring together the home, the work-place and the playground or recreational centre, the essential triad of human life {which has become scattered and disunited in the welter of the modern metropolis. The worst feature of many metropolitan areas to-day is that much of their environs consists of neither town nor country but merely of land suffering urban blight.

15.23. "When we have done all this * * * we shall find that we have transformed the great metropolis. In place of an inchoate metropolitan community continually shuttling back and forth between suburbs and central city * * * we shall gradually create an ordered and coherent decentralised metropolitan region. The central city will contain the institutions which need vast resources and the support of a large number of people * * * which can best flourish in the great city and cannot be easily decentralised. The outlying towns or settlements of the garden city type will contain houses, flats, factories and offices, shops and laboratories, schools, cinemas, civic centres, lending libraries and many other institutions to enable the local communities to lead a largely self-contained life for much of their time but with recourse to the central city when occasion demands,"*

15.24. This was said with reference primarily to England but with slight modifications the arguments apply to our country as well.

* Great Cities of the world, 1957, Ed. by W.A. Robson, pp. 101-05.

CHAPTER—XVI

Limits and conditions of planning

16.1. After what has been said in favour of planning it may be paradoxical to speak of its limits. But planning must have its grass-roots in the community where it operates; it cannot transcend the practical limitations imposed by the social and political conditions of the day, the economic and administrative resources of the community, and the degree of popular acquiescence in the curtailment of liberty which is contemplated. To the extent that these limitations are absolute, they set definite limits to the area of planning; to the extent they are variable, their removal is the condition of its successful working. Some of these limitations stem from the human elements involved in the process of planning—the Ministry and the administrative machinery which work it out and enforce it, and the people who feel its impact and react to it in different ways. Other limitations may derive from the organs of popular democratic government at different levels and the degree of efficiency with which they are administered. Still others relate to the planning process and the content and scope of the subjects that should be brought under planning control.

1. The Ministry

16.2. If government agree that planned control of land use is desirable and urgent they must give town and country planning a recognised place in the scheme of administration. This means either the creation of a separate Ministry of town and country planning or the setting up of a department of town and country planning attached to a Ministry of sufficient standing which can make its voice decisive in the Council of Ministers—a Ministry somewhat akin in rank to the Finance Ministry with which indeed it will have some points in common because each will have to act as an arbiter in relation to the conflicting demands of different departments, whether in respect of the allocation of financial resources during the framing of the budget, or in respect of allocating the land resources during the formulation of a land use plan of any particular area. As the future devolution of planning powers on local authorities is a desirable objective to be always kept in mind, it may be advantageous to make it a wing of the Ministry of Local Self-Government and Panchayats as is the case in England, but the main point is that the Ministry must have adequate prestige and status and must be the only Ministry charged with securing “consistency and continuity in the framing and execution of a national policy with respect to the use and development of land”* throughout the State. Once the national policy is determined the administration of planning control must be unified in one place. The mistake in the English planning administration which makes the Planning Minister play second fiddle to the Board of Trade in fixing the location of industries and to the Ministry of Transport in fixing trunk road routes should not be repeated here if we want to avoid the anarchy that flows from each department following its own independent line. It is necessary to stress this point because of a possible trend towards a new geographical division of responsibility in addition to the functional division which now exists. Already there is a Land Utilisation Board set up by the Ministry of Land and Land

* This is how the function of the Minister of Town and Country planning was described in the English Minister of Town & Country Planning Act, 1943. The name of the Ministry has now been changed to “Ministry of Housing and Local Government”.

Revenue whose purpose, as explained by the Minister in one of its rarely held meetings, is to advise government on how all lands within this state (and not merely lands whose khas possession has devolved on government after estates acquisition) should be utilised. Then came the Health Department notification dated 12th May 1961 which set up the Calcutta Metropolitan Planning Organisation with functions covering a comprehensive programme of town and regional planning for a practically undefined area under the direct control of the Chief Minister. The present Commission whose obvious purpose is to suggest on what lines a town and country planning law should be framed to regulate and co-ordinate land use in this State was set up by the Ministry of Local Self-Government and Panchayats. All this is an indication, if not of a competitive bid to become the putative father of a child yet unborn, at least of some confusion and uncertainty about its authentic affiliation and kinship. Where does town and country planning really belong? Should it have a separate Ministry of its own? The question, so far as we know, has not yet been asked nor answered, but the present position is anomalous and a clear decision of government is necessary. If the planning of the metropolitan city of Calcutta must be under the control of the Chief Minister because of its importance the entire department of town and country planning must also be placed under him. That is the only way to ensure administrative economy and tidiness, avoid overlapping jurisdictions and conflicting decisions, and create a central pool of planning skill from which all authorities concerned with physical planning can benefit. A division of responsibility, whether based on function or geography, would be fatal. As town and country planning will be a comparatively new subject both for the Minister and his officers, preoccupation with many other duties would deprive it of that systematic and concentrated attention which it should need on account of its novelty and its impact on people's living conditions and rights of property.

16.3. The creation of a department means shouldering some financial liability which may not be too small. It has been suggested that if action is confined to preventive control only it would merely mean "directing to appropriate places and securing an appropriate form" for developments which private enterprise was prepared to undertake in any case, and the cost, consisting only of the cost of the staff engaged in such direction would not amount to much.* We do not think so. As Mr. Peter Self says in his reply to the questionnaire, a detailed regulatory control over the use and development of land such as operates in Britain involves an elaborate administrative machine which is currently handling in that country over a million applications in a year. Moreover if such 'direction' is not to be arbitrary it must be based on a comprehensive plan prepared in greater or less detail by a large general and technical staff with varied qualifications and training working over a period of years. In U.S.A. and U.K. all or the major part of the cost of preparation is borne by the local bodies, the central government's large staff in England being intended only to supervise and scrutinise what is being done at the lower levels, to hear objections and appeals in connection with planning and its administration, and to carry on research whose visible result is an unending stream of rules, circulars, instructions and some quite valuable handbooks for guiding the local planning authorities in carrying on their duties. In this State very few local bodies, even if they are entrusted to-day with planning and its administration, will be able to finance it out of their own funds. Planning will have to be done directly under government auspices and by deploying a section of the permanent planning staff which must be attached to the department of town and country planning suggested above. The strength of the establishment will depend upon the scale of operations and the type of control sought to be

* L. Keeble - "Principles and Practices of Town and Country Planning", P.11.

enforced, but even if operation is limited in the first instance to some of the major urban areas the size of the staff will have to be fairly large and at the top echelons, fairly highly paid.

16.4. This extra cost will not be balanced by an increase in any immediately realisable taxable revenue, or increased popularity. Good planning aims at long range and diffused benefit to society but yields no immediate political dividends. Bad planning may, as Prof. Cullingworth shows in his recent study of planning policy in England. * A diffused advantage to the community is always less appreciated than those concentrated advantages which benefit certain sections, and a government acting genuinely in the interest of the general public runs the risk of being thought by each such section to be perversely ignoring its interest. † But it is far better not to have any planning control at all than to have one which, either at its inception or during its execution, is influenced by pressure groups or flouted by individuals or private developers because of the planning authority's lack of courage or administrative competence to enforce it. True, government must occasionally compromise to keep its following in good humour, to win financial and political support to its policy and programme, to avoid hurting susceptibilities which, however irrational, may be one of those imponderables which demand gentle rather than violent treatment. Road side trees therefore blossom into temples and graves into 'dargas' to encroach on the carriageway of important thoroughfares, hawkers crowd out pedestrians from pavements and central grass verges, displaced persons clutter the open spaces and vacant lands with a mushroom growth of huts—all because any drastic step taken against them might prove politically embarrassing. But if planning is to succeed a line must be drawn beyond which government cannot allow itself to be deflected. A conference of planners with a strong official leaven suggested some years ago that in order to insulate physical planning from the influence of pressure groups the respective functions of ministers and officials should be clearly laid down in the legislation. This suggestion which assumes fallibility in ministers but takes official integrity and competence for granted seems to us both preposterous and presumptuous. We would prefer to follow the English model where the ultimate decision lies always with the Minister who is at least responsible to Parliament but who, before he confirms a development plan or gives decision on a planning appeal, has the matter thoroughly examined by one of his inspectors and gives his report the fullest consideration before arriving at his decision. The main point is that if public confidence in planning is to be maintained the Minister must be, and must appear to be, motivated by no other consideration than the welfare of the community as embodied in the policy already formulated by him. The conditions of successful planning, so far as government is concerned, are a unified administration, readiness to undertake the financial obligation, and successful resistance to pressure from whatever quarter it comes.

2. The planning and administrative personnel

16.5. The adoption of a policy of land use planning is only the first step; the more important step is to make it work. The extent of control and its successful working depends upon the ability of the community to find within itself a cadre of adminis-

* "Though it might have been agreed that the New Towns method of providing what is needed will be the cheapest in the long run, politicians were concerned with the short run. A policy of overspill catches no votes; the sheer size of the housing programmes does. And what quicker way is there of providing houses than by allowing the development of outskirts"? (J. B. Cullingworth—"Housing Needs and Planning Policy" 1960, p. 146).

† Bertrand Russell- "Authority and the Individual", p. 69.

trative officers and technical personnel who combine knowledge, efficiency, honesty and zeal with broad human sympathies. What Lady Barbara Wootton said with reference to economic planning applies to physical planning as well. Success or failure will turn on the behaviours of the men and women who have the actual responsibility of planning and on whether their care for the freedom of others is stifled by the habit or exercise of authority. * Planning, even at its best, comes very near to being a sort of benevolent despotism. In unenlightened hands it might develop into an objectionable dictatorship. While it should be regarded simply as a means to an end a complex administrative machinery might easily turn it into an end in itself. †

16.6. It is however necessary to distinguish between two categories viz. the bureaucratic machine against which the corrupting influence of power is charged, and the specialist personnel entrusted with planning and planning administration. As regards the first, the Commission admits that some of the misgivings in the public mind about extension of governmental control over what has hitherto been regarded as one's private concern is justified, but this is not a disease peculiar only to our country. Bertrand Russell speaks of the love of power and dislike of work which in a highly organised society characterise those who exercise governmental authority from the Minister down to the most junior employee in a local office; ** and Professor Hayek, looking at it from the opposite angle, considers the efficient expert administrators, exclusively concerned with what they regard as public good, as the greatest danger to liberty in western democracies to-day. Over these officers "the Minister's control has become a myth and the control of Parliament is and has always been a fairy tale". This sort of administration of the welfare of the people inevitably became a self-willed and uncontrollable apparatus increasingly invested with the mystique of sovereign authority. †† Lest it be thought that his strong dislike of all forms of control has made him lay his colours too thick he quotes the view of the eminent jurist Roscoe Pound to the effect that "the zeal of the administrative agency to achieve the immediate ends they see before them leads them to see their functions out of focus and to assume that the constitutional limitations and guaranteed individual rights must give way before their zealous efforts to achieve what they see as the paramount purpose of government. *† Having started as a planner of the use of land, he may end up by trying to plan the life of the community. †*

16.7. All this really means that no plan can work successfully unless officers in whose hands considerable powers will necessarily be placed behave as public servants, not as masters, shed laziness as well as the intoxication of power, and curb an excessive

* Barbara Wootton—"Freedom under Planning", p. 140.

† Desmond Heap—"Outline of Planning Law"—Preface to the 1st edn.

** Bertrand Russell—"Authority and the Individual".

"A civil servant who says 'no' to a project satisfies at once his pleasure in exercising authority and his disinclination for effort. *** Even if you only wish to register a letter at a post office, the official is in a position of momentary power; he can at least decide when to notice that you desire attention". (p. 70, 76-77).

†† F. A. Hayek—"The Constitution of Liberty", 1960, p. 262

*† Cf. also Franks Committee's observations.

"Nothing can make up for a wrong approach to administrative activity by the administration's servants. Less public resentment would be aroused against administrative action if officials were trained in the principle that the individual has the right to enjoy his property without interference from the administration, unless the interference is unmistakably justified in the public interest." (para. 405).

†* Justice Scarman's speech reported in the Journal of the Town Planning Institute, July-August 1962, p.188.

zeal to do good to people without ascertaining people's reaction to the step they are about to take. This is not disputed and it necessarily imposes some limit on the extent of planning, but it is not a decisive argument against all planning. Such officers may not be plentiful but they are not altogether rare. With proper recruitment and training their number will increase with time, provided the Ministers and the public demand an exacting standard from them. To quote Barbara Wootton again "All the old clichés are just as true as ever they were—power still corrupts, absolute power still corrupts absolutely, and eternal vigilance is just as much the price of liberty as ever it was."*

16.8. The real difficulty however is the dearth of qualified planning personnel from whom, in addition to all that is expected from public servants generally, special knowledge and technical competence of a high order are demanded. The limited opportunity that now exists cannot really train up at short notice a large number of planners if demand increases with the adoption of countrywide planning as part of government's policy. The qualification for the planning staff, required to give effect to the English Town & Country Planning Act 1947, was considered by the Schuster Committee whose somewhat diffuse report, submitted in 1950, suggested that the chief planner's function was primarily that of Synthesis and not Design—"a synthesis of separate policies and claims into one consistent policy for the use and development of land within a particular area, and the devising of means to translate that policy into a plan that is practical, economical and aesthetically pleasing". The role of Design being subsidiary to that of Synthesis the Committee laid down the following essential qualifications in order of importance:— (a) certain innate qualities of intellect and character, (b) a sound basic educational discipline, (c) some specialist knowledge of planning, and (d) lastly, some practical training and experience. The innate qualities demanded are very high—intelligence, vision, imagination, sound judgment and common sense, broad sympathies and human understanding, the ability to make decisions and persuade others to accept them, in fact, all the elements which go to confer on an individual a high degree of maturity and great administrative ability. For basic educational discipline they inclined heavily in favour of a high class university degree in the social sciences (economics, law, sociology, history) or engineering, architecture, geography or any other subject (like the Oxford Greats) which had a special value as developing thought and understanding of the humanities. They denied the claim of engineering, architecture and surveying as the only "Open Sesame" to an esoteric town planning lore and thought that other disciplines might be equally or even more fruitful. The foundations in basic discipline should be laid early in life to counteract the narrowing effect of later stages of specialist education which, they suggested, should be acquired by a two-year post-graduate course in a university, preferably after a period of practical experience.

16.9. These recommendations did not please architects, engineers and chartered surveyors who had hitherto regarded town planning as their exclusive preserve. The professional teachers who thought that a full degree course in a university in town and country planning could be devised with only so much of the diversified knowledge of different disciplines as was necessary for the purpose gave it qualified support, not being fully satisfied with the attitude of benevolent neutrality which the Committee displayed towards them. For us the controversy is slightly unreal as town and country planning knowledge acquired abroad has to be suitably modified for adaptation to our country. Lack of original thinking and rigid

* Barbara Wootton—"Freedom under Planning", p. 140.

adherence to the book lore learnt in the West which characterise many specialists in India have not escaped the discerning eye of many foreign observers. Dr. Mrs. Ruth Glass deplored it in a discussion she had with the Chairman of the present Commission when she saw him some years ago in Calcutta; and Mr. Jack Wood of U.S.A., sometime visiting professor of regional planning in the Indian Institute of Technology, Kharagpur, observed that reliance on foreign teaching techniques and syllabi, coupled with lack of research and experience in the schools, often resulted in courses heavily laden with subject-matter inappropriate to Indian conditions and needs.*

16.10. There are at present three schools offering training in town and regional planning leading to an advanced degree or diploma. In two of them (B.E. College, Shibpore and I.I.T., Kharagpur) planning is a separate field of study in combined departments of architecture and planning. The third (Delhi School of Town and Country Planning) is an independent institution under the control of the Government of India, which is not attached to any college or university but offers post-graduate training in planning. A Bachelor's degree in architecture or, in some cases, a Master's degree in geography or in the social sciences is required for admission to the schools. According to Jack Wood, "While the quality of instruction at the schools is good, it is generally not high enough to produce specialists with an adequate understanding of the complexities of urban and regional growth and development. Education leans heavily on established doctrine, too little on original thinking and analysis. The teaching of planning in general is cut off from related branches of social studies, from specialisation, from research. The subject-matter is often taken directly from similar courses in schools of western countries, modified or not according to the ability and experience of the teacher. Material thus presented not only† tends to be dated but often bears little relation to the socio-economic problems of India. The teaching is not specialised; it remains markedly theoretical."†

16.11. While we do not want to comment on Jack Wood's other observations we like to endorse his emphasis on the importance of the growth of our indigenous school of town planning attached to our universities, broadbased on the social sciences, oriented to our needs, and adapted to our conditions of living. Some elementary knowledge of town and country planning can be easily incorporated into text-books on 'Civics' for the pre-university course, while universities should consider whether Town and Country Planning as such is a fit subject for a degree course. The post-graduate diploma course should be up-graded and properly staffed for more detailed lectures and practical work. There is no reason why town and country planning should not form a separate post-graduate degree course in B. E. College, Shibpur instead of being a "poor relation" of architecture or some other specialised discipline to which it is attached. The risk in not developing our own schools of town and country planning with original research devoted to the problems posed by our climate, social systems and habits, and economic conditions lies not only in our acceptance of assumptions without testing their validity in India or our adoption of standards and values which have only a

* Jack Wood—"Town Planning in India Status and Education" 1959, p. 13.

† Jack wood—Op.cit., P. 20.

limited application in our country but in our inability to discriminate between a 'good' expert and an 'indifferent' expert from among many whose services are made available to us. *

16.12. But till such schools grow up the dearth of qualified personnel definitely sets a limit to the extent and spread of the activity of physical planning. (It is of course a two-way traffic, for unless there is greater planning activity leading to increased demand there will be fewer entrants to the town planning courses even if facilities are provided for such studies). We must therefore get the pick of those who have qualified from abroad and start preparing a Register of all qualified personnel available in this state. The existing institutions at Shibpore and Kharagpur should be geared at once to the production of qualified man-power we shall need in a year or two. And we must also depend on those who fulfil the Schuster Committee requirements of a high class university education, administrative ability of a high order, and some practical knowledge of planning.

16.13. We have omitted from this discussion a fairly large number of people whose services are also necessary for preparation of plans and the administration of planning control because facilities for their training already exist either in the universities or in technical institutions—the surveyors who collect the basic data; the economists, geographers, sociologists, statisticians and other specialists who analyse them and draw necessary inferences; the draftsmen, cartographers and clerks who do the large amount of mapping and paper work associated with planning; the vigilance staff employed to check violation of planning restrictions; the superior staff engaged in hearing planning objections, applications, appeals etc. With the expansion of planning control more and more of such officers will be necessary and existing facilities for their training will have to be inevitably expanded.

3. Public Opinion

16.14. The most important condition of successful planning is people's acceptance of it, for "in the final reckoning, public opinion must have the last word". This should not be construed to mean that the planner must always follow and cannot lead public opinion. The late Sir George Pepler is quoted by the Schuster Committee as saying that although experts could make plans and dictators enforce them in the longrun the only planning that would succeed was that which the people wanted. Justice Scarman's advice to the members of the Town Planning Institute was that "ultimately the planner must accept the standards and values of the society he serves". Keeble says that "planning by demand" is the only safe means of ensuring that public control over the use of land is kept within proper bounds and does not encroach upon individual liberty. What is meant is that while public opinion can and should be educated, the planner has no right to impose his own ideas if in spite of his efforts at persuasion a strong and substantial opposition to the proposal still persists. Conscious consumer wants, as Mrs Catherine Bauer Wurster

* Dr. D.F.C. Eversley, B.Sc., Ph.D., Hony. Secy. to the Midlands New Town Society, is very forthright in his comments on foreign experts from Western countries in whom, he says, the emergent countries of Asia and Africa have so much apparent confidence. Declining our request to reply to our questionnaire for lack of local knowledge he said, "As far as I can see, India in particular is over-run with people financed by the United Nations agencies or the large American Foundations, often persons with uncertain qualifications and poor reputations in their own countries, who travel at the expense of taxpayers and charitable-minded industrialists and presume to tell you how to do your job. I have no wish whatever to be involved in this kind of activity. I should have thought, just glancing at the questions you ask, that you and your associates are at least as well qualified as British academics to judge the needs of West Bengal."

rightly said, are limited by experience and knowledge since people can only want what they know, whereas what the planner might like to know is what they would want if they understood the full range of possibilities on the one hand and the practical limitations on the other.* Apart from lack of knowledge, there is also a natural human disinclination to change one's established routine of life. The reluctance of many slum dwellers to move into the housing estates built by the Calcutta Improvement Trust may have been due not solely to the slightly higher rent they would be required to pay or their distance from the present place of residence, but partly also to a preference for a social milieu to which they were accustomed. To respect such preferences in order not to go against so-called "public opinion" can hardly be advocated.† Changes can be brought about even if there is no initial demand from those likely to be affected but they should be brought about with consent or at least, with the approval by the general public of the policy of which the changes are the consequences.

16.15. The means of obtaining such consent or public acquiescence may be easier in some countries than in others. Abercrombie tells a probably apocryphal story of some German rioters instinctively obeying a 'Verboten' notice to keep off the grass even at the risk of capture by the police who were chasing them, and contrasts it with the attitude of his own countrymen who were nourished on the doctrine of the rights of the individual and the castle idea of the home. The first type is easily amenable to legal planning control while the second is not. But acceptance of planning control by people who are instinctive lovers of freedom is perhaps more valuable than its acceptance by those who are instinctive respecters of law, for in one case there is mutual co-operation between the 'Authority' and the individual while in the other case there is only obedience. But such co-operation does not come automatically and has to be sought after. It depends upon a pragmatic, not a doctrinaire, approach, upon not going too far ahead of the people's preferences or even prejudices. The means of persuasion are not merely the fairness of the proposals themselves but also the fairness of the procedure. "A wrong planning decision given in the right way is better than a right one reached wrongly. The process of arriving at planning decisions must appear to the public to be right, for although the public may tolerate a mistake it will not accept what it considers to be an injustice."

16.16. The only way in which public acquiescence can be secured for planning as a policy is to associate the public with it at some stage of the planning process, and to simplify the apparatus of control. Such association may be ensured if there is proper publicity, proper opportunity of hearing, and a reasoned decision which shows that the objections have been duly considered. Some recent legislation betrays a tendency either to by-pass the enquiry or to short-circuit the procedure so as to reduce it almost to a meaningless formality which, we are afraid, we cannot approve. Proper publicity implies at least two things; first, that the changes sought to be brought about by the proposed pattern of land use should be set forth in maps and explanatory notes with sufficient

* Quoted with approval by Keeble who had suggested "planning by demand", Cf. Principles, P.10

† Cf. J.B. Cullingworth—"Housing Needs and Planning Policy" 1960.

"The social life of the slums is not necessarily a precious flower to be preserved and transplanted into a new environment. The fact that people follow a certain pattern of life in a given environment and are temporarily upset when the pattern is disturbed does not mean that the disturbance should be avoided. The sympathetic sociologist is apt to read too much into the happy way of life of the dear old London slums with their fish and chip saloons and pawn-shops. At the extreme, much of the pattern reads like a modern version of 'the poor are happier as they are'. Theories of cultural relativity are invaluable to the historian but to the social policy-makers they can easily be blinkers." (pp. 167-68).

clarity to be easily understood by the ordinary citizen ; secondly, that definite steps should be taken to bring these proposals to the notice of the persons whose rights are affected and of the general public, giving them a sufficient margin of time within which to study the proposals carefully and formulate their objections if any. It may not be physically possible to serve a separate notice on every individual owner or occupier of property, but publicity through the press must be adequate and it must, if possible, be supplemented by public meetings addressed by the Minister explaining the scope and and purpose of the p'an. What is more important is that copies of the plan with its explanatory literature should be available for purchase at cost price or less so that people can study them at leisure in order to understand their full implications. If the Plans are only displayed at one or two central places without any provision of sale of copies very few would queue up for getting a glimpse of how the planner proposes to mould his physical environment, and the purpose of publicity will be defeated.

16.17. The most crucial stages are the next two and here the procedure followed in England came in for a lot of criticism during recent years. In a lecture delivered in 1955 Lord Denning referred to the three major complaints against such enquiries viz. that the decisions were given by a person other than one who heard the evidence, that they were not exclusively based on the evidence recorded at the public hearing since reception of evidence behind the back of the party was not barred, and that they were not backed up by reasoned arguments showing that the objections had been duly considered. "It is departures like these from the course of justice that have led to a demand for review of the way these decisions are reached."* The result of such public demand was the appointment of the Franks Committee in 1953 which submitted its report in 1957 suggesting some very drastic changes in procedure. It is perhaps unfair to say that the Franks Committee tried to put the clock back, but there is no doubt that, probably to redress the balances which had tilted somewhat on the opposite side, it put in a strong plea in favour of the preservation of private rights except when its disturbance was unmistakably called for by demonstrable public benefit. The purpose of the enquiry, it said, was two-fold—to protect the interest of the individual by giving him a statutory right to be heard, and to ensure that the Minister is fully informed of the facts of the case so that a proper balance could be struck between private rights and feelings of individual citizens and the legitimate pursuit of the duties and policies of the administration. Although the enquiry was not a purely judicial process it stood halfway between judicial and executive action and the cardinal principles of openness, fairness and impartiality should be observed except in so far as 'impartiality' had to be qualified because the Minister is committed to promote a certain 'policy' in respect of which he could not be asked to be absolutely impartial. The concrete suggestions of the Franks Committee are as follows :—(1) The inspectors who held the enquiry should be placed under the Lord Chancellor (Lord Silkin dissented from this suggestion). (2) The individual must know fully and in good time the case he has to meet. When written objections to a particular feature of the plan are made the local planning authority should send the objector a statement explaining the reasons for its inclusion. (3) There should be a statement of Ministerial policy at the hearing or at least an outline of the general approach which the Minister was likely to take, but since policy is by nature evolutionary it would be unreasonable to bind the Minister to this statement if he thinks later that a deviation should be made. (4) The enquiry should be public and the procedure reasonably simple, inexpensive but orderly, the inspector having the right to summon witnesses and administer oath. (5) The inspector's report should not be confidential. If its immediate publication is not considered possible or desirable it should be in two parts of which the first part dealing

* Sir Alfred Denning—"The Road to Justice" 1955, p.29.

with facts should be published in order to enable the objector to correct any mistakes before the Minister gives his final decision. The second or the recommendation part should be published with the Minister's decision. (6) There is no objection to the Minister having subsequent consultation on questions of policy in the absence of the party but acceptance of factual evidence should be in the presence of the party with right to contradict. (7) The decision of the Minister must give full reasons.

16.18. We do not think that all these recommendations have been accepted by the government in England but we are concerned here with the extent to which they should be applicable here. We are later going to recommend that for many years to come preparation of Development Plans for any area that is selected as the 'planning area' will have to be the responsibility of the government through its own Town and Country Planning Department or under its direct control. There is thus an apparently stronger case for placing the 'inspector' who hears objections under some other authority to ensure his independence but we do not recommend it. Whether the 'inspector' belongs to this department or to another he cannot override the policy of the government; it is only in the detailed working of the policy in so far as it causes individual hardship or omits better alternatives that alterations are possible. If the hearing is entrusted to officers other than those who actually drew up the plan it will bring to bear on the Plan an independent mind which is not committed to the plan although it may be committed to the policy.

16.19 Secondly, if the Plan is properly drawn up it should contain sufficient materials to inform the objector of all that he needs to know and no further clarification is necessary. We do not agree that if there is any objection to any particular feature of the Plan, the planning authority should go out of its way to offer the objector an explanation as to why the feature has been incorporated. No new statement of policy seems to be required if the text accompanying the Plan is sufficiently explanatory. We have no objection to the earlier publication of the findings of fact by the inspector as part I of his report unless the cost is prohibitive and we agree that his final report should generally be printed as an appendix to the Minister's final decision. On other points, especially as regards the public nature of the enquiry, the manner in which it is to be conducted, and reception of factual evidence subsequent to the enquiry we are in agreement with the Franks Committee's recommendations. There must be a reasoned recommendation by the inspector and a reasoned decision by the Minister or by some superior officer on his behalf. The Franks Committee is right in thinking that the obligation to give written reasons for a decision improves the quality of the report and compels a consideration of the question from all its aspects. It also enables the public to see that their objections have been duly considered.

16.20. The other condition of public acquiescence in control would be the simplification of the apparatus of control. If people have to run to different authorities and to fill up a multiplicity of forms for planning permission and if red tape predominates over quick decisions people's exasperation may boil over. To what extent can municipal by-laws and planning provisions be co-ordinated? Can they be brought under one unified administration? If so, under which authority should it be unified? These are difficult questions for which an answer is not easy to find.

4. Inter-governmental co-operation

16.21. It goes without saying that since planning implies co-ordination of land-uses it cannot succeed unless there is inter-governmental and inter-departmental

co-operation. When the matter concerns different departments of the same government this may not prove very difficult; with central government departments competing in the field it may be less easy. The requirements of some of the latter (e.g. defence) may be so paramount as to override all other considerations, while others, with less reason, may regard themselves as placed on the same high pedestal. We have already seen* that in U.K., government departments are so prone to pursue their own separate interests, untrammelled by any considerations of planning, that they regard their land requirements to be immune from any legal control. The position is the same here, and the Government Buildings Act 1898 adds to this freedom by releasing government from any obligation to submit their building plans to the local authority for sanction so that they can site their buildings anywhere and design their structure in any way they like. This constitutes a potential danger to good planning unless the causes of conflict are removed as far as possible at the preliminary stage and there is at some stage a provision empowering some authority to override departmental intransigence which refuses to yield to persuasion.

16.22. To co-ordinate and keep in line the multiple state agencies concerned with developments which involve the use of land should therefore be an important function of the town and country planning department. This may be ensured by requiring the prior submission of development projects proposed by various state agencies to the land planning department so that not only may the overall land requirement of government and other public sector undertakings be assessed and compared with the requirements of the private sector but inter-departmental conflicts may also be resolved separate and joint discussions held by the planning department with the departments whose claims are conflicting. It is only when the difference is irreconcilable that there must be power somewhere to cut the Gordian knot and lay down the law, and earlier in this chapter, when we said that the Minister in charge of town and country planning should have a decisive voice in the Council of Ministers, we had this necessity in mind. But, in fact, inter-departmental co-operation really goes much beyond this. The interest of most departments extends beyond their exclusive land requirements. The agricultural department is not interested only in the 'demonstration farms' under its direct control and possession but in improving farming method and conserving good agricultural land throughout the state which is almost wholly in private occupation. The education department should be interested in the diffusion and improvement of educational opportunities throughout the State and not merely in the institutions run under its direct control. The industries department does not run industries itself but is interested to see that private sector industries are suitably located and all legitimate facilities provided for their expansion in size or number. The same can be said of almost all other departments except possibly Forests and Mines which needed conservation by being brought more directly under government possession or control. With all these departments, the town and country planning department must be in close and constant communication and there must be frequent exchange of views in order to ascertain what is a desirable pattern for the optimum use of land within the state or any particular area within the state.

16.23. But, as already observed, some differences may be irreconcilable and there must be provision to make the recalcitrant department conform to the approved pattern of use. The Model Act of CRUPO (now renamed as TCPO) recognised this danger and in its original version placed government departments and local authorities on a par with private individuals by requiring them to obtain planning permission in the ordinary way except that they would not have to pay any development charge. In its revised

* See chapter X.

version it suggests that instead of applying in the usual form, they should intimate their intention to the local planning authority with full particulars and plans at least a month before starting construction during which time the local planning authority should be able to decide if the proposed development contravened their Plan (existing or contemplated) and their building laws. If it did and if the department or local authority was unwilling to modify its plan to secure conformity the matter should be referred to government (meaning, in this case, the town and country planning department) whose decision, given after consultation with the Chief Town Planner, would be final. This revised provision is undoubtedly better as it saves the dignity of government departments and local authorities without impairing the substance of control but it puts off the first application of the brake to too late a stage. If land has already been acquired by a particular department in a particular area it would be awkward to be told, less than a month before construction is to start, that the plot was unsuitable and permission could not be granted. The department would be left with a piece of land which it would be unable to utilise and fresh acquisition proceedings will cause vexatious delays so that a desirable development which could have benefited the people of the locality would be indefinitely postponed. The English Act provides for advance permission by submission of an 'outline plan' to enable the prospective developer to decide whether to invest in land or not, and we suggest that something similar to it should be provided even in respect of developments undertaken by government to avoid frustration at a later stage. This purpose can be achieved if our suggestion about prior submission of departmental requirements to the town planning department is accepted; for once the particular land requirement is incorporated in the Plan the intimation to be sent about a month before starting construction would relate only to the details of structure and design, not to the purpose of development.

16.24. There is another aspect of inter-departmental, and especially inter-governmental, co-operation which is perhaps more vital. We refer particularly to the positive action that government departments are constantly taking which, taken in one form, may advance and accelerate the cause of planning, and, taken in another, may mar it. One of the steps which planned use of land may suggest is the relief of congestion of highly urbanised areas by the expansion and improvement of existing towns or the setting up of New Towns, but this can succeed only if they can also be made magnets of new industrial location. Catherine Bauer Wurster and several other participants in the seminar at Berkeley (California) in 1960 showed how government departments, particularly at the Union level, could help this process by deliberately creating facilities and incentives for human settlements in places where a regional plan would want them to settle, and some of the participants deplored that these instruments were not being used that way. Distribution of licenses for setting up new industries and import licence for machinery and materials went mostly to applicants from Bombay and Calcutta industrial areas which accentuated the present congestion of those two areas. A more diffused distribution or the grant of license conditional on the industry being sited at one of several places indicated in a State or regional plan could scatter industries and distribute population over a wider area. Peter Self has suggested that part of London's congestion due to the concentration of offices of all sorts may be relieved by an extension of the dialled telephone system which may induce the less important sections of an office to move out without loss of efficiency, and the same step may lead to similar results in Calcutta. Public sector industries are not dependent on immediate profit and may look to long-term results, and in their location the Union government has a potent instrument of redistributing population where the planner wants them to move. The alignment of communication routes (especially road transport), power production and distribution, the setting up of industrial estates,

rural and urban and industrial housing, community development, establishment of schools and hospitals, resource development and public works—in all of which large sums of public money are being spent may be turned into an indirect means of decongestion of conurbations and the growth of new settlements in conformity with a pre-determined plan of land use. This is the kind of co-operation which would be most needed by the town and country planning department when it starts grappling with the problem of this State.

CHAPTER—XVII

Limits and conditions of Planning (continued)

(5) The place of local authorities

17.1. We are on more debatable ground when dealing with the role of local authorities in the sphere of land-use planning. There are, broadly speaking, three different stages in the planning process, viz. (a) preparation of plan, (b) enforcement, and (c) implementation. Where do our local authorities fit into this picture or do they fit into it at all? The answer should be based on realistic thinking and not on any theoretical preference for devolution of powers to local democracies. The instrument must be fit for the job it is asked to perform. As yet the democratic basis of our local authorities is slight, and even the citizen who has the franchise is not likely to be unduly depressed at the prospect of his chosen representative being denied the final say in how his own land should be used.

17.2. Most of the responsible opinion we have received in reply to our questionnaire has favoured direct state participation in the planning sphere. To a Ford Foundation consultant Catherine Bauer Wurster writes: "In India it seems to me that state governments clearly have the basic responsibility and the key tools for regional planning." Although she was speaking of regional planning, the arguments in favour of direct state participation in town planning are equally unanswerable. The strongest reason against assigning the preparation of plans to local authorities is that even apart from their chronic financial difficulties which would prevent them from employing really qualified planning personnel, they lack the imaginative foresight which could have enlarged their vision and inclined them to be guided by longterm advantages. Planning is forward-looking. Local authorities are closely influenced by the day to day working of the municipal services and the provision of current needs which is likely to limit their horizon, if not also to warp their judgment. The probable increase of rate revenue, even if we exclude the possibility of other, baser, motives, has often won support for some quite indefensible private land development projects in our largest municipal bodies, despite expert advice to the contrary. Planning the use of land over a considerable area involves such a detailed investigation and analysis and requires such a diversity of talents working in close collaboration that the English Act of 1947 withdrew the function from smaller local authorities which were closer to the people and placed it on the larger and more solvent county councils and county borough councils. In this State the analogues of these two authorities are the district boards and municipalities of which the first are probably on their last legs while the second, with rare exceptions, provide only the minimum of services with varying degrees of inefficiency. Even those municipalities which work with the best of intentions find it difficult for lack of financial resources and adequate technical personnel to discharge their present responsibilities to any degree of satisfaction, and to burden them with further responsibility which requires vision and clear thinking in a completely new type of experiment would be like placing them rudder-less in an uncharted sea. The analogy with local authorities in U.K. would be misleading, for those local authorities, unlike ours, had long recognised their obligation to provide housing for their ratepayers even if it means going beyond their boundary and schools for every person of school-going age within their boundary, which made them large consumers of land for a public purpose and gave

them a justifiable claim not only to select their own sites but also to see how others selected and used theirs. But their role in planning has not gone unchallenged and the author of a widely used text-book made acid comments on the narrow outlook of the local authorities and the poor quality of members which lays an undue emphasis on the planner's diplomatic skill rather than his technical ability. In planning matters the views of local authorities and their members, he says, are seldom representative of public opinion, often irresponsible and in a staggering proportion of cases, manifestly full of bias. Planning was a complicated, though not a mysterious process, but the views of local authorities were very often an embarrassment.* Since physical planning must, willy-nilly, have to cross invisible municipal boundaries to have a coherent area within which to operate, small local authorities are automatically ruled out as probable agents for the preparation of plans. Moreover, the detached long-term view which is essential to sound planning can only be achieved if the planning agencies are set up somewhat independent of local authorities, although the latter should be allowed sufficient scope either to participate in the decision-making process or at least to [make their views known and taken note of. Their role in the preparation of plans should be akin to that of the smaller local authorities in England (non-county boroughs, urban district councils and rural district councils) after the passing of the 1947 Act.

17.3. There remain enforcement and implementation which are concerned with the negative and positive aspects of planning control. Enforcement is the application of the restrictive provisions of the plan so as to prevent their transgression by private parties; implementation relates to the positive and constructive aspects of planning—the provision of services and amenities of all kinds (roads, water-supply, parks, open spaces, recreation centres, community buildings, houses, schools and other educational institutions—to name only a few) which are expected to be provided by public authorities in all civilised communities. The Model Act reserves enforcement for the planning authority but is silent on the question of implementation because, as the explanatory note makes clear, it considers it desirable to entrust implementation to elected local authorities as far as possible or to separate *ad hoc* agencies like improvement trusts or development corporations where the elected local authorities are found wanting. We are in agreement with CRUPO's views as regards implementation because it is undesirable to distract the attention of the planning organisation from its real function which is to plan and not to execute. Planning is a continuous process and plans are flexible, not static, having to be continuously brought up to date at intervals of, say, five or ten years. It is not as if the plan, once made, is unalterable so that the planning organisation, released from its initial function of plan-making, may be turned on to the next stage of the work which is implementation. Some amount of implementation, in fact, has to go on *pari passu* with the preparation of the plan and cannot wait till the whole plan is completed. The local authorities may not have a planning personnel but all of them have or should have the requisite staff capable of tackling the engineering part of the job, once the general layout is there. For inefficient and unwieldy local authorities and for creating new towns improvement trusts or development corporations should be set up.

17.4. What about enforcement? CRUPO's view is to entrust it to the planning authority but we are not so sure. There are undoubtedly advantages in placing enforcement in the hand of the organisation which has been responsible for planning and knows best the reasons for and the extent of the restrictions imposed, but preoccupation with enforcement may distract attention from the more positive

* Keeble.—"Principles and Practices of Town and Country Planning, 2nd Ed., p. 291.

aspects of planning as, Peter Self says, † has been the case in England. For reasons we shall explain in the next section, we are going to propose establishment of local planning authorities for the present only in a few important areas while for the majority of urban areas we would suggest that plans should be prepared by a highly qualified technical personnel attached to the head-quarters organisation of the department of town and country planning. The head-quarters organisation would be unsuitable for enforcing planning restrictions as long-distance control is bound to cause harassment to individuals living in remote urban centres. If, as has been suggested earlier, vigorous participation of local authorities can be ensured during the preparation of the plan by frequent consultations, they should have a fairly good idea of the reasons and the purposes of the restrictive provisions of the plan. Moreover, the enforcement of planning control cannot be divorced from the regulatory provisions of the building by-laws which are now administered by the municipal authorities. Planning restrictions include not only use-zoning but also zoning of size, bulk and height of buildings and this latter is indistinguishable from building control. If full-scale zoning is adopted the ordinary building by-laws, which are uniform throughout the municipal area, will have to be abrogated and replaced by zoning regulations which may vary in different parts of the town. Within the same municipal area there is no place for two contradictory sets of regulations affecting buildings, one administered by the local authority and another administered by the planning authority. Simultaneous exercise of control by two authorities will make a prospective developer run to one authority for planning sanction and another for building sanction which will not only cause unnecessary annoyance but increase the risk of graft. However the machinery may be streamlined by causing all the applications to be submitted at one place and with one authority and thrusting on the latter the duty of obtaining the consent of the other authority, vexatious delays cannot be avoided. For these reasons we think that planning permission and building sanction should be obtainable from the same place. Where the planning area coincides with or only slightly exceeds the municipal area, the enforcement measures should be applied by the municipal authority. Where it overlaps two or more municipal areas, the respective municipal authorities should have jurisdiction. It is only when there is no local authority over a considerable proportion of the planning area that the question of a separate enforcement authority will arise. Two strong arguments against this suggestion are the inefficiency and venality that exist in many municipal offices and the difficulty of entrusting interim control of development to them before any plan is made. About interim control we have some doubts which will be discussed later. Interim control before any plan is made must necessarily be exercised, if it has to be exercised at all, by one who has some idea of the future picture in his mind and that can only be the planning authority. The local municipal authority cannot enforce control unless there is a plan, or an interim plan or even a rough zoning plan to guide it. As regards inefficiency, those who have seen from close quarters the inexplicable irresponsibility with which even small town-planning powers are exercised in some of our largest local authorities may be excused if they have some misgivings at the prospect of conferring on them additional powers. Yet, one may hope that in the sphere of municipal administration, something other than Gresham's Law would operate, and that the bad coin would not always drive out the good. If local authorities can be entrusted with large expenditures that implementation of positive planning implies and are thought capable of administering the building regulations, they can without much additional risk be trusted with the administration of enforcement control. In the case of Calcutta this purely executive function would be administered by the Commissioner; and if the

† In his memorandum sent in reply to our questionnaire.

present practice of selecting high-grade administrative officers in active service is continued, planning control may be in safe hands. As regards municipalities, a provision may be made that the power should be exercised only by the Chairman ; and, in the last resort, Section 550 of the Bengal Municipal Act will always enable government to supersede any particular department of the municipality and get it administered through their own officers at the cost of the municipality if the latter abuses its powers or proves grossly inefficient.

(6) Machinery and procedure of Planning

17.5. If the existing municipalities and other local bodies are ruled out as agencies for preparation of plans what is the organisation to whom this function should be assigned ? The Model Act places it on *ad hoc* local planning authorities acting under the supervision of a State Planning Board and the Chief Town Planner, subject to the ultimate control of the government. The local planning authorities envisaged by it take all the necessary steps to collect preliminary data, prepare the plan, obtain government's approval to publication, hear objections that may be filed (which is more than what English local planning authorities may do), and send their final recommendation to government which, on approval, becomes the Final Development Plan. The State Planning Board exercises default powers, but the preparation of the plan in case of default is the duty of the Chief Town Planner, not of the Board. In our comments on the Model Act we have tried to show how the proposed State Board seems to us to be 'neither fish, nor flesh, nor good red herring', Co-ordination of the land requirements of different departments or even the achievement of the greatest common measure of agreement about land uses throughout the State may be better ensured through separate inter-departmental discussions. Research and the preparation of monographs on the principles and methods of town planning would be beyond its competence, and whatever control is exercised on local planning authorities and whatever guidance and assistance may be needed will come from the government through its Chief Town Planner. A Board, whether constituted of departmental heads or outsiders, with an ambitious role which it has neither the staff nor the apparatus to carry out, would be pretty nearly useless.

17.6. The choice therefore lies between a fully equipped autonomous or semi-autonomous Board and a fully equipped department of government exercising direct control over planning authorities at the lower level where they exist, and having the right of direct participation in planning where they do not. The argument in favour of autonomy is freedom from bias and ability to resist pressure, but since government cannot altogether divest themselves of responsibility in a matter of such vital importance, some reserve powers must be retained in their hands in any case so that complete autonomy would be unthinkable. On the other hand, the existence of a Board will interpose delay and may create a stalemate if both the Chairman of the Board and the Minister (or his Secretary and chief adviser) are both capable men with strongly held but diametrically opposite views. We therefore reject the idea of setting up an autonomous Board and suggest instead the strengthening of the department of town and country planning by the appointment, on a permanent basis, of such qualified personnel as may be necessary to make it the central reservoir of the best planning talent within the State. The functions of the department would be more or less akin to what is discharged by the analogous department in the Ministry of Housing and Local Government in U.K. with this addition that, for reasons explained below, we want the State department to have direct participation in preparation of plans for areas where the creation of a separate local planning authority seems

unnecessary. This direct participation is what the government are now having in the Calcutta metropolitan area although it is probable that they toyed with the idea of an autonomous organisation in the beginning. The health department notification dated 12th May 1961, taken literally, constituted an 'autonomous organisation' formed by a departmental Secretary and his subordinate staff—a somewhat unusual administrative set up which contravened the usually accepted theories of political science and the art of public administration; but the ambiguous position was clarified by the issue of a second notification on 21st June 1961 which made the C.M.P.O. a part of the development department, working as a separate unit under its own Secretary. Direct participation by the state in planning which this exemplifies was also stressed by Catherine Bauer Wurster in her letter to a member of the Ford Foundation team now working in Calcutta when she suggested 'the establishment of a permanent State agency for developmental research, planning, and policy co-ordination'. The member to whom this letter was written concludes: 'I concur and would suggest the establishment of a State planning authority concerned with economic and physical planning. * * * A rational and co-ordinated delegation of planning powers to the local authorities could then be framed, including ultimately some adjustment of the functions of the C.M.P.O.'

17.7. A State Planning Authority of the type proposed above, working directly under the Minister in charge of town and country planning, would consist of the officers at the top echelons of the department constituted somewhat on the administrative organisation in U.K. There should of course be a Secretary possessing the qualifications recommended by the Schuster Committee who might perform the dual function of being the chief adviser of the Minister and the Chairman of the State Planning Authority whose other members would consist of a Chief Town Planner, a Director of Applied Economic Research, a Director of Sociological studies (?) and either an engineer or an architect. Instead of the sociologist there may be a demographer or statistician but without having equal status with others. Except the Chief Town Planner and the Director of Economic Research, the appointment of others would depend upon the type of planning control envisaged and the volume of work likely to be undertaken. There should be at the lower levels and under the direct control of one or other member of the State Planning Authority an adequate staff possessing requisite qualifications for collecting data, analysing them and preparing memoranda and notes about the multifarious matters which physical planning has to take into consideration, and draftsmen, cartographers and others able to draw maps and plans according to direction. The Secretary will profit by the specialist knowledge of his colleagues without losing his right to offer independent advice and the Minister will have the benefit of all view points before him in those cases, expected to be rare, where that Authority is not unanimous. The purpose of the State Planning Authority would be chiefly preparation of plans and scrutiny of plans prepared by local planning authorities. For the hearing of objections to development plans and of appeals against planning decisions and enforcement orders there should be inspectors possessing the dual qualifications of a good knowledge of the principles of planning and some acquaintance with judicial procedure, but they should be attached to the secretariat and not the directorate wing in order to create public confidence in their impartiality on which the Franks Committee laid so much stress.

17.8. In view of the dearth of qualified personnel and the cost of setting up a large number of planning authorities with separate, fully equipped, establishments of their own, (all of which, as we shall show later, will have to be financed by the State) the best talent that is available should be concentrated in a central organisation to

act as a task force for drawing up plans for whatever area or town is in urgent need of attention. All the different State Acts of India recognise the possibility that the local planning authorities may default and provide for the preparation of plans by the Chief Town Planner or the Director of Planning in such cases. We think that unless local planning authorities are provided with ample funds and have the necessary technical organisation, default is inevitable, and it is wise to recognise this fact and forestall a futile first step by proceeding at once to the inevitable second step viz. preparation of plans by the government agency. Apart from the Calcutta metropolitan area and the Damodar Valley regions physical planning for several years to come will have to be confined in a large measure to urban areas or areas undergoing rapid urbanisation. A State Planning Authority is not only best able to judge what these areas are but also to deploy the best available talents to produce the quickest results. Planning is a complicated job and requires team work and co-operation of a multiplicity of talents which the governmental organisation at head-quarters would be better able to provide than any ordinary local planning authority. Once the pattern is set and future use zones known, its enforcement requires only normal understanding and integrity which it may not be beyond the ability of a local authority to provide. It is therefore only the preparation of plans which should be undertaken by the State Planning Authority on account of the fact that such preparation requires the exercise of great skill, judgment and imagination which are none too common. By entrusting preparation of plans to a central organisation another purpose may be achieved for which the Model Act makes no provision. Different local planning authorities, working independently, will produce plans for their areas, but until the entire State is fully covered even a rough general picture of a plan for the State cannot emerge, for no power is given either to the State Board or the government to prepare it. By the time the State is fully covered by local planning authorities it may be found that the earlier plans prepared by the planning authorities which were the first to be established do not dovetail into what these later planning authorities want to propose. The need for a tentative general plan for the whole State at a very early stage is obvious. Peter Self has suggested in his memorandum that as an initial step we may proceed by 'requiring the preparation of a general plan for the whole State which will contain broad proposals for the location of new industries and urban developments and for the improvement of communications'; while Catherine Bauer Wurster wrote that "in the dynamic regions undergoing rapid change and growth with high population mobility, the development pattern can be viewed and guided most effectively at the State level. The national scale is too big while the city or metropolitan scale is too small. *** The fundamental planning issue for West Bengal is the desirable future distribution of jobs and population between these two areas (i. e. the Calcutta industrial area and the Damodar Valley), and how to bring it about". If planning is undertaken directly by the State Planning Authority it may, at the same time as it is concentrating attention on detailed planning of individual urban areas, prepare also a rough guide plan for the entire State or for entire regions.

17.9. There are, however, obvious limits to a department's ability to tackle large areas and sound reasons why the latter should be in the hand of high-powered local or regional planning authorities. The Calcutta metropolitan area is much too big a job to be handled departmentally and the same is true of the Damodar Valley area whether regarded as one unit or as two. There may be other regions for setting up local planning authorities but this can be determined by reviewing the possibilities of their growth and how rapid and widespread it is likely to be. Generally, it may be said that while the State Planning Authority should be fully capable of planning for the ordinary municipalities or other urban areas, a conurbation or a metropolitan complex, present or impending, requires more exclusive and concentrated attention and wider research

than a department can usually devote to it. There is also the question of new towns that may have to be set up to transfer the overspill from congested conurbations. If the latter is entrusted to town development corporations as in England and the former to local or regional planning authorities what should be the composition of these corporations or planning authorities and how are they to be linked to the town and country planning department or the State Planning Authority ?

17.10. It is unfortunate that in setting up such local planning authorities one often forgets the model suggested by the Board of Trustees for the Improvement of Calcutta which has worked with a fair degree of success during half a century and is still capable of better work in future. Whatever its other defects may have been, there is little fault to find with its organisational structure consisting as it does of a high-grade officer appointed by government as Chairman and a composite body of members (partly nominated and partly indirectly elected and one ex-officio), working under the administrative control of a department of government whose light touch is just enough to keep it on the rails but never so ham-handed as to impede or delay. Even so learned an author and so staunch a supporter of self-government for local bodies as Dr. W. A. Robson said in his short note in reply to our questionnaire that in the circumstances of our country a composite body consisting of civil servants, senior municipal officers, a few professional men of ability and integrity and some representative local councillors might form a workable basis of a good local planning authority. Where the planning of large areas requires the setting up of a local or regional planning authority we would like the model of the Calcutta Improvement Trust to be followed—a body of between 7 and 11 members, partly nominated by government and partly elected by the major municipalities comprised within the area, with a Chairman who will perform the dual functions of presiding over the policy-making and controlling body and directing the large operational staff which is concerned with the preparation of plans. After the plan is prepared in draft and published with the approval of government, its function would be almost over for the hearing of objections, as in U. K., would be by an officer appointed by government, assisted, if need be, by an assessor selected from the local area from which objections have been received. The plan becomes final when the Minister's approval is given. The local planning authority should have nothing to do with implementation nor, generally, with enforcement, but the local authorities (municipalities, improvement trusts, development corporations) on which will devolve the duty of enforcement and/or implementation will have to conform to the plan whether they carry out development themselves or permit developments proposed by others. In the case of new towns the British device of public development corporations will be suitable but the selection of site must be by government.

17.11. The present constitution of the C. M. P. O. does not fit into this structure. Organisationally it is only a department of government working with a large staff of its own and assisted by a foreign team of experts under the eye of the Chief Minister. There is no Board or panel which can keep tab on the progress made, proffer advice, or direct policy. The recently appointed co-ordinating council of nearly forty members is not the kind of body which can perform this function for it is too big and heterogeneous to be able to meet frequently and guide the course of action.

(7) Financing the Plan

17.12. It would be a truism to say that in planning, as in all matters, one has to cut one's coat according to one's cloth—in other words, that the extent and the limits of planning would depend upon the financial resources that may be placed in the service of planning. The Model Act placed its reliance on grants, loans, development and other

charges and moneys received from any other source. Disregarding the last which is much too vague and loans which are useful only as a temporary measure but not as an independent source of income, we are left with development charge and grants. In our comments on the Model Act we doubted the legality of the development charge except as a tax measure and it seems that the principal reliance must be on grants or subsidies.

17.13. But if planning is done directly by government it would be more correct to say that the cost is to be met from general revenue for it would then be an expenditure incurred by government in the course of discharging one of its primary functions, namely, the promotion of public good by preparing a pattern of rational use of the limited land resources available to the society. The question of grants would arise only if planning by semi-independent planning authorities is contemplated. For preparation of plans the State must bear the cost. For enforcement the local authorities should do so, but even the premier local authority in West Bengal is unable to provide the City Architect with enough building inspectors to keep up a constant watch on the condition of insecure buildings, and it is quite likely that most of the smaller authorities will ask for financial assistance if the duty of enforcement of plan is placed on them. Implementation is positive planning and means large expenditure of funds for which grants and advances are paid even now. But after a plan is prepared and the phasing of future development better understood, the claim for larger grants will be more insistent though there will probably be better co-ordination of expenditure which is now disbursed through different departments. For that additional expenditure the State is entitled to get its legitimate share of the allocation of funds from the central government and we do not agree with the expert witness of the Ford Foundation who argues against receiving such subsidies on the ground that ultimately it would lead to increased taxes on the State. Central taxation is imposed on an all-India basis and neither the rate nor the incidence will be lowered in one particular State because it is modest in its demands for central assistance.

17.14. The cost of land acquisition has been called the Achilles' heel of planning. It certainly is in the case of positive planning, if land has to be acquired at current market price which has a tendency to soar in all urban areas that are most in need of renewal. Even in the case of negative or preventive planning it may effectively stop action if compensation has to be paid for any restriction of use. The point however involves very complicated questions of policy and we are not sure whether it falls within our terms of reference. In the Town Planning Ministers' Conference held in Calcutta in November 1962 under the chairmanship of the Union Minister of Health, a Committee was appointed to go into that question in all its aspects and it would perhaps be better to wait till the Committee completes its deliberations.

(8) Scope and extent of control

17.15. Having regard to what has been said before, what should be the scope and extent of control that should be adopted for this state? There may be a geographical limit to the extent of control if it is confined to a few selected areas instead of covering the entire area of the state. There may also be a limit to its scope if instead of trying to regulate every detail of a man's activity in relation to land or every minute change of land use, attention is fixed only on the broader aspects of use and the individual citizen is left a large area of freedom in respect of others. Even in England, after forty years of legislation which had "created both the responsibility and the power of controlling the use of land so as to provide a designed setting for the whole range of the nation's social and economic life", the Schuster Committee thought in 1950 that grandiose conceptions were unrealistic and practical conditions must reduce the range of the planner's work to

more pedestrian levels. The first flush of enthusiasm with which the Act of 1947 was hailed by planners and social reformers is now tempered by a more realistic appreciation of the difficulties involved. In his latest book* one British authority on town planning deplors how regional planning is still very largely ignored, and Peter Self, author of that extremely readable book 'Cities in Flood', writes to us how preoccupation with the protective and preservationist aspects of planning (e.g. detailed questions of local amenities, convenience of siting, access to roads etc.) had diverted planners from its more positive aspects. We should not try to compress within a decade or less what England is still to achieve after half a century of effort, and we are therefore inclined to agree generally with the following view expressed by Mr. Peter Self in his letter.†

17.16. "I do not think that this kind of detailed control would be helpful in West Bengal. I would warmly recommend the adoption of a measure which promoted a more positive type of planning, and in particular an integration of physical planning with economic and social planning in your state. This might proceed by requiring the preparation of a general plan for the whole state which would contain broad proposals for location of new industries and urban development and for the improvement of communication. The key to urban growth or containment lies in the location of employment. There is a heavy over-concentration of population and economic activity in the Calcutta area and it would be highly beneficial to limit its further growth and promote a number of new and greatly enlarged towns elsewhere. Any control of the growth of the Calcutta area would only work satisfactorily if accompanied by resolute measures to shift the location of new industries and other forms of employment. It seems to me that British ideas of urban dispersal might well be appropriate to your very different circumstances. The device of the public development corporation is a very suitable way of building such a town. Such a corporation should be given a clear indication of the tasks which it is to perform and thereafter should not be subject to a great deal of control. Probably the most effective form of planning is the power to guide or influence the location of industries and other forms of employment and measures to promote new towns or large urban developments, both aspects to be linked with the planning of communications. This is the point at which physical planning touches economic planning, and close integration of the administrative machinery becomes essential.

17.17. "So far as the more protective aspects of planning are concerned, I am doubtful as to how far specific protection of agricultural land is necessary in the case of West Bengal. I doubt whether a detailed planning control of individual plots of land would be wise even if it was administratively feasible. On the other hand the plans for new development should pay some attention to the agricultural value of the land, although this should not be the dominant consideration."

17.18. With the first part of this letter we are in complete agreement. There should no doubt be a shadowy national policy of which plans for trunk roads, distribution of industry in different regions and the optimum densities desirable in even the most congested cities should form part; and more detailed thinking at the regional level about the location of main transport routes, the distribution of population and industry, the location of large non-agricultural uses in open country and the distribution of local services,—but many of these decisions will have to be made by the economic planner

* Keeble—"Town Planning at the Cross-Road" 1962

† Slightly abridged and summarised.

in whose aid the physical planner will have to place his services. The physical planner finds his *metier* only when the question boils down to one of town planning.*

17.19 Apart from selecting the sites of main communication routes and of new towns which may have to be created along with industrial and other employment facilities for a self-sufficient urban settlement, the control in the countryside should, subject to one exception, be minimal. Our countryside is not yet so disfigured by advertisement hoardings as to require their control on aesthetic grounds, and we do not recommend assumption of powers similar to that which enables the Minister in U.K. to pass an order on the private owners of historic buildings or buildings of special architectural value or of trees of special character deemed worthy of preservation that they must or must not take certain measures with regard to their property in the national manner or interest. There are very few such buildings or trees in West Bengal, but even if there were many and they were considered worthy of preservation outright acquisition by the State is in our opinion the better course. In some cases there is the Ancient Monuments Preservation Act to confer all the power that is necessary. If in future, changes in the countryside become inevitable with the erection of pylons and atomic power stations, and if effective transmission of radio and television, as well as the protection of the country by a network of radar stations necessitates the construction of towering masts, it will probably be difficult to control them merely on aesthetic grounds since defence must come before everything else. In view of the flat nature of our land we cannot even possibly suggest that they should be sited in sunken valleys with clumps of trees in higher slopes to camouflage or conceal their nakedness.

17.20. To this there may have to be one exception, and it relates to the preservation of agricultural land and possibly land containing minerals. We do not include forests because all forests are now either government owned or government-controlled and extension of forest areas would require acquisition of land for the purpose. In so far as the threat to agricultural land, forests, or mineral areas is from new or expanding industries control may not be difficult by making all new industrial developments and all expansions conditional on obtaining a licence from the State Planning Authority who will see, after consultation with the department of industries and those other departments which are interested in protecting the land from industrial invasion, what is the most suitable location (in new or expanded towns) where these industries may be guided. Evasion of the duty to take out a licence which, we understand, is not uncommon will have to be checked by the exercise of a greater degree of vigilance by the departments concerned since we do not propose to set up local planning authorities all over the State or invest them with enforcement powers. Cottage and small-scale industries do not pose this problem as they are carried on within the inhabited part of villages without encroaching on open country, and are not 'bad neighbours' in the sense that large industries tend to be. It will, however, be more difficult to control diversion of agricultural land to other purposes—e.g. residential or other buildings, brick fields, borrow-pits. It is easy to make such diversion a penal offence on paper but the administration of such law by the State Planning Authority from

*Cf. L.Keeble—"Principles and Practices of Town and Country Planning" 1959, p.16.

"At this very general (i.e. state) level the contribution of the planner would be somewhat limited. Many of the decisions to be incorporated in such a plan would have to be made primarily on the advice of economists and geographers and would be based on economic considerations far removed from land use, the determination of which would be the last line in a fairly long chainEven at the regional level.....much of the work falls within the work of the economic geographer but considerable knowledge of town planning technique is also necessary."

head-quarters or through its local officers, if any, will be intrinsically more difficult than is the case in U.K. where, according to Peter Self, more than a million planning applications or appeals have to be dealt with per year. If village Panchayats started functioning properly and efficiently in all rural areas, this problem of administration could have been solved but to rely on them now may be too optimistic.

17.21. As regards coal-bearing lands the problem, we understand, is the number of residential buildings that have been erected on long or permanent leases obtained from previous mine-owners which prevents their full exploitation at the present day. If the problem is really acute, one remedy may be to constitute such mineral areas into local planning areas and to zone the surface area in such a manner that only agriculture or similar innocuous uses are permitted. Any other use (residential, commercial, industrial etc.) would then be a non-conforming use and after the usual period of moratorium may perhaps be induced or compelled to remove itself.

17.22. The control of land use within a town proposed to be planned or replanned must however be much more detailed. The sickness of existing towns may be due to hyper-tension or anaemia, the one requiring planned dispersal and the other planned introduction of population; and there may have to be completely new towns built from scratch to afford home and employment to a sizable overspill. The difficulties which expansion of old towns experienced in England are not likely to be met with here, and we suggest that as much attention should be paid to the existing urban settlements (particularly administrative or industrially important ones) as to the building up of new towns. The latter must inevitably encroach on open country, however infertile the land one may select for the purpose, whereas some peripheral development is always going on in existing towns and a plan for expanding such towns may not only curb such haphazard growth (which goes on regardless of the quality of the land) but also put an effective check to further growth beyond what the plan considers desirable. Such a plan should provide good siting conditions of approximately the right amount for each suitable use and must involve some redistribution of existing uses in terms both of land areas and building accommodation. The main decisions which have to be taken in preparing a plan have been described to be of three main kinds; namely, those which concern (1) the kinds of uses which the plan should provide, (2) the amount and distribution of the floor space and land that should be provided for each use, and (3) the layout of the main streets. The determination of the kinds of permissible use is of primary importance. As a Ministry of Town and Country Planning hand-book† says, the aim of all planning is to enable all activities to take place under the best practicable conditions which is possible only if buildings with similar siting requirements are grouped together and those with conflicting requirements separated. The plan should therefore provide for the division of the area into a number of use zones each of which should be laid out to provide suitable sites for particular classes of buildings. The hand-book lists thirteen such building uses, viz. (a) dwelling house, (b) other residential buildings, (c) schools and residential colleges, (d) shops, (e) offices, (f) wholesale warehouses, (g) storage warehouses, (h) public buildings and places of assembly, (i) special places of assembly like amusement halls, sports grounds, stadium etc., (j) light industrial buildings, (k) industrial buildings, (l) special industrial buildings (generally those which give rise to offensive sights or smells or noises) and (m) other buildings. Under each head a large number of uses are grouped which has been given in detail in Appendix I of the hand-book. It should be remembered

†The Redevelopment of Central Areas 1947 (H.M.S.O.)—an extremely well-written guide for practical purposes from which some of the ideas of this section are taken.

that this grouping of uses relates to building uses only and not to open spaces and other requirements for which also a good town plan should make provision.

17.23. It is not necessary to discuss the other two aspects of a good town plan viz. density (of buildings as well as accommodation) and the street layout both of which have been incidentally touched upon earlier in our Report. What we would like to suggest is that these three are the main decisions and all else is secondary—the decision relating to the grouping and juxtaposition of permissible uses, the decision relating to the kind of density that should be permitted in different zones and for different kinds of use, the decision relating to a rational road system which relieves traffic congestion and economises the time and trouble of the journey. If these three objects are achieved ninety per cent of the object of planning can be said to be achieved, and one may as well do without refinements which are concerned with elevations or facades; colour-schemes of building walls, compound walls and gates; the height and colour of pillar-boxes etc. Advertisement displays in towns and cities may endanger safety by distracting attention and also offend one's aesthetic sense, but the elaborate rules framed under the English Act to control them seem out of proportion to the evil they are designed to prevent. As regards architectural control the following observations of Dudley Stamp are worth quoting, "Perhaps one of the weakest (points) is the impossibility of controlling architectural design. Wherever architecture is concerned personal taste as well as public taste come very much into the picture. One man's meat is another man's poison.* By and large it has proved impossible to control and probably very undesirable to attempt to control, actual architectural design." † We suggest that it should be the responsibility of public and local authorities to improve aesthetic standards in the designs of their own public buildings, parks and park-ways and that the citizen should be allowed to have his head unless the proposed structure is either impossibly ugly or utterly incongruous with the noble facades of other buildings within the same street-block. "We certainly give a high place in the scale of values to outward beauty, whether in people's homes or in the streets and public places or buildings of the town in which they pass their working and civic lives. But outward beauty of design is not to be regarded as the sole object of planning. It is one of a number of different elements of value, all of which have to be taken into account and combined to provide the best environment for living." ‡

(9) Survey

17.24. The aim of planning survey is to collect and summarise in a suitable form the information which a planning authority will need in order to base his proposals for guiding development within his area. Incidentally, as Abercrombie says, it will also provide the Minister with materials upon which to judge the merits of the proposals, and help convince the owners and especially the general public of their fairness. The survey naturally varies in range and detail according to the character of the area and the kind and scale of the development which is likely to take place. For regional planning involving a large area where the negative method of preventing undesirable development is perhaps more important than the positive planning of amenities, a bird's eye view with attention concentrated on the broader features is both appropriate and sufficient. For local planning of towns and other considerable human settlements, much more intensive survey and mapping will be called for. It is one of the conditions of successful planning that both the extent of survey and the limits within which it should be confined should be carefully borne in mind.

* L. Dudley Stamp—"Applied Geography" 1960, p.134.

† Schuster Committee Report, p. 18 para 52.

17.25. The subject-matter of survey necessary for regional planning has been grouped under three heads: (a) physical, (b) physical and economic, and (c) social and economic. Landscape and contour, topography, and other physical characteristics which constitute the first category are the most objective part of the survey though what is a good landscape is often a matter of individual judgment. Other characteristics of land viz. height, slope, unfavourable aspect, swamps, liability to floods or subsidence etc. which make it unsuitable for building purposes are important because one object of such survey is to find out areas suitable for new towns. The relevance of geology is both physical and economic. Generally speaking, it is desirable to obtain detailed maps of all areas in which it is reasonably certain that economically workable minerals exist, for though the presence of minerals is not an absolute bar to other kinds of development it is desirable in view of their relative scarcity to steer non-mineral developments to other areas as far as possible. Agriculture is the only kind of operation on such land to which there can be no objection because it is possible to scuttle out at the first hint of danger. The most important physical-economic factor is the suitability of the land for the purpose of agriculture. Next comes the pattern of the communication system consisting of the network of roads, railways, canals, navigable rivers and aerodromes together with a study of the density of traffic using these various means of movement in normal times as well as at week-ends and during seasonal holidays. Last under this group come the public services—sewers, gas, electricity, water and also, one may add, telephones.

17.26. The socio-economic factors are mainly demographic or economic. The first is a study of current population and its projection into future, areas of moderate or great increase or decrease being shown on the map so that anything not fitting in with the expected pattern may be a pointer to the existence of unusual factors capable of being remedied or taken advantage of by planning action. The second is intimately connected with a study of the distance between home and the place of work. It is not the function of the physical planner to study unemployment as such in order to devise means of eradicating it or to improve the standard of living, but "where important changes in employment structure appear feasible in pursuance of economic planning policy or inevitable in the light of economic exigencies, such additional surveys may be of great importance in redistributing employment with as little upset as possible. An investigation of the extent to which particular industries in an area are tied to a particular location or can, on the other hand, move with comparative ease is likely to be of special value where it is sought deliberately to bring about wide changes".*

17.27. Local survey which is concerned with a town or a village or an area of sporadic development includes a study in greater detail of many subjects dealt with under regional survey and adds a few more items. A large part of local survey is concerned with a study and analysis of the present distribution of uses and density of occupation with a view to deciding what changes should be made when redevelopment takes place and what amount of extra land will be required to reduce density to a more satisfactory level. It is upon local survey that the town map is based. The survey area covers not merely the existing development or the administrative boundary of the municipality but also surrounding lands which might possibly be required for its future development. In the case of a new town on virgin or sparsely populated land a physical survey may be all that is necessary—a study of topography, landscape, agricultural value of the land, accessibility from major communication routes, ease of providing the services of which the most important are power and water-supply, and facilities for disposal of sewage and other effluents. For old congested towns which are proposed to be

*Keeble. Principles. p.56.

redeveloped a large number of other very complex investigations are necessary. There has, for example, to be a land use survey, a density survey, a survey of the age and conditions of existing buildings, a survey of the factors limiting development, a survey of catchment areas (in relation to services) of which the relationship of place of work to home may be regarded as a part, a traffic survey, and a social survey.

17.28. It is impossible within the limits of our space to deal with all the kinds of survey, and it is not necessary either, as any good text-book on town planning will explain them in sufficient detail. A particularly important, short and practical book is 'The Redevelopment of Central Areas' prepared in 1947 by the Ministry of Town and Country Planning and published by H.M.S.O. How the different types of use should be classified and grouped, how density should be calculated on a floor-space-index,* what is the need and method of recording the age and condition of building etc.—are matters on which as much detailed discussion as one generally needs will be found here. But there are one or two points which we think it desirable to mention in passing. Some authorities suggest that both for regional plans and for town plans, the 'catchment' areas of different services should be surveyed. In the case of regions the idea is that patterns of human settlements, from the metropolis down to the hamlet, all provide services of a commercial, social and often educational nature which form a hierarchy of service centres not only for their own inhabitants but also for those of surrounding areas, and a mapping of these areas of influence and of the volume of services rendered by different centres will enable the planner to find out if there is any deficiency or maladjustment to be made good. The same process is supposed to take place within the city though on a miniature scale. We are doubtful both about the need of such detailed survey as also of its utility. Within the town, the householder is not tied to any particular shop or any particular locality for his requirements and current patronage may be easily transferred to another shop or another locality. To try to map out such areas of influence ascribes to the relationship a greater degree of permanence than it really possesses. The only exception is the distance between home and place of work, the bond here being more permanent as neither employment nor residence can be changed at one's sweet will. In the case of fairly large cities of a quarter million people, knowledge of the distance separating the worker's homes from his place of work is of considerable importance, it being one of the aims of planning to bring worksite and home as close as possible, both for the personal convenience and economy of the worker and for relieving congestion of urban traffic. The fact that a perfect mathematical solution is not possible in every case because some people prefer a particular neighbourhood despite long journeys to work and different members of the same family may have work places situated in different parts of the city does not invalidate the general proposition that the planning of development should ensure that substantial numbers of people do not have to make long cross-town journeys in order to reach their place of work.

17.29. It is necessary to emphasise before we close the limits within which the planner should confine himself in carrying out the several surveys mentioned earlier in this section. These limits are imposed by the subject-matter of planning, by the extent of control allowed by law, and by the practical nature of the planner's task ; and there is the fundamental and inexorable limit imposed by the cost involved in the planning process. "It is essential before embarking on a planning survey to be as definite as possible about the terms of reference ; the problems about which information is required, and the kind of action possible to solve them. * * * It is necessary to confine the survey

*Keeble thinks this too complicated and costly for universal use, however useful it may be for particular areas.

to such subjects as commonsense and experience suggest are likely to assist in formulating the proposals for which there is legislative sanction." * Planning is not an assignment for reshaping the social, cultural and spiritual life of the community, and socio-economic investigations into the problems of unemployment, prostitution, begging etc. should be left to other authorities more competent to deal with them. In view of the fluidity of human affairs and institutions all planning is subject to review in the course of 5 or 10 years so that an indefinite prolongation of the preliminary enquiry which equals or exceeds this time limit before any proposal can be put forward automatically defeats its purpose—all the more so if the enquiry is extended to spheres which it is not the job of the physical planner either to guide or influence. The temptation to glide into collateral enquiries, not strictly germane to the physical planner's task, is difficult to resist especially by a young research worker fresh from the university, but the ideal model constructed in the research library or laboratory may go far beyond the powers of control that the law would allow.

17.30. The second limitation arises from the need to avoid a duplication of work which has been or can be done more efficiently by other agencies. The probable future change of population due to natural increase or migration and changes in the family structure are of vital importance to the planner but most decidedly not the suitable subject for investigation by anyone but a qualified statistician or demographer. Similarly, although the maintenance of the welfare of the agricultural industry by preserving as much good land and as many productive farm units as possible is an important planning aim, the numerous factors that lead to the 'goodness' or 'badness' of land and the distribution of such lands and farms over the country are matters within the special knowledge of the agricultural expert, and a separate investigation by the planning authority would be a quite indefensible duplication of work. Fresh and independent investigations are necessary only when there is a lacuna in the information already collected and sample surveys may be resorted to for supplying the desiderata. In many western countries there are permanent census bureaus or statistical departments constantly bringing up to date all informations, figures and statistics relating to matters which have an important bearing on the different aspects of the life of the community.

17.31. Lastly, when the survey is concerned not with objective physical facts but with opinion, likings, and preferences many imponderable factors tend to come in. If "the purpose of planning is to provide a desirable physical environment for the people who live in the area" it may naturally lead to an enquiry into what is 'desirable', and it is here that research runs the risk of going off the track and plunging into the realm of abstract sociology which has little relation to the severely practical task of land-use planning. In relation to planning sociological investigation is hardly of any use unless it answers questions in such a way that the answers help determine an optimum distribution of land use and buildings of various types. Insistence on strict adherence to realisable planning aims alone can avoid the danger of getting lost in a sea of unassimilable information of doubtful relevance. It is, of course, true that too rigid insistence on strict relevance may prevent the emergence of much useful information, but the connection with action which is legally, politically and economically feasible must not be lost sight of. It is also essential that planning should be entirely dissociated from sectional attempts to influence social patterns and behaviours however enlightened and well-meaning the planner may think it to be. It is only by imposing on himself a strict discipline on these lines that the planner can avoid dissipating resources on investigation which are not strictly relevant and put up proposals within a reasonable time which are legally workable and socially desirable.

* Keeble—Principles, p. 48.

CHAPTER—XVIII

Conclusions and Recommendations

Conclusions

18.1. From this conspectus of the land resources of West Bengal, its density and distribution of population and probable future increase, and the extreme industrial concentration in a few limited regions, it is obvious that there is a definite need of some deliberate and purposive action by the government to control the use of land in this State. If its scarce and inelastic land area has to feed and house and give some elbow-room to its ever-increasing population and provide an appropriate location for its industries, we must make the most of this limited resource and prevent waste or uneconomic use. If its towns and cities are densely crowded with incompatible uses flourishing cheek by jowl with one another, conscious planning and its enforcement are the only possible way to unscramble the mix-up and introduce a more coherent pattern of living. We have discussed the possibilities of dispersal of population and industry and found it quite feasible, and we have also considered how that has been sought to be achieved in other countries, especially England. On considering the pros and cons of control we have decided in favour of control although we admit that it may be irksome unless its administration is enlightened and sympathetic. For such control legislative sanction is indispensable, and we have found that there is nothing in the Constitution which stands in the way of such legislation if the restrictions imposed are reasonable. The current Acts in the different States of India may offer little help, but the English law and practice can be of considerable assistance and so may the Model Act prepared by CRUPO (Ministry of Health, Government of India) though a close reading of the Model Act has disclosed some fundamental differences between its standpoint and ours,

18.2 In our recommendations about the kind of legislation necessary for this state we have adhered to a few cardinal principles which it may be as well to point out at this stage. We believe first, that the law should be practical and capable of being enforced; second, that the machinery should not be loosely jointed but compact and capable of functioning with the minimum amount of jolting and creaking occasioned by the existence of too many tiers between the top and the bottom; third, that while planning should be centralised, its execution or implementation should be decentralised; fourth, that people's co-operation should be obtained by limiting the area and range of control to essential things and giving them a real opportunity to voice their opinion and objections with a guarantee that they will be considered; and fifth, that local authorities should not be completely ignored but should be gradually initiated into the meaning and purpose of planning control by being given some responsible duties in enforcement and implementation. We have tried in the following paragraphs to set forth our recommendations as simply and clearly as possible and have followed them up, where necessary, with reasons for their adoption, the organisational set up necessary to put them into effect, and an explanation as to why our recommendations differ either from the English Law or from the Model Act. For the convenience of those who want to skip the reasons, the set-up and the explanation and only care to know the recommendations we have placed the recommendations first, and the reasons and the explanations later in separate paragraphs within square brackets. Some of the reasons are mere repetitions of what has already appeared elsewhere in the Report but this is perhaps a lesser evil than continuous cross-reference to earlier pages or paragraphs.

Recommendations

1. *Minister of Town and Country Planning*

18.3. There should be a Minister in charge of Town and Country Planning under whom all planning control of land use should be unified. The Minister may be in charge of other allied departments but there should be no division of responsibility in the administration of town and country planning between different Ministers.

18.4 [This is essential as we have shown in para 16.2 of our Report. A new Ministry exclusively placed in charge of town and country planning may not have enough work in its hand for some years to come. It may also lack the prestige of old established Ministries as happened in England in the late forties and early fifties so that in case of conflict between the requirements of other departments and the requirements of sound town-planning the latter had to yield to the demands of other departments. If the department of town and country planning is to be attached to an existing Ministry one obvious choice is the Ministry of Local Self-Government and Panchayats because a considerable part of the planning process viz. the administration of control and implementation of plans is proposed to be handed over to local authorities. It is not unlikely that in future even quinquennial or decennial revisions may also be so entrusted. Another possible choice is the Development Ministry because physical planning and economic and, to a lesser extent, social planning are closely inter-linked. The present preoccupation of the Development Department is however almost wholly with rural areas with particular accent on social rather than economic planning, whereas in our opinion physical planning will have to concern itself for the present largely with areas that have already been urbanised and are suffering from urban "blight". A third possibility is to keep it under the Chief Minister who is already in charge of the C.M.P.O.—the biggest planning undertaking in West Bengal up to date. This will give the Town and Country Planning Department considerable prestige and weight and if—it is a big 'if'—he can spare time from his other arduous duties for this new department town planning will get all the boosting it needs to get off to a flying start.]

II. *Town and Country Planning Department*

18.5. The department of town and country planning should be an independent department and not a branch of a composite department even if it shares a Minister with other departments. It should have its own Secretariat and Directorate and the relation between these two wings should be as laid down in the Secretariat Manual.

18.6, [We want to lay special stress on the quality and composition of the superior officers both of the Secretariat and of the Directorate because on them will depend the success and progress of land use planning in West Bengal in its formative stages till it gathers a momentum of its own. The Secretary should be a high grade officer of proved administrative ability, possessing the qualities (or as much of them as possible) which the Schuster Committee says he should possess (see para 16.8); and there should be the usual complement of officers under him somewhat on the lines of the set up in the English administration (see para 10-11) but excluding the section on planning technique and research which should be placed under the Directorate. There should be at least

two Directors—one, called the [the Chief Town Planner who should be in charge of Town Planning and the other, the Director of Applied Socio-economic Research, whose designation sufficiently explains his function. The Chief Town Planner will deal with all aspects of planning technique and design and all ancillary matters such as surveys leading to the preparation of maps and plans. An important part of his function would be to collect and collate the most up-to-date information about planning law and practice in different countries and states, to evaluate alternative methods and practices, and to consider their applicability to conditions of this State. The second Director, as his name implies, will be more concerned with population growth and distribution; agricultural, industrial and employment statistics and trends within any given area proposed to be brought under planning control; analysis of the result of the survey in relation to density of accommodation, family grouping, distance of journey from home to work, and other matters. In case of overlapping at the border line it should not be difficult for the two Directors to come to an agreed demarcation of their respective spheres of work. Whether there should be any other Director in addition to the two mentioned above will depend upon how rapidly the work progresses and how wide the net is cast for preliminary enquiries necessary to formulate or prepare a plan. We are not convinced yet that detailed investigation of many social and economic aspects are so necessary as to require separate Directorates working full time in the town and country planning department, if information is available from other sources or other departments of government.]

III. *State Planning Authority*

18.7. There should be a State Planning Authority consisting of not less than 3 as not more than 5 members with the Secretary of the department as its Chairman and the Chief Town Planner and the Director of Applied Socio-economic Research as its two other members.

18.8. [Whether two more places should be filled up will depend, as already mentioned, on whether there will be need for other detailed studies and sufficient work to keep them fully occupied. If it is decided to fill these two places, the choice should lie with persons with specialised knowledge in the geography and geology of West Bengal, or in the social sciences (including law), or in engineering or in architecture. All these members of the State Planning Authority should be whole-time officers of government with a special assignment of work in the sphere of planning so that they form a team working together towards the same purpose and their formal meetings are merely the culminating points at which the results of separate thinking and working in cognate subjects (with, possibly, frequent informal discussions in between) are finally brought together and synthesised. This State Planning Authority which is our substitute for the anaemic State Town and Country Planning Board of CRUPO's conception will have a much more dynamic part to play in the sphere of planning. In its organisation it is compact, not composite,—a team of permanent officials of the same department who are in frequent contact with one another under the same roof without the need of periodical election or appointment and not hampered by departmental work unrelated to planning which would have made them unable to meet even at long intervals.]

IV. *Duties and Functions of the State Planning Authority*

18.9. The duties and functions of the State Planning Authority will fall broadly into two classes; (a) supervising and assisting

the work of local planning authorities where they are set up ; and (b) preparing on their own plans for towns, cities or regions which are in need of planning but where for administrative or other reasons it is not considered necessary or possible to set up separate local planning authorities. In preparing such plans the State Planning Authority should consult all the departments of government concerned with land use and the relevant local authorities.

18.10. [The duties of the Board under the Model Act are (a) advising the government in planning matters, (b) helping local planning authorities in preparing plans (c) collecting statistics and publishing bulletins, monographs and reports either on the aims and methodology of planning or on the working of the Act, and (d) doing such other acts, as government may ask the Board to do. The first and the last duties in the above list postulate a duality between the government and the Board which is absent in our recommendation. The State Planning Authority is not something apart from the government, it is in fact a limb of the government itself at its highest level and its activities are the activities of the government. The other two duties—(b) and (c) in the above list—are important and a State Planning Authority consisting of whole-time officers with special technical knowledge in town and country planning and cognate disciplines can perform them much better than a Board which meets at infrequent intervals and has no office or research staff to assist it in the discharge of its functions. Even under the Model Act these duties will be actually done by the Chief Town Planner and our recommendation places them squarely on him and his colleagues.]

18.11. [Guiding and assisting local planning authorities will form only a part of to the work of the State Planning Authority, for according to our recommendation local planning authorities should be set up only in a few places of great industrial or strategic importance and should be fully equipped with staff of high calibre who may not need much assistance from head-quarters though there may be some need for vigilance to ensure that work goes on according to schedule and no time is wasted. The major part of the State Planning Authority's time will therefore be taken up with preparing plans for those towns and cities or areas which should be brought under planning control but for which a separate local planning authority is not contemplated on the ground of cost or administrative difficulties. The technical staff of the State Planning Authority can be easily switched on to these areas and more than one area can be taken up simultaneously with no addition to overhead cost. The State Planning Authority should probably start by preparing a rough outline plan for the whole State, showing the major communication routes (existing or projected), the probable sites of future industrial locations and towns, and other particular features (e.g. places of archaeological or mineral importance) that need to be protected or preserved. This will only be a guide plan which is necessarily flexible and has no legal validity for enforcing control. In selecting sites for new towns or in expanding existing towns which require to be re-planned great care must necessarily be exercised. Not being hampered by the difficulties which beset the smaller towns in U.K. in giving effect to the Town Development Act of 1952, the State Planning Authority may so design the existing towns as to provide for a fair amount of overspill population from other congested areas and do all that is expected to be done under the English Town Development Act of 1952. As an instrument for re-planning existing towns or planning brand-new towns or villages or other areas the State Planning Authority seems to us to be likely to prove both economical and efficient.]

18.12. [The State-Planning Authority may also have another function viz. to hold enquiries into objections filed against plans prepared by local planning authorities but this will be explained later when we deal with the procedure of preparation of plans.]

V. Local Planning Authority and Its Functions

18.13., For metropolitan areas and conurbations or areas of great industrial or strategic importance which require concentrated attention and study over a number of years, local planning authorities should be set up with a clear demarcation of their boundary under the administrative control of the department of town and country planning, the latter having the right to extend or reduce the area of operation by notification if the need of proper planning requires such extensions or reduction. A local planning authority should not be a replica of the State Planning Authority at a lower level ; it should be more representative and less bureaucratic in its composition. The number of members may vary from 7 to 11, a minority being representative of selected local authorities while the majority are appointed by government, the chairman and the town planning officer being whole-time salaried officers while the rest should be entitled to receive such allowances for attending meetings as is thought desirable. The usual term should be three years but the term may be extended in suitable cases so that the body which produces the plan may be more or less identical from beginning to end. Local authority representatives will, of course vacate when they cease to be members of local authorities they represent or when, on the expiry of their term, they are not re-elected. The function of the local planning authority will be to prepare a Master Plan for the area over which it is set up after carrying out such surveys and investigations as may be considered necessary. It may also prepare, within one year, an Interim Plan showing the broad features of proposed use zones if the preparation of the Master Plan is likely to be delayed. It should not be burdened with the duty of enforcement and certainly not of implementation.

18.14. [The composition of the local planning authority follows more or less the proposal of the Model Act but we fix a statutory term instead of leaving it to be prescribed by rules. The Model Act describes its functions to be (a) to prepare an existing land use map, (b) to prepare an Interim Development Plan, (c) to prepare a Comprehensive Development Plan and (d) to prescribe uses of land within the area. This is both an understatement and an overstatement. It is an understatement because it omits the local planning authority's duty of enforcement of control on which Model Act lays so much stress, but since an Act is not a text-book in which a comprehensive classification of duties and functions is expected to be given in one place this defect is not very material. The other defect, however, is more serious as it creates a misleading impression that there are four separate functions while, in fact, there is

only one. The four items mentioned are merely steps of a process which ultimately culminates in the preparation of a plan. The land use map is nothing but the visible representation of the result of one of the surveys that has to be undertaken and it is one of the earliest steps in the process. The determination of the appropriate uses of different parcels of land within the area is the next step which, in its inchoate stage, is embodied in the Interim Plan, and in its mature stage is shown in what the Model Act calls the Comprehensive Development Plan. The splitting up of one continuous process of plan preparation into four separate stages and describing each as a separate function seems to us unjustified, as it may create the impression that as soon as any of these stages is passed one complete function is accomplished and nothing remains to be done in that behalf. The dichotomy implicit in separating development plan from prescription of use does not exist for the two are really one, the plan being nothing but the expression in maps and written texts of the appropriate uses in different zones that have been determined and are proposed to be prescribed. The description is also defective for another reason for it picks up one kind of survey out of several and gives it the dignity of a "function" while it omits other surveys (e.g. density survey, survey of the age and conditions of buildings, traffic survey, socio-economic survey etc. mentioned in paras 17.25 to 17.28) which, from the point of view of the town planner, are hardly less important than the existing use survey.]

VI. Time for Plan Preparation

18.15. The State or the Local Planning Authority, as the case may be, should carry out such surveys as it may think necessary or as it may be directed to carry out by the Minister by rules, circulars or orders. It should prepare a Master Plan within the time prescribed which should not generally exceed three years. In cases where control is urgently necessary to prevent haphazard development and the preparation of the Master Plan is likely to be delayed beyond two years an Interim Plan should be prepared within a year which will automatically lapse when the Master Plan comes into operation.

18.16. [This is more or less in accordance with section 5 of the English Act of 1947 which runs as follows. "As soon as may be after the appointed day every local planning authority shall carry out a survey of the areas and shall, not later than three years after the appointed day or within such extended period as the Minister may in any particular case allow, submit to the Minister a report of the survey together with a plan (hereinafter called a development plan) indicating the manner in which they propose that land in that area should be used (whether by carrying out development or otherwise) and the stages by which any such development should be carried out." Note that it merely speaks of a "survey of the area" without going into further detail which is reserved for elaborations by means of circular orders or instructions. The Model Act merely speaks of one type of survey—survey of existing land use—and considers it so important that it devotes a whole chapter to how it should be prepared, published, and finalised after inviting objections which have to be disposed of after a personal hearing. The second part of the suggested procedure viz. publication and hearing of objection seems to be unnecessary, while the first part belittles the magnitude of the task. If the local planning area is a "region" and the use of "every piece of the land within it" has to be recorded and mapped, it may be a colossal task which only the Director of Land Records with his large survey personnel can possibly perform with accuracy and speed. We think that if

a cadastral survey of the area has already taken place within recent years there may be considerable saving of time and energy if that is adopted as *prima facie* correct, subject to further enquiry only in those cases where anybody questions its accuracy. For urban areas an independent land-use and other surveys are essential, for no municipal record is probably accurate and up to date and none conveys all the information that the planner will need to know. This survey can probably be covered by one set of people during one tour provided they are properly trained. The only use of such survey is to supply the planner with materials for formulating his plans but it has no evidentiary value or purpose. The Model Act does not say that the maps and registers prepared after objection hearing will have the presumption of correctness in a court of law as is the case with the cadastral survey maps and the settlement record of rights. The publication under the Model Act, even according to its sec. 16(5), is a guarantee of the correctness of the procedure followed, not of their contents. We therefore think that the elaborate procedure of inviting objections and giving a hearing to the objectors at the time of preparing the existing land use map and register is unnecessary. The records should be treated as a departmental record, prepared solely for departmental use. The English Law which is more sensitive to private rights than the Model Act in many respects does not provide for it either.]

VII. *A question of Nomenclature*

18.17. The State Planning Authority and the Local Planning Authority should prepare a physical plan of the area showing the details and embodying the features mentioned in the next following section. The plan in its final form may be called the Master Plan, and in its intermediate stage, the Interim Plan.

18.18. [The English Law does not provide for framing plans in two stages; it mentions only one plan—the development plan—which is the final plan. The Model Act adopts the term but because it provides for the preparation of plans in two stages it calls one the Interim Development Plan and the other, the Comprehensive Development Plan. There is a slight inappropriateness in calling a plan “a Development Plan” when the idea is not so much to advance development as to “contain” it. The technical meaning of “development” in planning law, as we shall presently see, is to construct buildings and roads or conduct mining operations or substantially to change the use of land from what it is at present. Much of the Plan is protective and preservationist in nature, designed to prevent such development except in stated places and in a stated manner. To call a Plan prepared with such intention a “development plan” instead of a “development control plan” seems a misnomer. The word “comprehensive” is also misleading if applied to what is generally known as a Master Plan, for a Master Plan is only a broad skeletal framework showing the network of major roads; the principal use zones and neighbourhoods; the central and other areas with allocation of uses suitable to them; the size, height and bulk of buildings appropriate to each zone. It does not go further and make detailed plans for each small sector within the zone. Comprehensive planning, etymologically interpreted, would require filling in the details within this broad canvas which is not the function of the Master Plan but of specific improvement schemes framed for each small area within a zone. We do not see what is wrong with the word ‘Master Plan’ which, in spite of vulgarisation through frequent use, expresses the idea better than any other word or expression. It is the “Master” which holds the strings, the framework which binds together the details as and when they are to be worked out and implemented in future.]

18.19. [We agree with the Model Act that there should be provision for an interim Plan and a final (but flexible) Master Plan but for a slightly different reason. We want to make the local authorities the agency for enforcement and they cannot obviously start doing so unless they have some sort of a guide before them in the form of a plan, however rough or inchoate it may be. If the final plan is likely to be long delayed, these local authorities should at least be supplied with a working guide which the Interim Plan provides. But the reasons for which the Model Act suggests the preparation of an Interim Plan are not so strong. According to it, control starts as soon as the Act applies to a planning area, which means as soon as the state government declares an area to be a local planning area. That is why a planning authority is empowered under the Model Act to take into consideration not merely what is in a plan already prepared but what is still in the mind of the planner but has not yet materialised into a visible or tangible plan or map. If it can do so even before the Interim plan is ready (which it must, because even an Interim Plan will take at least a year to be prepared) why waste time in preparing an Interim Plan with all the procedural formalities (publication, objection hearing, submission to government for approval) and not continue to rely on intuition or mental picture till the final shape of the Plan is ready?]

VIII. *Contents of the Plan*

18.20. The Master Plan should indicate the manner in which the land in the area should be used. It should in particular (a) allocate areas of land for use for agricultural, residential, industrial, commercial and other purposes ; (b) define the sites of proposed roads (including national highways, arterial roads, ring roads and major streets) and other lines of communication (including railways, airport and canals) ; (c) indicate the proposed sites of parks, playgrounds, pleasure grounds, nature reserves and other open spaces ; (d) include regulations controlling location, size, height, and bulk of buildings and other structures within each zone together with the size of the yards, courts and other open spaces to be attached to every building within a plot ; (e) show the sites of the proposed public and semi-public buildings and works as well as of public utility undertakings ; (f) provide for the control of architectural features in specific areas if thought necessary ; (g) indicate the stages by which the development should be carried out ; and (h) include any other matter, not inconsistent with the purposes of the Act, which the planning authority thinks necessary or the State government directs to be incorporated.

18.21 The plan should contain such maps and descriptive matters as are necessary to explain and illustrate the proposals but the Minister should issue detailed instructions as to the forms and contents of the plans, the number, type and scale of the maps to be prepared, and the points on which information is to be supplied in the descriptive text and other matters. If an Interim Plan is considered necessary it should indicate broadly the manner in which the land is proposed to be used and incorporate atleast

items (a) (b) and (c) of the above list even if the other items cannot be included.

18.22. [The above list of items to be incorporated in the Master plan is a paraphrase with slight additions of sub-section (1) and the first portion of sub-section (2) of section 5 of the English Act of 1947. The English Act does not contemplate preparation of an interim plan to be followed by a final plan which is why it is thought necessary to split up the compact wording of the English Act into a number of items, only some of which need be included in the Interim Plan. The *raison d'être* of the interim plan is, as already mentioned, to arm the local authority as early as possible with some guiding map or plan on the basis of which it can start granting or refusing permission or permit or refuse change of use in doubtful cases. If it has to wait till the Master Plan is prepared considerable damage may be done in the meanwhile. If it starts controlling without any plan before it, its action will be arbitrary since, not being the planning authority, it cannot even have a shadowy mental picture of the plan which will ultimately emerge.]

18.23. [The items mentioned above correspond to the items of the Interim Development Plan of the Model Act with one or two additions from those of the Comprehensive Development Plan but without their repetitions. They differ in one significant respect from the items included in the Comprehensive Development Plan of the same Act. Following the English Act, the Model Act suggests that the Comprehensive Development Plan should also "designate" lands for future compulsory acquisition without realising that such designation is not only not necessary here, but that, even in England, where there are some built-in safeguards in the Act itself against the harm that 'designation' may cause, it has come in for severe criticism from very high authority. The range and power of designation for compulsory acquisition permissible under the English Act of 1947 is extensive and it has been set fourth in para 10.38 of our Report. Its harshness is, however, softened by two safeguards incorporated in the English Planning Law of 1947 and 1959 respectively. By the first the Minister is to refuse sanction to a development plan if the land designated is not likely to be acquired within a certain time (7 years in the 'case of agricultural land and 10 in other cases). By the second, if the land becomes unsalable on account of "designation" except at a grossly inadequate price the resident owner can compel its acquisition by the local authority at a fair normal price which is not affected by the depreciation on account of the planning 'blight'. It is obvious that designated land tends to depreciate in value and to be sterile because the danger of compulsory acquisition which can take place at any time prevents it from finding a buyer and at the same time offers no inducement to the owner to invest any capital

in it.* In the Model Act these safeguards do not find a place; 'designation' can be made without any limitation of time during which acquisition must be completed and the owner has not the right to compel acquisition if his land becomes unsaleable. In fact, there is no reason why any provision about 'designation' should be incorporated in the Indian Act at all, because the reason which exists in England for such designation does not exist here. The right to acquire land compulsorily which was somewhat meagre in England was enlarged by the Act of 1944 but it was in the Town and Country Planning Act 1947 that it found its maximum scope. But there is no right to acquire under the 1947 Act unless the land is designated in the development plan which is what makes designation so important in English planning practice. There is no such limitation under the Indian Land Acquisition Act of 1894 and compulsory acquisition is possible as soon as public purpose is proved. We have therefore deleted the provision about 'designations'.]

IX *Development*

18.24 What is sought to be ensured by the plan and its enforcement is that the character or use of a piece of land does not change in a manner which is prejudicial to public interest. This change of character or use is what is meant by the special technical term "development". Subject to suitable modifications there is no objection to our accepting the definition given in section 12 of the English Act of 1947 viz. "(1) the carrying out of building, engineering, mining or other operations in, on, over or under land, or (2) the making of any material change in the use of any building or other land. The section itself excludes certain categories of building work or change of use from the definition of development (see para 10.6) which we should not only accept but enlarge.

18.25. [For example, maintenance and repair of existing buildings need not be confined only to internal alterations but may extend to external appearance as well. The alteration of a shop front in existing shopping premises must change their external appearance but this attempt to enhance their attractiveness need not be discouraged

* "Designation brings out in an acute form one of the worst difficulties of planning—the anxiety and sometimes the serious depression to owners who see the existing use of their property threatened. The decision how far forward to plan, at what stage to show proposals, can be a very awkward one. On the one hand, an authority ought to tell people what is in mind, and the public complain bitterly if that is not done. On the other hand, if they announce proposals before they are firm—or proposals which are very far ahead—they may inflict unnecessary hardship. Land can become unsaleable as a result of designation or even of definition or of a mere symbol on the plan. Whether designation—the advance announcement of intention to purchase—is really worth the disturbance it creates is a matter which needs further consideration. It certainly seems that land ought not to be threatened unless there is a reasonable certainty that it will be needed and a strong case for the advance warning. The Minister has amended several plans and is amending others in the direction of cutting down designations which are uncertain or unnecessary."—Address delivered by Dame Evelyn Sharp in 1954 and quoted in the *Encyclopaedia of Planning Law and Practice*, Ed. Desmond Heap (Sweet & Maxwell) p. 2114.

Even after the Act of 1959, which gave further relief against planning 'blight' caused by designation Desmond Heap questions whether the relief is adequate or substantial. (See his address at the Town and Country Planning Summer School 1961 at the University of Reading in the Seminar Report published by the Town Planning Institute).

by insisting on plan permission every time, since we do not recommend rigorous control of architecture in every part of a town. There is no reason why the permissible limit of road improvement (permissible, that is, without planning sanction) should be confined to the existing road width and cannot extend beyond it even when it is admittedly narrow. The activities in relation to agriculture and afforestation have been rightly excluded by the English Act from "development" and we would like to extend the exclusion to the making of structural additions or alterations also, if they are intended to facilitate agricultural and afforestation activities. As regards material change of use, while there is no dispute when the nature of the use itself changes to something quite different, the English Law would sometimes prevent a more intensive use of the same kind and it lays down specifically that when a single dwelling-house is used as two or more dwelling-houses it amounts to material change requiring planning permission. This would mean that a person desiring to let out a portion of his house would have to take planning permission from the appropriate authority. While we admit the evils of overcrowded houses we doubt whether this kind of control will be tolerated or can be enforced in Calcutta and whether without providing the requisite volume of extra accommodation necessary to house the overspill any such external check can prevent overcrowding. The greatest difficulty is likely to arise in deciding whether any particular change of use is a material or substantial change and the British statutory device of arming the Minister with powers to declare by promulgating orders as to what changes of use would not be deemed to be material may be adopted here also, though in grouping uses which are compatible with one another and differentiating them from those which are not we need not slavishly imitate the Use Classes Order promulgated in England. A second device in England is that the Minister is empowered to issue a general development order declaring that certain uses, changes of use, and activities which might fall within the definition of development are automatically given planning permission and will not require submission of an application to get such permission in each individual case. These exceptions and these "permitted developments" constitute a large class where the individual or public or local authority enjoys considerable freedom from planning control and the device can be useful in our own legislation. The statute should simply empower the Minister to grant relaxation or create exceptions and the details will have to be worked out in the department and later promulgated as rules and orders in accordance with the usual procedure. The Model Act does not make any reference to these exceptions and these "deemed permission" cases except in a very perfunctory way in section 29.]

X. Procedure of Plan Preparation

18.26. When the State or the Local Planning Authority prepares a Master Plan in draft it should be submitted to the Minister and published with his approval so that any person who is interested may file an objection. The publication should be in more than one central place and widely advertised in the local press though individual service of notice is not necessary. Copies of the basic plan and the descriptive text should be available for purchase and reasonable time should be given for filing objections. After the expiry of the period, the Minister should appoint a qualified person of his department to hear the objections and

submit a report to him. If the plan is prepared by a local planning authority, an officer of the State Planning Authority may be deputed for the purpose ; if by the State Planning Authority, the enquiring officer should belong to the secretariat wing of the department. We are not very sure whether it is necessary to associate an Assessor selected from the locality to assist the enquiry though at one stage we favoured the idea. It is much better that a single trained mind should be brought to bear on the enquiry to help the Minister with proper advice. The Minister is not bound to accept the enquiring officer's report and, on matters of policy, he should have the right to have further consultations even after the enquiry is over ; but no additional evidence on questions of fact should be admitted in the absence of the party affected. The Minister's right to approve or modify the plan or to return it to the planning authority for further consideration should be unfettered. When the plan is approved it becomes the final Master Plan and comes into operation on the date the approval is notified in the gazette. It may be challenged in the High Court on strictly limited grounds. The plan should be periodically reviewed and, if necessary, revised at intervals of 5 or 10 years.

18.27. We do not think that the same procedure should be duplicated in the case of an Interim Plan. That would merely waste time and energy on a matter of temporary value which could be better utilised in pushing on with the preparation of the Master Plan.

18.28. [The procedure and the machinery suggested is more or less what obtains in England. The reasons will be found in detail in paras 16.16 to 16.19 of our Report. The Model Act suggests an enquiry by the same authority which drew up the plan, but this cannot exclude bias whose elimination is one of the first conditions of winning public confidence according to the Franks Committee. The Model Act provides for an enquiry also at the interim plan stage which we do not.

XI. *Control of the Countryside*

18.29. For rural areas where no planning authority is likely to be set up the preservation of good agricultural land poses a difficult problem because of the absence of any enforcing authority within easy reach, able both to obtain timely information when such agricultural land is threatened with spoliation and to restrain it by exercising the authority vested in him by law. Among the factors which lead to such spoliation are (a) the invasion of industries, (b) the erection of rural retreats by people who want to escape from the town, (c) brick manufacture and (d) the erection of huts and buildings by squatters or shop-keepers on

the roadside, spoiling agricultural land and bringing in traffic complications. For the first, the creation of new and compact industrial sites and refusal of industrial licence to any person who proposes to establish his factory elsewhere may suffice, provided any violation is heavily penalised. Borrow pits for brick manufacture may be controlled by a provision similar to the English Agricultural Land (Removal of Surface Soil) Act of 1953 under which any person removing and selling more than 6 cft. of surface soil from agricultural land becomes guilty of an offence. A law forbidding construction of any kind within a certain distance (say, 100 or 150 ft.) from the middle line of a road declared to be arterial may prevent further extension of ribbon development. It is not so difficult to think of and pass appropriate laws as it is to enforce them. A law making all conversions of agricultural land to non-agricultural use (whether by the original owner or by a transferee) conditional on the permission of the nearest responsible authority can prevent or reduce the mischief but who can this nearest authority be who will be easily accessible and at the same time unlikely to be influenced? The nearest authority we can think of is either District Magistrate or the Sub-divisional Officer because it is not yet known how the embryonic Panchayats will shape. But a District Magistrate or Sub-divisional Officer is burdened with too many duties already to take kindly to an additional load upon his shoulders, and he lives too far away from the rural area to be able to exercise the vigilance that is needed. It is for government to consider whether the administrative set up is sufficiently strong, alert and honest to exercise this control without converting it into an instrument of oppression. If there is a reasonable chance of enforcing such a law, these provisions should be on the lines mentioned above and embodied in the planning statute itself so as to give the department of town and country planning an overall supervision of the manner in which this power is exercised. In exceptional cases the Minister should have the right to withdraw a case to be disposed of by him. It should be a convention that in disposing of applications for conversion of agricultural land to other uses the District or Sub-divisional Officer should consult the local officers of the departments concerned (e.g. agriculture, industries etc.) before deciding whether conversion should be allowed or not.

XII. Control of Urban Areas

18.30. For urban areas for which an Interim or Master Plan has been prepared control will rest with the local municipal authority. If there is no municipal authority in being, one should be set up, for if an urban area is important enough to deserve a plan it should be important enough to deserve a municipal administration of its own. This applies whether the plan has been prepared by a State Planning Authority or by a local planning authority. Control is exercised by requiring the submission of an application for development with necessary plans and maps and stating explicitly for what purpose the building is proposed to be used. The Minister should have the right to withdraw any application filed before a local authority to be disposed of by him directly. The local authority should have some discretion as in the English Law and need not be strictly bound to follow the letter of the plan. Permission may be granted with or without condition or it may be refused, but order must be passed within, say, two months after which, if no order is passed or time extended by consent, permission should be deemed to have been refused. For refusal and for imposition of conditions detailed reasons must be given in writing, and the aggrieved party should have the right of appeal. The appeal will be to the Minister and not to the State Planning Authority. The Minister's discretion when hearing such appeal should be unfettered as in U.K. and he may pass a more unfavourable order than the order appealed from. There may be a further appeal only on a point of law to the High Court. For reasons explained in the next paragraph we do not recommend that planning permission should be required before at least the Interim Plan is completed.

18.31. [The reasons why we suggest that local authorities should be the enforcing authorities and what safeguards there should be against abuse have been discussed in para 17.3. Delegation of enforcement powers to an authority at a lower level is provided for in the English Law and after 1959 some local authorities with population above a certain limit can claim it as of right. Even the Model Act visualises the possibility of delegation to a local authority. We have suggested that the obligation to ask planning permission imposed by the Act should start not from the date when the planning area is demarcated as suggested in the Model Act but from the date when the Interim Plan is prepared and forwarded to the local authority. The latter must have some prefabricated framework in the light of which alone it can exercise its powers of control. Not being the planning authority it cannot act on its own intuition. True, conditions may deteriorate in the meantime and some of it may cause irreparable damage but the only remedy against arbitrary action is a more rigorous application of the existing powers under the Municipal Acts. We have shown, when discussing the provisions of the Calcutta Municipal Act, how by a simultaneous or successive application of the law which empowers the Corporation to declare different streets as unsuitable for "buildings of the warehouse class", it can even now prevent industries and factories from invading the residential and commercial areas.]

XIII. Duration of the Validity of Permission

18.32. Development permission, once granted runs with the land and should be available to whoever is lawfully in possession of it later. If at the time it is granted no condition is attached limiting it to a temporary period only, it continues to be valid for ever unless it is subsequently revoked or modified. [This is also the English Law. We do not understand why the Model Act says that the permission should be valid only for three years and in no case for more than six years. To put such a limit would contradict an earlier part of the same section of the Model Act where it is said that permission may be granted unconditionally. A statutory rule that a permission is limited to three (or six) years makes all permissions conditional.]

XIV. Non-conforming Uses

18.33. On the day a Master Plan comes into operation a large number of buildings and their uses as well as the uses of other lands are bound to be at variance with the Plan, for if the plan merely reproduces the existing pattern there is no point in making it. The buildings and uses which are found to be non-conforming are likely to cause considerable headache to the authority charged with enforcement. We suggest that the local authority should make an inventory of all such non-conforming buildings and uses within two years and serve notice on the owners and/or occupiers asking them to show cause why the buildings should not be altered or demolished and the uses changed in conformity with the plan. In many cases the violation may be found to be technical or trivial and not serious enough to call for interference, and the local authority may, by giving a formal permission, allow the building to be retained or the use to be continued as provided for in section 18 of the English Act of 1947. In other cases the owner or occupier should be given a period from 5 to 15 years within which to conform to the plan or to wind up and leave the place. The moratorium period should depend on the one hand, upon the degree of inconvenience caused to the neighbourhood by this non-conforming use, and on the other hand, on the capital sunk by the party in the building or in the business. In cases of special urgency, where immediate removal is wanted, reasonable compensation should be paid. The local authority may also impose a tax or increase the municipal rate (to double or treble the normal rate) as soon as a reasonable period allowed for winding up is over. The usual steps against a transgressor of a plan should be available to the local authority against persons responsible for continuing the non-conforming use after the expiry of the period. If no such notice is issued within, say, 5 years the non-conforming use or building should be allowed to continue as if it is an

authorised use, and the only remedy against it is revocation or modification on payment of compensation which power the planning authority has both against authorised and non-conforming use.

XV. Owner's Right to Demand acquisition of his Land

18.34. If the land becomes incapable of reasonably beneficial use in its existing state on account of refusal or revocation of planning permission or on account of the condition imposed, or if it cannot be so rendered by carrying out an alternative form of development, permission for which has been or may be deemed to have been or is promised to be granted, the owner should have the right to compel the local authority to acquire the land by serving upon him a notice to this effect, provided the Minister confirms it within six months after being satisfied from the report of an enquiry held by one of his officers that the contention is correct. In this enquiry the persons who should be given an opportunity to present their case are (a) the applicant by whom the notice was served, (b) the local authority on whom the notice is served, and (c) any other local authority or statutory undertaker whom the Minister thinks likely to be interested in the acquisition. The Minister may, instead of confirming the notice, either grant the permission asked for or permit an alternative form of development which makes it capable of reasonably beneficial use, the latter being construed with reference to its existing use and without taking into account the potential value of the land. Against the Minister's order there may be an appeal to the High Court.

18.35 [This is in accord with section 19 of the English Act of 1947 and differs from the Model Act on several points. According to the latter, (a) the right accrues only after an appeal is filed and dismissed; (b) the acquisition is to be made by the state instead of by the local authority; (c) the Minister is given one year's time to give his decision instead of six months; (d) there is no provision for an alternative offer by the Minister; and (e) the exclusion of potential value from calculation in determining whether the land is capable of "reasonably beneficial use" (which was incorporated in the English Law in 1959) is not specifically mentioned. These departures do not seem to have improved the law but probably made it worse. To wait for the disposal of an appeal before filing such purchase notice means not only that the party loses time but that he faces a Minister whose mind is already made up.* It is also inconsistent with a later provision of the same section which says that in order to avoid purchase the Minister may ask the local planning authority to grant permission or withdraw the offending conditions. Having already dismissed the appeal in his capacity as Chairman of the Board (and thereby admitting that the application was rightly rejected or the condition rightly imposed), how can the Minister ask the local planning authority to grant permission or withdraw the condition without incurring the odium of inconsistency? It is illogical

*It may be remembered that in CRUPO's conception of the ideal Board the Minister is the Chairman and the Chief Town Planner the member-secretary, and it is this Board which hears the appeal.

to saddle the State government with liability to purchase because of a decision of the local planning authority. The procedure is likely to make the State owner of small bits of property in different urban areas for which it is not likely to have any use. It is the local authority or some statutory undertaker operating within the jurisdiction of the local authority who may have some use for the land. It also seems that a year's delay for a decision as to whether acquisition should be made or not, is rather hard on the owner whose property is affected. In our opinion, the provisions of the English Act are better and should be followed.]

XVI. *Compensation for Restriction of Right*

18.36. Generally, no compensation should be payable for restriction of right caused by the use zoning provisions of a Plan provided some kind of development is allowed, although it may not be the kind which the owner or occupier wants. This is particularly so when a development or a change of use to what is not permitted by the plan is asked for. When however the proposed development is within the same broad category for which the area is zoned and is refused (or is permitted on conditions which neutralise the benefit expected) the owner should be entitled to compensation equal to the difference between the value of the land according to its existing use and its probable value on the assumption that the development has been permitted. Section 20 of the English Act of 1947 and the accompanying schedule as well as section 33 of the Model Act mention some of the circumstances in which such compensation can be claimed but a more detailed classification is desirable. The value of the land may greatly depreciate by being defined or placed under a certain use class (e. g. open spaces, schools or other public buildings etc.) even though there is no "designation", and in such cases, apart from the right to demand compulsory acquisition mentioned before, the owner should have the alternative remedy of asking for compensation. This right to demand compensation should accrue only after the remedy by way of appeal has been exhausted.

XVII. *Revocation & Modification*

18.37. An authorised development may be revoked or modified by the enforcing authority with the sanction of the Minister if it is necessary to ensure conformity with the Plan but no such order should be passed if the use has already been instituted or the building construction reached a stage when its alteration is impossible and its demolition would cause hardship. For such revocation the owner should be entitled to compensation both for the abortive expenditure incurred by him and for loss or damage including loss of development value.

18.38. [This is a slight modification of the provisions of section 21 and 22 of the English Act of 1947 which the Model Act follows with one important omission. All such revocations and modifications require approval of the Minister under the English Act but the Model Act removes this safeguard which, we think, is unwise. Both say that no revocation or modification should be made when the building work has been "completed" which presumably means that it can be when it is half or three quarters complete. But what will a person do with a half finished construction which he is not allowed to complete unless revocation includes the further power of ordering demolition, subject to payment of compensation? Moreover, it is not possible to say always exactly at what stage a building has been completed. Either the power to revoke or modify should embrace even completed buildings with a provision for full compensation to the owner or it should be limited to the stage where alteration or demolition is possible without hardship. Our recommendation mentions only the second alternative but we have no objection to the first.]

XVIII. *Development Charge*

18.39. An intriguing question arises when some areas are restricted to comparatively unremunerative uses while others are placed in more favoured zones where the permissible use considerably appreciates the value of the land. If the owners of the former are not compensated (or not nearly as much as they think they are entitled to) for loss of value, there seems little justification for allowing the owners of the latter to get away scot-free without any payment because the accident of planning boosts up the value of their land while depressing that of others. There is no 'inflexible' or 'inevitable' plan for any particular area and several almost equally good alternatives are possible, in some of which the area now in the favoured zone might have been assigned a comparatively unremunerative role.* The choice as to which alternative should be accepted depends on the preference of the person who has the final say in the matter or even on his mood of the moment. It seems unreasonable that such an accidental choice should give an unearned increment to some people while causing hardship or loss to others. There is, therefore, quite good justification for levying a development charge to cover such cases as a measure of taxation, though we do not think that each and every plan permission should be saddled with such charge. The development charge should be levied only on those properties which are placed in the more remunerative zones and on those types of development (industrial buildings, business and commercial buildings, multi-storeyed houses and flats, cinema houses etc. may be cited as examples) which are expected to yield more than normal profit. The types

*"The Plan can usually take one of a considerable number of forms. It is seldom that only one solution is possible for a given problem, and the Town Plan may be regarded as the solution not of one, but of many problems, each of which is capable of being solved in several ways." Keeble—Principles and Practices of Town and Country Planning, p. 92,

and character of buildings and uses to be included in this list as well as the rates of levy should be published by orders or rules, the statute merely laying down that the Minister has the power to impose it and frame rules to regulate its working.

XIX. Enforcement of Control

18.40. The method of enforcement followed in England has already been described in some detail (see paras 10.26---10.30) and we do not think any useful purpose will be served by repeating them. The relevant sections in the English Act of 1947 are 23, 24, 26 while there are separate sections for control of advertisement, protection of trees, preservation of buildings of historical and architectural value, and proper maintenance of waste lands etc. The provisions of the Model Act are largely based on the English Act. We recommend a simplified version of the provision of the English Act for adoption.

XX. Incidental Amendment of other Acts

18.41. The provisions of the English New Towns Act of 1946, shorn of its complications caused by the existence of different tiers of local authorities in England, should be adopted for setting up new towns which we think necessary for relieving congestion in metropolitan areas and other conurbations. The main provisions have already been described (see paras 8.12---8.22) but the Act itself is a short one and may be looked into. Instead of having a separate Act, it is desirable to incorporate its provisions into the Town and Country Planning Act of which it may form one chapter as it will show that the establishment of new towns is subservient to town and country planning. The Land Acquisition Act of 1894 needs to be amended to cut down procedural delays and rationalise the basis of compensation. Some of the provisions of the Calcutta Municipal Act (Act XXXIII of 1951), The Bengal Municipal Act (XV of 1932), The Calcutta Improvement Act (V of 1911). The Howrah Improvement Act (XIV of 1956) and probably a few other Acts will also have to be suitably amended to remove any possible conflict between municipal laws, improvement acts and the town planning legislation.

18.42. The above is not a complete code of a Town and Country Planning Law for West Bengal but only a synopsis of a few of its possible salient features. To describe the provisions of a complete Act together with reason for the same and an

analysis of where they differ from current modern legislations and legislative models and why, will amount to writing a whole book with annotations which, with the time at our disposal and our present knowledge, we are unable to do.

Calcutta,
The 21st December 1962

(S. K. Gupta)
Chairman
(Dr. H. K. Nandi)
Member
(Dr. K. G. Saha)
Member
(K. L. Lahiri)
Member
(B. C. Mallik)
Member
(J. N. Mukherjee)
Member
(R. C. Roy)
Member
(A. K. De)
Member
(D. N. Gupta)
Member

APPENDIX I

Terms of Reference and Composition of the Commission

Notification No. 11451/LSG. 1A-4/61, dated 5th October 1961

(as it stands in its finally amended form)

Whereas Government, deeming it expedient in view of the density of the population in the State, and in consequence of the competing claims for the use of land, and further considering it to be incumbent upon the State to secure the best use for such land as also to ensure that the land shall not be put to such use that it would not be available for full and profitable utilisation in the future,—as for instance, by the construction of buildings on coal-bearing land which may hamper the working of the coal mines in future or necessitate forced evacuation of the residents—believe it has become necessary for Government to regulate and co-ordinate the use of all lands within the State,

Government do, therefore, constitute a Commission of the persons named below to recommend suitable legislation for the aforementioned purposes :

1. Shri S. K. Gupta, I.C.S. (Retd.)
2. The Director of Agriculture,
Government of West Bengal
3. The Director of Fisheries,
Government of West Bengal
4. The Chief Conservator of Forests,
Government of West Bengal
5. The Director of Industries,
Government of West Bengal
6. The Secretary, Board of Revenue,
Government of West Bengal
7. The Chief Engineer, Municipal Development,
West Bengal Development Corporation
8. The Associate Professor for Town and Regional
Planning, Bengal Engineering College,
Shibpur
9. Shri P. C. Majumdar, I.A.S. (Retd.),
Commissioner, Calcutta Corporation
10. Shri D. N. Gupta, B.E. (Cal.), M.I.E., M.T.P.I.
(Lond.)

Shri Anil Chandra Chattapadhyay,
Sub-Deputy Magistrate and Sub-Deputy Collector
—Secretary and Convenor

Government, by this order, hereby authorise and appoint Shri S. K. Gupta, the late Chairman of the Calcutta Improvement Trust, to be the Chairman of the said Commission.

And for effecting the purposes of the investigation, Government give and grant to him and the members of the Commission as appointed full powers to call such persons as may be judged likely to afford information in writing as also to call for, have access to and examine all such books, documents, registers and records as may afford information on the subject and to visit and inspect any area or premises that it may be necessary for the Chairman and Members in the pursuit of these purposes.

* * * *

By order of the Governor,

J. C. Talukdar

Joint Secretary to the Government of West Bengal

Note I—The names of members who are appointed by designation are as follows :

- Dr. H. K. Nandi, M.Sc., Ph.D. (Lond.),
Director of Agriculture,
Government of West Bengal
- Dr. K. C. Saha, D.Sc., C.P.F.T.,
Director of Fisheries,
Government of West Bengal
- Shri K. L. Lahiri, W.B.F.S.,
Chief Conservator of Forests,
Government of West Bengal
- Shri B. C. Mallik,
Director of Industries,
Government of West Bengal
- Shri J. N. Mukherjee, I.A.S.,
Secretary, Board of Revenue,
Government of West Bengal
- Shri R. C. Roy, B.E., M.I.E. (Ind.),
Chief Engineer, Municipal Development,
West Bengal Development Corporation
- Prof. A. K. De, B.E. (Cal), Dip. T.P. (Manchester),
A.M.I. Struct. E. (Lond), A.I.T.P. (Ind.),
M.T.P.I. (Lond), Associate Professor for Town
and Regional Planning, Bengal Engineering
College, Shibpur

Note II—On retirement of Shri P. C. Majumdar, I.A.S. (Retd.), as Commissioner, Calcutta Corporation, Shri S. B. Roy, I.A.S., Commissioner, Calcutta Corporation, was nominated as a member of the Commission in place of Shri Majumdar.

APPENDIX II

- [These detailed comments are made with reference to the Sections of the Model Town and Country Planning Act prepared by CRUPO on the assumption that the general structure of the Act will not be disturbed. In our recommendations we have suggested a change in the structure of the Act itself.]

CHAPTER I

1.
 - (3) Add 'and in such areas' after the word 'date'
2. Definition
 - (1) Agriculture

Since the idea is to apply the Act piecemeal in different areas, as suggested by Sec. 7, this is necessary.

Is the breeding of horses, donkeys and mules agriculture? In the matter of stock breeding should not the term be limited to animals whose meat we eat or which directly or indirectly provide food (e.g. by helping cultivation)? The English Act only includes those animals which are kept for the production of food, wool, skin or fur or for use on farm land.

- (5) Building Operation—omit (d)

It is absurd to say that a material change of use is 'a building operation'. It is 'development' but not a building operation.

It is a matter for consideration whether (e) and (f) are necessary either. If they are a material alteration they already come under (c). If they are not, is it necessary to ban such operations by calling them 'building operations' and so liable to control? What harm is there if an owner opens another door if the size of the building remains the same? Why should we slavishly imitate English law on the point?

- (6) Commerce

'Hotels, boarding houses, restaurants, sarais' are business and do not need specific mention. The same may apply to 'hospitals, nursing homes, infirmaries' run for profit. But a wider question arises. As regards proper siting does not a hotel or a boarding house which is undoubtedly business have a greater affinity with a residential zone than with a market place? If it has, is it necessary to bring all these different kinds of use under one common category 'commercial' simply because all are run for profit? The purpose of classification so far as town and country planning is concerned is to bring under one group those uses which can exist side by side and separate them from those which cannot.

- (9) Development — omit 'in any building or land or'

Redundant. It is covered by other parts of the definition and it does not occur in the English Act from which it has been taken. It is also doubtful whether 'subdivision of land' should remain as part of this definition.

- (13) Industrial use

Tautologous and unnecessary.

- (14) Land

This definition lays stress on what is unimportant. Planning deals more with the physical, tangible substance we call land—the crust of the earth with its subsoil and its atmosphere—and less with rights in land.

- (23) Relocation of population

Redundant. Which people should be relocated and where, what amenities should be provided, and what necessitates such relocation are not matters of definition but of policy.

CHAPTER II

4. (1) 'Subject to the provisions of the Act, the rules and the directions of the state government'.

Is it necessary ? A Board created by a statute can have no function except as provided in the statute and the rules framed thereunder.

5. (1) After 'prescribed' add 'by rules'

It is only government who should have the power to fix the terms and conditions of service.

CHAPTER III

From the final draft sub-section (2) of this Section which enabled government to confer planning powers on a local authority has been omitted. This seems to have been forgotten when Sections 16 and 20 were drafted.

10. (1) Add 'by rule' after the word 'prescribed'

The members of the planning authority should not be allowed to fix the terms and conditions of their service by 'regulations' framed by themselves.

- (2) 'At the pleasure of the government'

This arbitrary discretion should be replaced by a fixed term, but subject to removal for good and sufficient reason. As the words stand government may fix different terms for different members.

11

'As the language stands, the fourth function reads as if it is 'to prepare to prescribe uses of land' which is unmeaning. Some drafting changes are necessary.

Here also the question arises whether the words 'subject to the provisions of this Act' are not mere surplusage.

More fundamental objections have been mentioned in Chapter XVIII (Recommendations).

CHAPTER IV

16. (1) proviso

After the omission of sub-section (2) from Section 9 this proviso does not arise. There is now no provision for making local authorities into local planning authorities.

16. (2) & (3)

The enquiry should be held, if at all, under the orders of the planning authority which may depute the town planning officer or anybody else for the purpose, and the planning authority should have the right to recall and re-examine witnesses if it thinks fit. See also Chapter XVIII (Recommendations).

CHAPTER V

18. (1) 'And such other area or areas contiguous or adjacent to the planning area as the state government may direct to be included'

- (3)(ii) 'purposes'

19. (2) (a), (b), (c), (d)

- (3) (a) (ii)

- (3)(b)(i), (ii), (iii), (iv), (v)

- 20.

Is it necessary? Would it not be simpler to include those other areas within the local planning areas since government has complete freedom to draw and re-draw its boundaries? Or was it included to cover those cases where a local authority is constituted into a local planning authority and asked to plan for itself as well as for its adjacent territories as mentioned in the earlier Sec. 9 (2)(a)? Even that justification disappears with the deletion of sub-section (2) of Section 9.

The inclusion of this word seems to be completely unnecessary. Sec. 19 which describes the content of a comprehensive development plan does not contain the word 'purpose' except in connection with land designated for compulsory acquisition. As soon as we include 'matters' (i.e. designation of land for compulsory acquisition) we also include the purpose without having to mention it.

Having said that a Comprehensive Development Plan should include all matters that are or may be included in an interim development plan it was unnecessary to repeat them elaborately, sometimes with a slightly misleading variation of language. The only additional points mentioned are green belts, nature reserves, traffic circulation patterns, matters which the state government or the Board may direct to be incorporated, and the stages by which the plan should be carried out, and it would have been enough to mention these alone. Clause (a) (vi) has only the appearance of novelty but is implicit in other clauses. In clause (a) (vii) it was not necessary to mention 'services and utilities' after 'amenities' because the definition of 'amenities' includes the other two.

At the end of the sentence, it should be better to add 'and redevelopment of slum areas and areas of bad layout and obsolete development and re-location of population'.

Our objection to 'designation' has been explained in our Recommendations (Chapter XVIII), but assuming that there should be designation, all these can be combined into one sentence—"generally for securing the use of the land in the manner specified in the development plan, and particularly for any of the matters referred to in sub-sections (2) and (3)". The development plan is concerned only with those acquisitions which are necessary for securing conformity to it. If the acquisition of the central and state governments and local authorities and of public utility concerns are in conformity with the plan, they are covered; if they are not, the plan should do nothing to encourage non-conformity. These authorities have enough right under the Land Acquisition Act (1894) to acquire lands for their purpose and are not precluded from doing so because such land is not designated in the development plan. It is not necessary to copy the provisions of the English Law in this matter.

Sub-section (2) of Section 9 having been omitted from the revised draft the very basis of this section has been knocked out.

CHAPTER VI

23. (1) For 'a local newspaper' substitute 'one or more local newspapers'.

Reasons obvious.

CHAPTER VII

29. (1) 'and subject to the provisions relating to the development charge'

'development, institution or change of use'

Proviso (ii)—omit 'within the boundaries of such highway, road or public street'.

- (3) (b) (i) After 'and' insert 'that'

- [(ii) For 'of' read 'or'

Add 'the' before 'planning authority'

- (6) For 'regulations' substitute 'rules'

- 30 (1) For 'subsection (2)' substitute 'subsection (3)'

For 'on' read 'or'

This is unnecessary in view of clause (a) of this sub-section and should be omitted.

Of these three, the last two should be omitted. What planning seeks to control is 'development' (which includes both constructional work and *material* change of use and not any and every use or change of use). The word 'institution of use' is apparently meant to cover lands hitherto lying unused but a change from 'non-use' to 'use' is a change of use.

Why should we blindly imitate the English Law and say that no widening of any road, street or highway should be undertaken without planning permission? Most roads and streets are narrow enough in all conscience, especially in view of the increased volume and speed of modern traffic and most local authorities are chary of spending money under this head because of lack of funds. Any further obstacle in their way by requiring planning permission for road widening would make matters worse.

To make the sentence more balanced.

These are mere verbal corrections, but on a point of substance would it not be better in these circumstances to ask the applicant to resubmit the plan after including this 'other land' so that one permission may cover both? To permit development on one piece of land on condition that another piece of land not covered by the application is used in a particular way seems somewhat incongruous. It is presumed that the lands are contiguous, for otherwise such a condition would be hardly reasonable. It is not the unity of ownership but the contiguity of lands which determines how one should be developed in relation to the other.

It is better that rules affecting the rights of parties should be made by the government.

This is obviously a misprint. The order referred to is passed under subsection (3) and not subsection (2).

Also a misprint.

'aforesaid period of three months'

- (3) For 'accepting' substitute 'allowing'
- (ii) For 'and' substitute 'or'
- (iii)

32 (1) 'incapable of reasonably beneficial use'

(3) (a), (b)

(4))
(5)

33. 'compensation for grant of permission subject to condition'

(3)

35 (1) 'any persons,

Clauses (e) and (f) may be omitted

'Aforesaid' is wrong because no such period is mentioned before. Either Sec. 29 (3) (a) should be recast as 'The planning authority shall, within three months of receiving the application, pass an order' or in this section the clause in question should be recast as 'of the expiry of three months from the date of submitting the application.'

Verbal change according to the terminology generally used.

There are alternatives, not conjunctives.

It is not clear whether the Board may retain all the conditions and impose additional once unless it comes under (ii). But if (ii) is wide enough why have (iii) at all?

The expression caused considerable confusion in English Law till it was settled by the Act of 1959 that the determination should be on the basis of the existing use, not of potential use. In this Act no such explanation is added

There is some inconsistency between (a) and (b). Under (b) (i) it is said that government *shall confirm* the notice and order acquisition if conditions of subsection (1) are fulfilled. Under (a), however, it is permitted to refuse confirmation not only when these conditions are not fulfilled but also under some other circumstances mentioned in a (ii). An awkward position will arise if conditions (a) and (b) of subsection (1) are fulfilled but the circumstances mentioned in a (ii) are not. The loophole should be plugged.

Moreover, what are the provisions of the Act and the rules or regulations mentioned in a (ii) which the framers of the Act have in mind whose non-compliance will enable the government to refuse confirmation even though the land has become 'incapable of reasonably beneficial use'?

The time lag between application and the start of land acquisition proceedings is too great—minimum two years—and after that the Land Acquisition Collector will probably take another three years.

The compensation is for the imposition of conditions, not for the grant of permission, but this is not properly emphasised or clearly brought out in the expression used.

The enquiry may be made by any valuation expert appointed by the planning authority or by the town planning officer as the planning authority may direct. Even a highly qualified town planning officer may not always be an expert valuer.

The language is too wide and includes masons, labourers, contractors etc. who may not know that planning permission has not been obtained.

These are superfluous. As soon as permission is revoked or modified under Sec. 34, the original permission is to that extent superseded and anything done afterwards on the basis of the original permission but in violation of the order of revocation or modification would be without permission as mentioned in clause (c).

- (2) For 'under Section 28'
substitute 'under
proviso to Section 28'

That is probably what is intended.

36. (2)

Two remedies are provided, viz. an application to the local planning authority for permission, or an appeal to the Board for cancelling the demolition or discontinuance order. In England, by the Act of 1960, both are now combined into one proceeding viz. the appeal to the Minister which streamlines the procedure and avoids delay. A planning authority which has once refused permission is hardly likely to grant it, after the owner has defied the order and begun unauthorised development.

- (4) }
(5) }

The enquiry should be by the Board, or a committee of the Board or any officer appointed by it.

37. (2) Add and (3) before (4)
and (5)

They are necessary both for substantive reasons and for securing consistency with the proviso.

CHAPTER VIII

40. (1) (2)

Development charge should be payable for 'development', not for all new use or change of use. The word 'development' covers material change of use.

42. (2) and (3)

If the right to enquire into the liability of the applicant to pay development charge and assess its amount is statutorily vested in the town planning officer as subsection (3) contemplates, subsection (2) becomes redundant. If the right belongs to the planning authority as is suggested by subsection (2), the town planning officer's right to enquire should not be statutory but delegated.

CHAPTER X

71. (2)

This seems to be wrong in principle. If a particular building, construction requires sanction under two different Acts (say, a planning permission from the planning authority under the Town Planning Act and a building sanction from the Corporation under the Municipal Act) how can it be said that the construction will not be illegal even if the Municipal Act is violated and no building sanction taken? It is clear that the scheme of the Model Act is merely to set up a planning authority for preparing and enforcing plans, but it does not supersede the parallel local authority nor its rules and by-laws. When both sets of rules are in operation, the violation of any of them should make the development illegal.

APPENDIX III

QUESTIONNAIRE

I.—Land area and population pressure

[In 1951 the area of West Bengal was 31,048 square miles and its population 26,302,386. In 1961, with an area of 34,214 square miles due to states re-organization, the population, as provisionally estimated by the recent census, is 34,967,614. Density per square mile which was 847 in 1951 is now 1,022. The increase between 1941 and 1951 was 12.7 per cent. but that between 1951 and 1961 is 32.94 per cent. The population is unevenly distributed, roughly about 20 per cent. being concentrated in the 160 square miles of the Greater Calcutta industrial belt. Although less than 60 per cent. of the population are dependent on agriculture as against an all-India average of 70 and the proportion of net cropped area (59 per cent. of the geographical area) is larger than many of the more important States (Maharashtra, Gujarat, U.P., Punjab, Bihar), the acreage of cultivable land per capita is less as is also the average yield per acre.]

I-1. (a) Is the present density of population in West Bengal already high?

(b) Do you think that the present rate of increase will persist or be even accelerated in the next few decades?

(c) Is there any discernible counteracting force tending to halt or slow down the biological increase?

(d) Is there any likelihood of any check to immigration, whether due to economic or political causes?

I-2. Is any appreciable increase in the total land area or the total habitable area of this State likely in the foreseeable future whether through deltaic formation or by reclamation of waste land or swamp or lagoon, or by deforestation or any other measure?

I-3. Under what circumstances can the addition of extra territory to a State relieve the pressure of its population? Has the addition of Cooch Behar or Chandernagar and the expansion of West Bengal after States re-organisation had any effect on the pressure on land?

I-4. If land area is stationary and population increase is maintained at the present high level should not the land resources of the State be conserved and utilised to the best possible advantage?

I-5. In judging this "best possible advantage" would you equate the private profit of an individual owner with the welfare of the community as a whole, or do you think that one may be in conflict with the other? In case of such conflict would you prefer the general welfare of the community to individual profit?

I-6. In securing such welfare would you consider the following objectives as worthy of pursuit, viz.: (a) insuring a balanced economy where all the different branches of production—agriculture, industry, commerce, etc.—have their appropriate place and function, (b) conserving the mineral and natural resources of the State, (c) preserving the beauty of the countryside and nature reserves, (d) ensuring the beauty of urban architecture and landscape and eliminating congestion, squalor and overcrowding, (e) providing efficient and economical means of communication for movement of goods and men, (f) in short, “so ordering the use of land and the character and siting of buildings and communication routes as to secure the maximum practicable degree of economy, convenience and beauty”?

I-7. Does density of population lead to a scramble for land and is the effect of such competition to place some lands in the hands of persons whose proposed use is likely to be detrimental to the general welfare of the community? Can you cite instances of this happening in West Bengal?

I-8. Between specialisation and a balanced economy what would you prefer? Do you think that over-industrialisation and dependence on food imports is a good economic policy for West Bengal?

I-9. (a) Has agriculture any special claim to consideration in this State because of the population it has to feed?

(b) Is it possible to appreciably increase agricultural production by more intensive cultivation while retaining or even reducing the present net cropped area?

(c) Is the available agricultural land in the State gradually being encroached upon by suburban proliferation, by intrusion of industry into the countryside, by excavation for sand or brick building and in other ways? What is the extent of such encroachment per year?

(d) Would you agree with the Scott Committee, that infiltration of industry into the countryside should be stopped except where the proximity of raw materials and difficulties of transporting them make such siting inevitable?

I-10. In case of conflicting claims for the same pieces of land, e.g., for agriculture, mining, afforestation, housing, industry, communication routes and air terminals is there any unfailing standard of judging priorities?

II.—Town and Country

II-1. What has been the trend of migration from rural to urban areas during the last few decades? What are the areas of maximum population concentration in West Bengal?

II-2. Why does the big city act like a magnet to people living in rural areas and smaller towns?

II-3. What is the effect of such migration on (a) environment, (b) sanitation, (c) housing, (d) communication, transport and traffic, (e) congestion at the centre and the suburbs, etc?

II-4. Do you think that ribbon development is ugly, uneconomic and dangerous to traffic and life? What are its causes and cures?

II-5. Would better rural planning curb the lure of the city? Has community development in rural areas had any appreciable effect on the city-ward migration?

II-6. If blind economic forces have led to what has been characteristically described as "Cities in Flood" do you think some positive control is necessary to check the flood?

II-7. Should congestion in cities be fought on two fronts, viz., by checking further migration from village to city and by a planned dispersal of the over-spill population to receiving centres outside? Does vertical construction and high density accommodation offer any alternative to dispersal?

II-8. (a) If dispersal is preferred should it be in the fringe of the city or away from it, whether in new towns or in expanded old towns? Would existing social and personal ties prove too strong a disincentive against dispersal even if it is possible to move business and occupation along with men?

(b) Will business and industry move out if sufficient incentives are provided? If not, can they be forced to go into new areas where the over-spill is re-accommodated?

(c) Should only new industries be set up in areas specially earmarked for the purpose or should old established industries be also persuaded or forced to move?

(d) Has Kalyani been able to attract a sizable population to relieve congestion in Calcutta? If not, why not?

II-9. A B.I.S. pamphlet published in 1960 says that in England several Government establishments with a potential employment capacity of over 1,800 have moved into the new towns. Do you think that the State Government should have taken a similar step for Kalyani and over-ruled staff reluctance to move away from Calcutta? If the reluctance was due to genuine inconveniences what steps should have been taken to remove them?

II-10. If outward expansion along the fringe (cf. the Salt Lake Development Scheme) is planned what should be the factors delimiting its extent? What should be the optimum size of a city and how would you contain it within the proposed limits?

II-11. Would you do it by a girdle of green belts round every expanding town? What sort of use would you permit in these green belts? If the proposed green belt covers some suburban built up area would you let it stand or recommend demolition? If one of the purposes of a green belt is to allow access to open country would you curtail the owner's right in order to compel him to allow such access?

II-12. How would you set about planning and establishing a completely new town? Would you do it directly through a Government Department or set up an ad hoc body financed by Government? Do you think that all the finance advanced to the ad hoc body can be recouped by sale of land after development? If not, who is to bear the loss? Would you set up an elected local authority for the New Town to administer the civic services after the ad hoc body does its work and is dissolved? In such cases, is not there a risk that the original purpose of the plan may be defeated by an incompetent local authority?

II-13. Can a city be planned apart from the region in which it is set and which forms its economic base? What is the test on which you would demarcate the area of this region?

II-14. If this region contains a number of cities, some big, some small, and the surrounding countryside with close cultural and economic links would you prefer one physical planning authority for the whole or several? If the latter, how would you ensure co-ordination? If the former, would you prefer an ad hoc body super-imposed on the whole area or a joint board with representatives from each unit?

III.—Scope and extent of control

III-1. Of the two methods of control, viz., nationalisation of land which enables the State to dictate the pattern of use, or assumption of powers to impose restrictions on use while leaving all residuary rights to the owner, which would you prefer?

III-2. Nationalisation by expropriation being ruled out as unconstitutional is not the other alternative, viz., wholesale acquisition, likely to put too great a strain on the State's resources, in whatever manner the compensation be assessed?

III-3. If you prefer retention of owner's rights but want the use to be controlled, what should be the *raison d'être* and the extent of control?

III-4. Under English Planning Law, all development after July 1, 1948, *prima facie*, requires planning permission; and *development* is defined as (i) the carrying out of any building, engineering, mining or other operation in, on, over or under land and (ii) the making of any material change in the use of any building or other land. Taking this as our starting point:

- (a) How would you define "land" in this connection? Do you think that a definition which emphasises rights in land and benefits arising out of land is adequate for the purpose of land use planning or would you concentrate on the earth's crust (both surface and sub-soil) as being more relevant?
- (b) Would you adopt the definition of development in English Law without any further qualification?
- (c) Does not engineering operation in the wider sense also cover building construction and is it necessary to mention them separately? Does the expression "other operations" make the definition too wide?
- (d) What would be the test as to whether a change of use is material or not?

III-5. In order to relax the rigidity of control and give the owner some amount of freedom, the wide definition of development and the requirement of planning permission has, in the English Act, been slightly qualified by (a) excluding certain operations from development, (b) laying down that certain operations, though development, would not require permission, and (c) stating that in a certain limited number of cases planning permission "would be deemed to be granted." Would you agree to similar exceptions being incorporated in the State Act? If so, can you give a list of operations you would bring under categories (a), (b) and (c) above?

III-6. Can you broadly classify the different kinds of use for which you like the land to be allocated?

III-7. Would you make these allocated zones water-tight compartments or permit a mixture of uses?

III-8. Since within each broad class there may be an infinite variety of uses would you be content with laying down the broad classes and giving the owner or occupier *carte blanche* to do whatever he liked so long as he kept within that class of use? Or, would you further subdivide the class and permit only a limited freedom to move within the sub-class? Do you think that the infinite variety of uses can be exhaustively listed in a number of sub-classes on any rational principle directly related to the aims and purposes of urban and regional planning?

III-9. Would you avoid or modify the rigidity of a statutory definition of development by authorising the appropriate Minister, in the exercise of his rule making powers, to exclude certain operations from development or divide the few broad classes into a number of sub-classes or transpose one kind of use from one sub-class to another, giving the owner freedom to "leap about" within the sub-class without having to ask for planning permission?

III-10. (a) Would you call a more intensive use of the same kind a material change in use? For example, in order to control overcrowding in congested houses would you lay down a norm of accommodation any excess beyond which would be regarded as a material change requiring planning permission?

(b) While it may be possible to limit the number of houses per unit of space and control their heights is it administratively possible to control overcrowding except by frequent inspections and forcible ejections which, even if permitted by law, would be irritating beyond measure and involve costly and time wasting litigation?

(c) If such ejections break up families which form a natural and homogeneous unit would not the larger elbow-room for a part be achieved at too great a cost to the unity of the whole? To what extent can an external authority decide whether the inconveniences due to over-crowding outweigh the advantages of joint-living?

III-11. Would you agree that while control of buildings in urban areas has to be more rigid and strictly enforced a greater latitude may be permitted in rural areas?

III—12. On aesthetic grounds would you (a) control advertisements whether in towns or in the countryside? (b) impose an architectural pattern or patterns on all buildings and regulate their heights not merely for air and light and to control density but also to ensure a good sky-line or silhouette? (c) regulate the heights of compound walls or fences? (d) control the colour schemes of structures, gateways, walls or fences, roofs, etc.? (e) prevent the spoliation of the countryside by haphazard growth of industries with their inevitable smoke and sludge and heaped up ashes or waste products?

III—13. Is there any one pattern of architecture unanimously held to be the best or the best possible in any given situation? If the experts disagree how would you decide whose opinion should prevail? Is the expert always the best judge of what satisfies the ordinary man's aesthetic feelings and sensibilities?

III—14. Is there a risk that the expert may be carried away by the novelty of his ideas or his desire to strike out a new path or his emphasis on one aspect of the problem to the exclusion of others?

III—15. Do you think that absence of unanimity in architectural standard cuts the ground from under all claims to architectural control of buildings, building lay-outs and urban designs?

III—16. Even when the experts agree or the design is accepted on all hands as satisfactory would you enforce such control if the owner has not got the means to pay either the expert's fees or the extra-cost involved in embodying the design in the structure?

III—17. While all material change of use is *prima facie* "development" the English Act of 1947 has excluded agriculture and forestry from its ambit so that the turning over of a piece of land previously used for other purposes to agricultural use or afforestation would be in order even without planning permission. Would you agree to this special treatment of agriculture and forestry in the economy of this State? What are the different operations or activities (growing crops, horticulture, dairy farming, etc.) which you would bring within the definition of agriculture for exemption from planning control?

III—18. Should the planning authority rest content with laying down the broad allocations of land for different purposes or uses or should it go into greater detail and define which of the permitted uses is suitable for a particular piece of land? For example, in areas reserved for public recreations should it also lay down what kind of amusement or recreation should be provided at a particular place? In areas reserved for agriculture should it direct whether a food or money crop should be raised or dairies started or a pasture laid out, etc., or should it leave it to the commonsense and prudence of the farmer with such help as he can get from technical associations or government departments?

III—19. Granting that private interest does not always lead to the most advantageous use of land and that a synoptic view of the needs of society as a whole is a better guide don't you think that it presupposes in the person or persons on whom decision and its enforcement rest a comprehensive knowledge of social requirements, an earnestness and zeal in pursuing them, and sufficient strength and independence of mind in avoiding extraneous pressures and influences? Do you think that these virtues are easily available or cultivated?

III—20. If the machinery set up is inefficient or corrupt is it not likely to allow gross evasions of necessary restrictions while pursuing minor deviations with full bureaucratic zeal? In such circumstances may not the cure prove worse than the disease?

III—21. Has the experience of the limited by-law control exercised by our local authorities even of the highest grade in allowing private estate developments, granting or refusing building sanctions, preventing encroachments on roads and open spaces, stopping unauthorised construction or use, etc., been such as to justify optimism in their capacity to administer the much more stringent controls envisaged in town and country planning law which greatly curtail the citizen's rights of property as ordinarily understood?

III—22. On the other hand, is there not a risk that with the almost inevitable and insidious corruption incidental to the exercise of power even an efficient and independent machinery may, in course of time, regard itself as the absolute arbiter of men's rights in land, the dictator of the manner of its use, and the unerring judge of what is good for society, and that it may become opinionated, impervious to new ideas, and intolerant of criticism?

III—23. Would you agree that the extent of control should depend less upon a theoretical argument as to what is ideally desirable and more upon the standard of living and the ability of the community to throw up from within itself a machinery for administration which is and will continue to be honest, knowledgeable, efficient and incorruptible?

III—24. If in order to avoid bureaucratic interference in man's fundamental rights you vest the powers of control directly in a Minister is there a risk that he may be susceptible to political influences from pressure groups whose effect on land use planning may be undesirable?

III—25. In view of the risk of abuse would you proceed step by step with one or a few short Acts giving some very general powers (viz., to prevent ribbon development, to control industrial encroachment on the countryside, to ensure that routes of arterial roads are not encumbered by buildings, etc.) and, see how the powers are enforced or administered? Or would you have a comprehensive Act at once investing the controlling authority with all the powers it needs to ensure the optimum use of land according to what it considers to be best calculated for the welfare of the community?

III—26. Even if you recommend one comprehensive Act would you extend it at once to the whole State or make it applicable to different regions and zones as and when the need arises and adequate machinery is available?

III—27. In case you decide on comprehensive control and set up a machinery for the purpose would you bring all land within its ambit? To be more precise, would you recommend that land belonging to the Union and State Governments and lands of local authorities or statutory corporations should also not be used except in conformity with the approved Development Plan and without the permission of the authority set up to administer the Plan?

IV.—Legal and constitutional aspects.

[The Constitution of India distributes legislative powers between the Parliament and the State legislatures as shown in the three lists of the seventh schedule, and the legislative competence of the body passing a law has to be judged by reference to it. In the case of a law relating to land use planning its validity has also to be tested by reference to Articles 19(1) (f) and (5) and 31(1) (2) and (2A) which may be summarised as follows: "All citizens have a right to acquire, hold, and dispose of property subject to reasonable restrictions in the interest of the general public; and no person shall be deprived of his property save by the authority of law. There is however no bar to his property being acquired for a 'public purpose' on payment of compensation whose amount (or the principle of determining which) will be laid down by law."]

IV—1. Between the Union and the State legislatures which in your opinion is competent to pass a law on land use planning applicable to a State?

IV—2. If the State legislature is the competent authority do you think that entries 22 (railways), 23 (national highways), 27 (ports), 29 (aerodromes), 54 (mines) etc., in List No. I will preclude the application of such law from matters covered by these entries?

IV—3. If the reply is in the affirmative how would you reconcile the conflict arising out of this dual jurisdiction?

IV—4. Do you think that without nationalisation of land it is possible by law to control the use of land owned by a private party? Would such law be *intra vires* the Constitution? Would nationalisation be possible without acquisition on payment of adequate compensation?

IV—5. Should such control be based solely on the "good neighbour" principle of minimum interference consistent with health and the adjoining owner's right to light and air or can it, without overstepping the limit of reasonable restriction of property rights, direct that a particular piece of land should be earmarked for a particular use or class of use and no other?

IV—6. Can such law, in the case not only of virgin land but of built up areas, direct the reversal of the existing use and the adoption of some other kind of use in conformity with the approved Plan?

IV—7. If the reply to the above is in the affirmative, would you agree to a continuance of the non-conforming use for a specified period or till obsolescence or till the land changes hands?

IV—8. (a) Since freezing of land use restricts its use potentiality and is bound to be reflected in its market value do you think any compensation is payable, in law or equity, for such reduction in value? If so, how can it be measured or assessed?

(b) If a non-conforming use is directed to be reversed should any compensation be payable in law or equity? If so, how can it be measured or assessed?

(c) In the circumstances stated in question IV—7 should any compensation be payable when the period of grace expires or the structure becomes obsolescent or when the land changes hands because of the probability that the owner may get less than the original market value on account of the imminent restriction on use? If so, how can such compensation be measured or assessed?

IV—9. If in the above cases compensation is to be equal to the difference between full market value for unrestricted use and limited value for restricted use, is it not likely to prove too onerous a burden for any land use plan to succeed?

IV—10. Assuming that the State is competent to impose restrictions on the use of land without compensation, can it go further and levy a charge on the owner for developing his land in conformity with the approved restrictions? Since there is no *quid pro quo* on what principle can the charge be levied?

IV—11. Can any charge be levied for permission to develop in variation of the approved Plan? If the variation is substantial does not the permission either defeat the purpose of the Plan by withdrawing a necessary restriction or condemn it as arbitrary for imposing an unnecessary restriction? If it is a minor or a reasonable variation in an avowedly flexible Plan does not the permission, by *ipso facto* incorporating the variation into the texture of the Plan, make the development a conforming one?

IV—12. Do you think that the sale of surplus lands in an "area of comprehensive development" and the possibility of making profit would offend against the principle of "public purpose" which is a pre-condition of compulsory acquisition? Would it do so if the entire sale proceeds less the cost of administration are ploughed back for execution of further developments? Would it do so if the acquired land is handed over to a private or semi-private corporation for development and disposal in accordance with an approved plan at their risk of profit or loss?

IV—13. On what principle would you assess compensation in the case of compulsory acquisition? Would you peg the price to the market value of any particular year? Or restrict it to the market value of the permitted use? Or fix it at its present use value? Or lay down a graduated scale decreasing at the upper slabs, etc.? Or would you, without doing any such thing, simply adopt the market value principle with or without the 15 per cent. addition?

IV—14. If the high market value of land in urban or suburban areas or in areas of projected industrial development is due to increased demand created by concentration of people on account of industrial, economic and social development, do you think that the owner of land who may have contributed little or nothing to such development has any moral claim to such increased value merely for "waiting" till social and industrial progress forced prices up? If this increased value is almost exclusively a social product has not society any claim to appropriate or share it?

IV—15. If acquisition at present market value makes all re-development of congested cities and towns impossible on the ground of cost, would you insist on the market value principle or accept some other standard of compensation?

IV—16. The mere act of zoning by which some lands are permanently reserved for agriculture or nature reserves or recreation spaces while others are allocated to industrial, commercial or residential use will freeze or depress the value of land in the first category and boost it up in the second. Since such allocation, even in the best of plans, is somewhat arbitrary can you suggest any method by which to avoid such discrimination in value, both at the time of private sale or on compulsory acquisition?

IV—17. Would you adopt the principle of the Uthwatt Report which was embodied in the English Act of 1947 but found administratively unworkable and finally discarded in 1959?

IV—18. The Uthwatt Report divided the value of lands into present use value and future development value and said that the latter should be nationalised while the owner's right to current use was left intact. For such nationalisation an arbitrary figure was fixed out of which the State was to pay to each owner the development value of his piece of land within a certain time or when the land changed hands. Would the existing law in India permit the acquisition of such partial rights? If not, can "public purpose" be invoked for passing a law for simultaneous acquisition of partial rights (i.e.; of development value only) in all lands in order to have some control on the mounting cost of acquisition? How would you describe this "public purpose" in case such acquisition of partial rights is contemplated?

IV—19. If the Constitution does not permit such nationalisation of development values would you agree to a further amendment of the Constitution in the same manner as was done for the acquisition of zemindary estates by the first and fourth amendments of 1951 and 1955 respectively? Would you abrogate the fundamental right of property in land?

IV—20. Do you think the existing laws in force (Municipal Acts, Town Improvement Acts, or Acts passed in respect of special areas such as Durgapur, etc.) give sufficient power to the State or the local authorities to control the use of land in a manner calculated to ensure its maximum and most profitable utilisation for the welfare of the community? If not, would you advocate the passing of such a law?

V.—Machinery of control and procedure of work

V—1. What in your opinion should be the qualification of persons dealing with town and country planning and its administration at the top level? Do you agree with the Schuster Committee that a good general (i.e., University) education and a capacity to understand good design combined with high administrative experience is to be preferred to specialist knowledge in any of the technical subjects like architecture, engineering, valuation, etc., or even of town and country planning treated as a separate discipline?

V—2. If it is necessary for a good town planner to have a large body of diversified knowledge what are the different disciplines or branches of study more than a nodding acquaintance with which you would consider essential or desirable? Would you include Economics, Geography-cum-Geology, Law, Agriculture, Social Anthropology, Architecture, Valuation, Engineering—or some of them—in that list? Would you stress practical experience more than theoretical knowledge?

V—3. What are the facilities now open to students in India to acquire knowledge of the principles and practices of town and country planning? What is the duration of that course, and how far is a student who has gone through it fitted to apply his knowledge in relation to the social and economic development of this country? If planned use and development of land is accepted as a principle will a sufficient number of good town planners be available at short notice?

V—4. In U.K. "the primary responsibility for the planning and administration of the national policy on the use and development of land lies with the Minister and the detailed execution of planning control and the preparation of development plans rests with local planning authorities." Would you agree with this distribution of function between the governmental and the local level?

V—5. The annual autumnal session of the Institute of Town Planners (India) in its Bombay Session in 1959 recommended that physical planning of land should be insulated from all kinds of political influence by reducing Ministerial interference or control to a minimum. Do you agree with that view and think that if a large discretion is left to a Minister there is a possibility of his yielding to pressure groups or individuals against his better judgment when a plan proposes the control of the use of land in which those groups or individuals are interested?

V—6. What safeguards would you suggest against that risk? Do you think that a convention under which the Minister leaves most planning matters to a hard core of experienced officers, retaining in his hand only the determination of fundamental policies but not himself deciding individual complaints or appeals, would be an effective safeguard? What chance is there of such a convention growing? What chance is there of such officers being found?

V—7. As an alternative, would you place the top level administration in the hand of a semi-autonomous Board appointed by Government but with considerable freedom to work—a body, in fact, akin to but with very much larger powers than, the Calcutta Improvement Trust? What should be the relation between such a Board, the Government and the local or regional authorities (a) in deciding on land use policy generally, (b) in resolving conflicting claims on land by Government departments *inter se*, (c) in preparing and publishing Master Plans and detailed Development Plans, (d) in sanctioning or refusing sanction to plans, (e) in appointment, discipline and discharge of its own staff and other matters? Should the decision of the Board be final or should it be subject to review or revision by Government?

V—8. If you prefer a semi-autonomous Board how would you prevent it from degenerating into a rigid bureaucratic machine and keep it continuously up to scratch, flexible, sensitive to public needs, responsive to public opinion, and amenable to public control?

V—9. Do you think there is any need of a Board as suggested in the model Bill prepared by CRUPO whose purpose, besides tendering advice, is merely to (i) supervise preparation of development plans by local authorities, (ii) collect statistics, and write bulletins and monographs on planning and its methodology, (iii) prepare reports relating to the purpose of the Act, etc? If there has to be a regular establishment to carry on the work mentioned above would it not be simpler to place it directly under a department of Government—say, the Ministry of Town and Country Planning or the Ministry of Local Self-Government as the case may be—than to interpose a Board and place the establishment under it? If the Board meets only periodically can it exercise that continuous check or keep up that continuous tempo which such work implies?

V—10. If the Board is manned by heads of departments or directorates with the Minister as Chairman do you think the members will be able to devote to the preparation and execution of plans that measure of continuous attention and thought which planning and its administration implies after doing their own heavy departmental duties? Is not there a risk in such case of power gravitating to the one member who has no other extraneous or departmental duties, viz., the Chief Town Planner?

V—11. In the model Bill referred to in question V—9 the Chief Town Planner, who is the ex-officio Member-Secretary of the Board, is expected among other things (i) to prepare the land use map after hearing objections when the local planning authority is in default, (ii) to draw up the interim development plan or the comprehensive development plan when the local planning authority fails to do so, (iii) to hear appeals against refusal of planning permission and either report to Board or give a final decision, (iv) to hear appeals against orders for demolition of unauthorised development and restoration of status quo, or for discontinuance of present use, (v) to hear appeals against assessment of development charge, etc. If, in addition, he is also the Chief Technical Expert of the Government (as is implied by calling him ex-officio member of the State Board), responsible for advising the Minister of Town Planning in all matters that come up to Government for final decision, don't you think that such concentration of power in the hand of one Technical Expert of the Government is fraught with risk?

V—12. If secretarial efficiency and technical skill are qualities of a different order, can both duties be combined in the same individual without prejudice to one or the other? Would you separate the secretarial and the technical functions?

V—13. Would you prefer the Chief Town Planner to have the same status as any other Chief Technical Expert of Government or a semi autonomous Board viz., that of the chief adviser to, but not a member of, the Ministry or the Board?

V—14. How many tiers would you have in the hierarchy of the machinery designed for controlling the use of land at the national, regional and the local level and what should be the inter-relation between them? If you have three tiers is there not a risk of red tape delaying the movement of files and the making of decisions? Would you minimise such risk by vesting the lower tiers with final powers in all matters except those of major importance?

V—15. How would you define a region for the above purpose? Would you take the administrative district as the unit? Or would you constitute the region on the basis of its economic and geographical inter-links regardless of district boundaries? Would you, for instance, constitute a large metropolitan region with Calcutta as the focal point, another with Durgapur; and still another with Asansol—to name only a few large towns which are either already saturated with industries or round which new industries and urban concentrations are rapidly growing up?

V—16. If the region is not identical with the administrative district how would you constitute the regional body? If there is already an existing organisation dealing with planning of large areas like the Calcutta Metropolitan Planning Organisation, or the Durgapur Development Board how would you integrate such independent authorities into the structure of your hierarchy?

V—17. If too many authorities working on the same or overlapping areas lead to duplication, waste or conflict, how do you think you would eliminate them? In particular, in the case of the Calcutta Metropolitan region, what function would you assign to the Calcutta Corporation, the Calcutta Improvement Trust, the Howrah Improvement Trust and all the neighbouring municipalities vis-a-vis the proposed Calcutta Metropolitan Authority? Should the big fish swallow the little fish?

V—18. Under the English Act of 1947, the local authorities (the county councils and the county boroughs) were constituted local planning authorities with a provision of joint Boards where necessary. Do you think the same model should be followed here?

V—19. Even in U.K. where Local Government has a fairly good tradition and urban planning a long start one authority has gone to the length of saying that "the outlook of local authorities tends to be exceedingly narrow and the poor quality of members lays an undue emphasis on the planner's diplomatic skill rather than on his technical ability..... Views of local authorities are more often an embarrassment than a help to the local planning officer in arriving at a wise planning decision." Do you think that local authorities in this State would give a better account of themselves?

V—20. Would you take planning and its enforcement completely out of the hands of elected local authorities and place it in the hands of separate bodies at all levels—State, regional and local? Should such bodies be purely official, i.e., represent devolution of Governmental authority at successive levels or should they constitute ad hoc authorities set up by Government but left with a large measure of freedom of operation?

V—21. What would be the interrelation between the different tiers of such ad hoc bodies if they were set up? Would each such body be linked directly with government or only to the next higher tier within the hierarchy?

V—22. (1) How would you ensure proper publicity of a Master Plan or a Comprehensive Development Plan covering a very large area? Would press advertisement be enough in a country where literacy is low and newspaper-reading habit marginal? Would door to door service of notice for large areas be feasible?

(2) How would you ensure that all reasonable grievances of people whose rights in land are curtailed are expressed and heard before a decision is taken?

(3) What opportunities of personal hearing would you give to the aggrieved citizen either in connection with the framing of a Development Plan, or refusal of planning permission, or refusal to acquire when planning permission is refused, or assessment of development charge, or a demolition order or an order asking to stop existing non-conforming use, etc.? Who should be entrusted with such hearing? What provisions should there be for appeal? When should the objection or appeal be said to have been finally disposed of?

(4) Should there be a right of appeal to the High Court? Can the jurisdiction of the Court be limited only to a consideration of whether the statutory procedure has been followed? Can it be precluded from considering whether the law itself is *intra vires* or *ultra vires*? On the other hand, if full jurisdiction of the civil courts is allowed is not planning and its execution likely to be held up by law's delays?

V-23. In planning for a better physical environment and more co-ordinated land use would you prefer moderation in order to educate people gradually into the advantages of land planning even though it means tolerating squalor for a much longer period or would you sweep away the cobwebs at once despite opposition and let people learn by experience that the surgeon's knife is necessary for a fuller and healthier social life?

VI—Finance

VI-1. How would you finance the preparation, execution, enforcement and administration of land use planning generally whatever be the organisation proposed?

VI-2. Do you think that local authorities in West Bengal, if they are also constituted the local planning authorities, have any surplus revenue which can be diverted to this purpose?

VI-3. Is development charge, even if it is possible legally to levy it, likely to be a workable or dependable source of revenue?

VI-4. Will sale proceeds of land be an adequate source? If the idea is to depend more on controlling land use while leaving it in the hands of the owner, will it not mean that the quantity of surplus land for sale in the hand of the planning organisation will be minimal? Will it not be still smaller if the execution of development (e.g., in New Towns) is entrusted to a separate ad hoc Development Authority with powers of disposal of land when development is completed?

VI—5. In the case either of sale or lease would you offer the land to the highest bidder or would you fix a price and select the buyer or lessee? In the former case how can you prevent the land from passing into the hands of the man with the longest purse irrespective of his real need? In the latter case, how would you disarm criticism about discrimination or nepotism? Do you think the blind method of drawing lots is likely to lead to land going to the hands of the man needing it most or best able to use it for the purpose intended?

VI—6. Do you think that borrowing in the market is an independent or adequate resource? If loans have to be repaid with interest after a time, how is that to be done if there is no other independent resource or if the borrowed capital does not itself fructify in the hand of the borrower?

VI—7. Does it lead to the conclusion that the only dependable source for financing planning is Government grant whether it comes from the Centre or the State? In a monograph on Indian finance, prepared and published for the UNESCO some years back by Mrs. Ursula Hicks she observed that while the Constitution allotted large functions and duties to the States, it reserved all the profitable and elastic sources of revenue for the Centre. If that is so, would you recommend large Central subsidies to make planning successful?

VI—8. Should such subsidies be conditional or without any strings attached? What in your opinion should be the relation between the Centre and the State for ensuring that the subsidies are properly utilised for planning and its execution and not diverted to other uses?

VI—9. If planning and its execution is not to be a direct governmental activity but entrusted to a semi-autonomous Board or Boards what provision for audit—both performance and expenditure—would you suggest?

VI—10. If grants are offered by the United Nations Organisation or their several branch organisations or by foreign governments or foreign endowments in their endeavour to help under-developed countries, do you think it is necessary to consider the full implications of such grants before accepting them?