Gokhale Institute of Politics and Economics (Deemed University)

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Platinum Jubilee Souvenir

Editors

Jayanti Kajale Smriti Mukherjee

Gokhale Institute of Politics and Economics

(Deemed University)

Pune 411 004

India

1 February 2005



सत्यमेव जयते

inva and their collea ees, particularly b

प्रधान मंत्री Prime Minister <u>MESSAGE</u>

I am glad to know that the Gokhale Institute of Politics and Economics is celebrating its platinum jubilee.

The Gokhale Institute of Politics and Economics is justly famous for its important contributions to the study of the social, economic and political problems of our country. The services of its faculty members, students and staff have earned the Institute high place of honour in the academic world. Its standards of research and education have been well acknowledged in India and abroad. My interactions with the faculty and students of the Institute have been memorable and rewarding. I recall its path-breaking study on poverty in India, which raised understanding of the scourge of poverty in its varied dimensions. The need of the hour is for the Gokhale Institute of Politics and Economics to come forward with ideas and concepts to address the problems of our people. This will only be fitting in the context of our efforts to create a caring and inclusive society.

On the occasion of the Platinum Jubilee of the Institute, I have great pleasure in extending my greetings and good wishes to the students, teachers and the staff for the success of the celebrations.

(Manmohan Singh) New Delhi

November 22, 2004

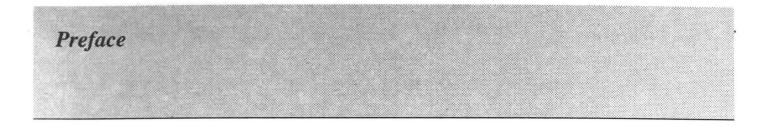


Seventy-Five years in the life of an Academic Institution is a significant landmark. Not many non-governmental research and teaching institutions get to survive this long. The Gokhale Institute has not only survived but has thrived over the years. The great institution builder D.R. Gadgil laid a solid foundation on which next generations of directors such as V.M. Dandekar, P.N. Mathur, N. Rath, K.S. Srikantan, D.C. Wadhwa, and V.S. Chitre could build on with relative ease. I take this opportunity to thank them and their colleagues for their great contributions to this institution. Occasions such as jubilees, particularly a platinum jubilee or a centenary, always inspire nostalgia. We are proud of our history and the achievements of our older generations. But this is also a good occasion to look ahead and resolve to take our Institute to unprecedented heights. In the era of globalisation it is not good enough to be a premier institution in the country, we must strive to be world class in every aspect. Keeping this in mind, we have launched a vigorous modernisation and quality enhancement drive. A very ambitious and thorough revision of the M.A programme is already under way and it is expected that the fresh batch of 2005 will enter a completely new programme. It is well known that our research contributions in the areas of agricultural economics, population, and poverty and development have been second to none. We are, however, working on expanding our research focus to several other areas such as Industry, Environment, Health, Labour, Law and Economics, Money and Finance, Economic History and various aspects of Economic Theory. We are encouraging team research as well as exploring ways of creating sister social science centres at the Institute to develop a wholesome interdisciplinary research agenda. Modernisation of our infrastructure is also already under way. Quality research is not possible without a good library. The library of the Institute, which was established by the great Gopal Krishna Gokhale in 1905, is celebrating its centenary. It is one of the best social science libraries in the country and the jewel in our crown. However, in the past few years it has been facing a serious resource crunch due to rapid rise in the prices of international books and journals. We are working on ways to raise funds for books and journals and modernisation of the library. We cannot only rely on governments and the UGC alone to achieve all this. A fruitful partnership with enlightened business community is essential to a successful implementation of our vision. My preliminary interactions with leaders of businesses in our community have been very encouraging and I am not only hopeful but also confident that we should achieve what we have set out to achieve in a short period of time.

I congratulate Dr. Kajale and Dr. Mukherjee, the editors of the Jubilee Souvenir, for a job well done. They had to work under severe constraints, particularly time constraint. I also take this opportunity to thank all my colleagues who have given me their wholehearted support not only for the success of the Jubilee celebrations but also for our shared vision of the future.

Pune		Ajit Sinha
February 1, 2005		Director
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The Gokhale Institute of Politics and Economics is completing 75 years of its existence. This is indeed a special occasion in the long life span of an Institute that began its career in the pre-independence days and is now striving to reach new heights in this era of globalisation. The Institute since its inception carried out research in various areas of practical significance and thus made important contributions to the society. It is felt on this occasion of Platinum Jubilee that this is the right moment for us to make a journey into the history of the Institute, remember the personalities to whom we owe the glorious past, to understand nature and extent of the scholarly work carried out in the Institute from time to time, to know abut the people, the environment and the infrastructure in the Institute. The Souvenir, we feel is an appropriate way to celebrate the Platinum Jubilee.

In its long career, many people came to be associated with the Institute in various capacities and enriched the Institute in their own way. Some of them have contributed articles to the Souvenir. The articles relating to the history of the Institute and the reminiscences of the contributors about the Institute and the Library are indeed interesting and take us back into the history of 75 years of the Institute. The other articles encompass various subject areas. They reflect upon the diversity of the fields wherein our contributors have their distinguished career. We also have informative articles about our statistical section and our journal 'Artha Vijnana' written by our current staff.

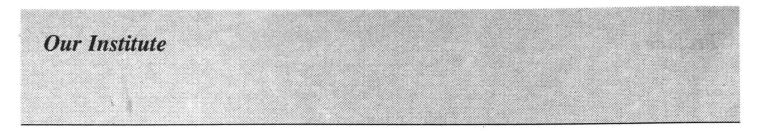
In the process of editing the Souvenir, we received cooperation from many. We are most grateful to Prof. Ajit Sinha, Director, for the cooperation extended and for the guidance provided by him in bringing out the Souvenir. We are equally thankful to Dr. Sangeeta Shroff, Officiating Registrar for the motivation provided for completing the Souvenir work. We thank all the contributors for their articles. All of them readily accepted our invitation to write a piece for the Souvenir. Their contribution is a gesture of affection towards the Institute. We also thank our advertisers and donors who are our well wishers. Our thanks are also due to Shri. Karnik and his staff for printing the Souvenir in a short period of time. Mr. Mane of Udyan provided us the campus photographs. Our sincere thanks to him. We would like to thank Mrs. M. S. Marathe and Mrs. K. V. Kulkarni for providing neat computer assistance. Their sincerity and patience till the last moment helped in finishing the work in time. Finally we take this opportunity to thank all faculty members and the administrative staff for their timely cooperation and support in this effort.

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Jayanti Kajale

Smriti Mukherjee

Editors



Gokhale Institute of Politics and Economics (GIPE) is perhaps the oldest research and teaching institution in economics in India. Established in 1930, it still remains a leading centre for learning. GIPE was founded with an endowment offered to the Servants of India Society by Rao Bahadur Kale. GIPE, under the guidance of its first Director D.R. Gadgil, emerged as a major 'think-tank' on policy issues soon after India's independence. Scholars who have worked in this Institute include some of the leading names in Indian economic studies.

GIPE is located in Deccan Gymkhana, a beautiful green part of central Pune. The history of GIPE is linked with the history of the nationalist movement in India. The Institute is located in the premises of the Servants of India Society, established in 1906 by the great Indian nationalist leader Gopal Krishna Gokhale (1866-1915), whom M.K. Gandhi regarded as his political guru. Gokhale's bungalow still stands in the precincts of the society. So does a massive banyan tree under which Gokhale and Gandhi used to sit down and converse.

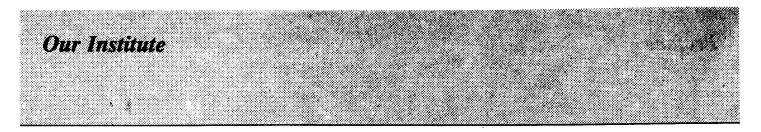
The Institute conducts research on economic development and policy in India. It offers a Master of Arts (M.A.) programme in Economics that is considered among the best in the country. GIPE has also offered from the start, a Ph.D. programme in Economics. To date, the Institute has presented doctoral degrees to nearly 200 students. In 1993, the University Grants Commission declared GIPE a 'deemed-university'. In recognition of the quality of teaching and research undertaken, the National Assessment and Accreditation Council awarded GIPE A+ grade in 2003.

GIPE is noted for empirical research, particularly field-based research in agricultural economics, poverty, and population studies. Some of the products of this Institute, such as *Poverty in India*, by V.M. Dandekar and Nilakantha Rath, are classics in their field. GIPE has always been catholic about preferred fields of research, and has tried to maintain balance between faculty trained in theory and faculty trained in field-based research. Combination of teaching and research is one of the unique features of GIPE. It sees research as a vital contribution to the teachers' capacity to teach better, and bring in more depth to what they teach.

The library of the Institute, founded in 1905, is one of the foremost among specialised libraries in India in the fields of economics and other social sciences. It is the depository library for all United Nations publications, as well as, publications of other leading international development and financial organisations. In 2005, the library completes its centenary. The library originally belonged to the Servants of India Society. Now renamed the Dhananjayarao Gadgil Library, is not only one of the largest social science libraries in India, but also contains an exceptionally rich collection of rare historical materials that draws South Asia researchers from all over the world. Today, the library collection includes 260,000 books, and 473 journals including almost all the leading English-language journals in Economics.

Since 1959, the Institute has been bringing out a peer reviewed quarterly journal in English, *Artha Vijnana* (Economic Science), which is regarded as one of the best academic journals in India. In its 45-year history, the journal has published articles on a wide range of subjects oriented to problems of economic growth and development in the Indian context.

Since 1937, the Institute has been holding the prestigious Kale Memorial Lecture. In its nearly 70-year history, Kale Memorial Speakers have included such influential thinkers and publicists of their time as B. R. Ambedkar, P. C. Mahalanobis, V. K. R. V. Rao, D. R. Gadgil, M. N. Srinivas, Manmohan Singh, Andre Bateille, Sukhamaoy Chakravarty and Jagdish Bhagwati.



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N.

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Ph.D.: State University of New York, Buffalo
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Sraffian Economics, Technical Change
Arup Maharatna
Ph.D.: London School of Economics
Areas of interest: Population and Development
Famine Demography
Tirthankar Roy
Ph.D.: Jawaharlal Nehru University
Areas of interest: Economic History,
Economic Development

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Gokhale Institute of Politics and Economics – A Journey into the Past

The completion of Seventy-Five years is a very significant event in the life of an Institute. The Gokhale Institute of Politics and Economics, Pune, which will be celebrating its Platinum Jubilee soon has traversed that longish span in its unpretentious though not uneventful life. It was founded on 6th June 1930 with objection to conduct research into the economic and political problems of the

It was founded on 6th June 1930 with objection to conduct research into the economic and political problems of the country providing for instructions and training and to facilitate research and dissemination of knowledge on allied subjects. Among others, Dr. D. R. Gadgil, first Director of the Institute for 35 years, devoted himself to teaching post-graduate students and guiding research students. During his tenure G.I.P.E. attained name and fame as the premier Institute in Economic Research in the Country. Throughout his career Dr. Gadgil combined academic excellence with social commitment. He believed that economic, political and social problems are interdependent and can not be separated while a dealing with developing economy. He believed that abstract principle of economics have to be tested in the crucible of experience and to be related to the specific facts and situation. He therefore laid great stress on an empirical approach and conducted his research work through by a number of economic surveys together with data and facts related to local environment. Though he was not Marxist or even Socialist, he stated that unbridled

capitalism leads to inequality and exploitation. He emphasized regulatory framework in planned economy. Dr. Gadgil brought great name, fame and status to G.I.P.E. In 1951 India embarked on planned process of economic development through successive five year plans. Dr. Gadgil entirely contributed to thinking on planning in the country. His two notable contributions to planning were the provision (a) of an objective basis for determination of plan grants to the states known as Gadgil formula (b) decentralization of planning at the district level. Though he was stern in appearance he had a great heart and his life was utter simplicity, utter integrity. The stamp of his personality was so great and so distinctive that you could hardly find anybody to compare it with. It is hoped that such a glorious life and lesson of it will inspire others to follow in his footsteps and to imbibe values cherished by him and enhance prestige and reputation of G.I.P.E. as Premier Institute in the country. For members of the Servants of India Society (past) it was an intellectual treat every year to listen to Professor Gadgil's lucid interpretation of economic problems faced by the Country at the meeting of associates during the Foundation Day of the Society when Wrangler Paranjpe, Prof. Karve, Wrangler Mahajani also addressed the meeting. I refer be permitted to may 'Changing India' essays in to honour of Prof. D. R. Gadgil edited by

S. S. Ajgaonkar*

* Secretary, Servants of India Society, Mumbai.

Prof. N. V. Sohoni and Prof. V. M. Dandekar. It presents various fields of Prof. Gadgil's work and activities by his eminent colleagues, successors and friends on the occasion of his 61st Birth Day. These articles of high academic standard contributed by Prof. M. L. Dantwalla, B. N. Datar, B. N. Ganguly, Eric Zacopy, D. G. Karve, B. K. Madan, V. L. Mehta, S. K. Muranjan, V. K. R. V. Rao, Prof. N. V. Sohoni, Maurice Zinkin and others represent and considered views and covers academic interest of Prof. Gadgil himself which includes Economics, Agricultural Economics, Labor Economics, Banking, Public Administration, Education, Statistic and Social Research Methods.

G.I.P.E. Commemorates Gokhale's Memory

It was befitting that the Institute was named after Gopal Krishna Gokhale founder of the Servants of India Society (12th June 1905). Gokhale represented a very important phase in the Indian National Movement. His academic brilliance, his persuasive eloquence, his missionary spirit, his amazing mastery over the intricacies of finance and administration were unique. His political outlook was in great tradition laid down by his illustrious forebears and contemporaries like Mahadev Govind Ranade and Dadabhai Naoroji. Gandhiji thought of Gokhale as an 'Ideal Mahatma' gave him a place in his own heart and aspired to the realization of that ideal in himself. Gandhji refers, "when I met Gokhale in S.I.S. campus, it was like meeting an old friend or better still a mother after long separation". There are numerous instances recorded about

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Gokhale-Gandhi meetings at various places including South Africa.

Library of G.I.P.E.

The original Gokhale Institute Library though founded by Gokhale and Servants of India Society and developed by Dr. D. R. Gadgil, Sarvashri Prof. S. V. Sohoni and Dr. V. M. Dandekar, it was ceremoni-ously named Dhananjay Rao Gadgil Library on 31.3.2001. In fact the library was initially founded by Gokhale as repository of knowledge. Gokhale conceived the idea of starting the library for the use of life workers of S.I.S. during their training period and for others and for having access to knowledge through such library, a repository of economics, political science, history, sociology etc. Whenever Gokhale went abroad he could spare time and made it convenient to purchase and send books to this library. Com. M. N. Roy in his booklet "A Library of a Revolutionary" also referred to this library. Gokhale's successor Hon. Srinivasa Sastri (silver tongue orator of British Empire) made special efforts to build Madras Branch library. After the closure of Madras Branch all its treasured books, vital reports and documents etc. were sent to G.I.P.E. library at Pune. It also contained important records including books of history, politics, economics, literature and at the same time literature on Marxism, Gandhism etc. Even Mumbai Branch of SIS at the request of Shri Sharangpani and the librarian Sovani sent books to G.I.P.E. on varied subjects, controversial reports of labour struggle (movement), proceedings of Mumbai Legislative Assembly and Central Legislative Assembly etc. Mumbai Branch was hub of numerous Trade Union and Social Reform Activities, spearheaded by legendary figures like Sarvashri G. K. Deodhar, Thakkar Bapa, N. M. Joshi (Father of the Indian Trade Union Movement) and the radicals like S. R. Parulekar, Dinkar Desai, N. V. Phadke, and Godavari Gokhale. All the reports of this branch were sent to G.I.P.E., library for preserving records of Trade Union and Social Reform Movement of the Country.

Gokhale's Public Life -

It is to be noted that Gokhale was less than 49 years of age when he died. Having regard to his brief public career of 20 years or so he could attain a great distinction in a wide variety of public activities.

During his brief public career, Gokhale laboured enormously and rendered outstanding services to the national cause. Gokhale's work for the cause of education and his labours in connection with grant of successive installment of political reform, has greatly distinguished himself in the public life of undivided Country (India), by his Parliamentary work. He was for 15 years a member of the Imperial Legislative Council and during all this time, made a tremendous impression by dint of his exceptional parliamentary abilities. His budget speeches were regarded as classics of economics analysis and exposition and complete mastery of complexities of Indian economics and finances. He was at the same time, capable of masterly and felicitous presentation of facts, figures and arguments. Gokhale's criticism of the budget in the Imperial Legislative Council

was referred as an annual public event of considerable importance. It is recorded that during the absence of Gokhale due to illness in the Imperial Legislative Council in 1913 and 1914 when the budget was discussed, the then Finance Minister observed during the debate that the discussion in the absence of Gokhale was like staging Hamlet without the Prince of Denmark. Later Lord Curzon with whom Gokhale frequently had occasion to cross swords paid the most handsome tribute to Gokhale's parliamentary capacities. In fact, "he was the leader of opposition", said Lord Curzon "and in that capacity" I often had to suffer the weight of Mr. Gokhale's blows. I have never met a man of any nationality more gifted with Parliamentary capacities. Mr. Gokhale would have obtained a position of distinction at any Parliament in the world, even in the British House of Commons. Gokhale was undoubtedly far and away the greatest Parliamentarian that the Country has produced so far".

Gokhale's life has lessons to teach legislators that Gokhale, the first leader of opposition in Indian Legislative History battered his wits against stonewall of an irremovable imperial bureaucracy. Even so, he never departed from grade or decorum or the courtesy of debate or in any way compromised the dignity of house that he had the honor to belong to and always insisted morality in Politics. To quote Gandhiji "Gokhale seemed to me all I wanted of a political worker, pure as crystal, gentle as a lamb, brave as a lion and chivalrous to a fault. He was and remains for me, the most perfect man in the political field". What is the moral of Gokhale's life and what legacy he has

left? In his last words to members of the Servants of India Society who were present beside his death bed (Presidents bunglow in campus) "Don't waste your time in writing a biography or setting up statues but pour soul in the service of India".

Gokhale belonged to a generation, which has already disappeared with its traditions and great culture. It is worth thinking whether the Institutions like Servants of India Society founded by Gokhale and others and good work done by them could continue for ever, when it has lost utility in the context of present day pattern of functioning and prevailing situation.

The Servants of India Society, Mumbai Branch during Gokhale's Centenary Year organised a seminar in Bombay on "Gokhale's Economics Thought" inviting C. D. Deshmukh (Ex. Finance Minister) Prof. M. L. Dantwala (School of Economic, University of Mumbai) and Justice B. N. Gokhale. The Political scene that we face today is completely transferred from the scene that Gokhale had to face against heavy odds as to advance the national interest in the Imperial Legislative Council, which was neither responsible nor accountable. The Gokhale Institute of Politics and Economics, Pune, was founded on 6th June 1930 with R. B. R. R. Kale Trust Fund with Dr. D. R. Gadgil as first Director. In fact Dr. Gadgil was founder President of the Institute. Located in the campus of the Servants of India Society, who are Trustees of the Institute, it aimed at conducting research into the economics and political problems of India, providing for instructions and training in these

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subjects and facilitating for research and training of research workers for the advancement and dissemination of knowledge. There is enormous material published in India Weekly (bound up volumes-30) printed and published from U. K. It covers articles since 1889, sympathising with Indian aspirations and efforts made by Indian leaders with articles and support for Indian aspirants. It is repository of knowledge and information of Indian aspirants and efforts made by Indian leaders like Gokhale who encouraged women like Sarojini Naidu, Nivedita, and Sarala Ray in their educational work.

G.I.P.E. Deemed to be University

Without entering into the background and prevailing circumstances, Servants of India Society, Trustees of Gokhale Institute of Politics and Economics arrived at the decision to convert the Institute as 'Deemed to be University'. It was momentous and crucial decision taken by the Trustees in the interest of the development and progress of G.I.P.E. It is now unique unidiscipline University in the Country concentrating on higher studies and research in economics and developing allied fields. It was so declared by the notification (Central Govt.) on May 9, 1993 the Birthday of Gopal Krishna Gokhale, after whom the Institute is named. The Institute in its 75 years history has played an important role in the development of economics research, teaching and policy making in India and has potential to remain a leading centre for learning. It is rightly said that the Jubilee Year is an occasion to strengthen the great potential of the Institute and to undertake a major modernisation and development programme as conceived by the Director, Dr. A. K. Sinha and his associates. Its self study report for National Assessment and Accredita-tion Council has positive and most favourable response. It is very vital for the successful implementation of future programmes for the development of Gokhale Institute of Politics and Economics as the Premier Institute in the Country.

Campus Landmarks

Memorial Plaque

Near the boundary line on the campus of the Society (Hanuman Tekdi/ Fergussion College Hillock) a memorial plaque was erected by public where Gokhale and his three colleagues at the sunrise on 12th June 1905 took the solemn oath to serve the Country and for formation of Servants of India Society. The foundation stone of the Servants of India Society was laid down by Shivram Hari Sathe a great friend and colleague of Gokhale from "Sarvajanik Sabha". In course of time, the spot became the centre of pilgrimage for devoted political and social workers as well as writers. Sane Guruji released his first publication after offering prayers on the hillock where Gokhale and his colleagues took the solemn oath to serve the Country.

Campus – President's Bunglow

Gokhale resided for eight years before having his mortal coils in 1915 at this bunglow (President Quarters). Earlier he lived in Dhavale bunglow (Aamrai Camp) and shifted to campus of the Society after the death of his wife. Gandhiji first met Gokhale as visitor from Africa in Kathiawari Turban. Shri. Dhavale grandson, of Gokhale and Velankar narrated this and many anecdotes of Gokhale's life when the other visited his house with Shri B. R. Nanda on the 7th of May 1991. In due course Gokhale - Gandhi relationship blossomed. Gandhi desired to join the When he could not get Society. membership due to reasons not recorded. Gokhale collected donation of Rs. 40,000/- from Narottam Morarji and handed over the amount to Gandhiji to start Sabarmati Ashram. Residence of Gokhale at Pune campus was pilgrimage and inspiring centre for many intellectuals, political aspirants, Indians and Westerners. Society's campus was then vibrating with visits of intellectuals, political leaders and academicians. Gokhale was often invited to address meetings in U.K. There he came in contact with young economists like J. M. Keynes and Sidney Webb. It is worth noting that Sydney Webb and Beatrice Webb, both economists visited campus and resided in S.I.S. guest house (Webb was one of the founder of Fabian Society along with Bernard Shaw). Webbs is reported to have said that the best period of their time in India was spent in the company of Gokhale at Pune. His correspondence with Gokhale since March 16, 1912 to May 1913 was already published. Gokhale's demeanor, honesty, _ purity of mind sincerity and simplicity attracted ladies like Bhagini Nivedita (Margaret Noble), Sarala Ray and Sarojini Naidu. They were in regular correspondence with Gokhale. He was guide and philosopher during crisis to Saraladevi. Sarojini Naidu admired Gokhale and visited Society's campus

many times and was thrilled to see 'Sinhagad' famous fort of Shivaji from the terrace of G.I.P.E. Library building (old). Like Gandhiji, Vishveshwaria regularly called on Gokhale in the campus. Pt Madan Mohan Malvia visited Pune to recruit dedicated scholar-teachers for Benaras Hindu University. There was famous apology instance and outcome of Plague epidemic which forced S.I.S. to construct cage like 'Kutir' with iron bars to protect Gokhale whose life was in danger. The Society's campus was then away from the city where citizens came to reside during the epidemic of Plague. Even after the death of Gokhale campus of the Society became centre of political pilgrimage, the description of which will be lengthy and beyond the scope of this article letter. Mohammed Ali Jinnah creator of Pakistan (whose ancestors were converts and followed many Hindu rituals) desired to be Muslim. Gokhale resided in Society's guest house when he was invited to address public meetings held in Gokhale Hall. Lala Lajpat Rai before founding 'Servants of Peoples Society' visited Pune to learn at the feet of Gokhale and Tilak and resided in the campus of the society. Political leaders, writers, intellectuals and workers of different shades from Pandit Jawaharlal Nehru, Rajendra Prasad, Rt. Hon. M. R. Jayakar and Tej Bahadur Sapru etc visited the campus to pay their respect to the memory of Gokhale and to get inspiration from 'Vastu' where Gokhale dwelled. Whenever Gandhiji went on a fast unto death Sapru, Jayakar visited the campus to request Rt. Hon Srinivasa Sastri to mediate between Viceroy and Gandhiji. Gandhiji had such devotion for Gokhale and Gokhale's Society that when Kasturba

died at Agakhan Palace he insisted that the funeral pyre should be lit by a person from Servants of India Society. The account is never ending...

End of an Era

Gokhale expired on 19th February 1915 at the age of 49. His mortal remains were kept in the hall of President's bunglow. It is recorded that when Gokhale was lying in semi-comatose stage members surrounding his bed observed lips of Gokhale were quivering. His colleague G. K. Deodhar bowed down and uttered to his ears not to worry about the Society. They would carry forward his mission. With a faint smile Gokhale departed. News of Gokhale's death spread in the city like wild fire. Public from every starta rushed to the Society's campus to take last 'Darshan' of the departed Mahatma. Reported 20,000 persons assembled in the campus. Mrs. Patwardhan (Age 95) once narrated to the Secretary during S.I.S. Anuual Day Gathering that Maharshi Karve brought to the Society campus two-bus-load inmates of his Ashram to take last 'Darshan' of Mahatma Gokhale. She was one among them still surviving. Fifty Thousand citizens assembled at Onkareshwar to bid farewell to the departed leader. Lokmanya Tilak in his stirring funeral oration paid tributes to Gokhale's immense contribution to the nation. Shri. S. S. Ajgaonkar under instructions of Pandit H. N. Kunzru jotted down from archives of Times of India in Mumbai Public Meeting held on Saturday March 6, 1915 at Town Hall (Dardar Hall of Royal Asiatic Society) to pay tributes to the memory of Gopal Krishna Gokhale and to raise a memorial in his honour in

Mumbai. It was reported that the meeting which was schedule to commence at 5.30 p.m., had public arriving from 3 p.m. and by 4 p.m. the entire Darbar Hall was crowded and hundreds including a large number of ladies were unable even to find place. To avoid their a standing disappointment another meeting was simultaneously held in open air in the adjoining Horniman Circle (named after the Englishman who stubbornly supported Indian aspirations for freedom through Bombay Chronicle, popular English Daily edited by him). Lord Wellington, who presided over the meeting held at Town Hall, said the great gathering was wonderful testimony of the esteem and regard in which Gokhale was held by all classes of both the European and Indian Communities. Among the principle speakers at Darbar Hall (Town Hall) were H. H. Agakhan, Phirojsha Mehta, M. A. Jinnah, Narotam Morarji, Sir Cowasji Jehangir, Dr. Stanley Reed, Jehangir Petit, Sir Dorabji Tata, Chimanlal Setalvad (all the cream of Mumbai's intellectual Life, industrial magnets and legal luminaries). In the simultaneously held meeting at Horniman Circle Sir Narayan Chandavarkar presided. Speakers were Sir Mirza, Sir Chunilal Mehta, Fazalbhoy Chinnai, S. Natarajan (editor of Social Reformer) and Sir R. P. Masani who eulogized eugolising the services of Gokhale to the Country. Sir Narayan Chandavarkar expressed his grief over the great national loss. "Gokhale stood before the civilized world as a symbol of the Country's progress and sprit of nationality and the prominent place which the motherland was destined to take in the history of the nations. Gokhale sacrified his life for his Country. The whole nation was in tears. Their sorrow was of deepest character and it prevailed not only in every part of the Country but in every part of the British Empire where he was known and made his mark by his powerful advocacy of the interest of the Country. In talents he equalled the best statesmen in the British Empire. His premature death was most lamentable. Mr. Gokhale was a great orator. His unselfishness and his heroic self sacrifice in the interest of the Country were unparallel. Mr. Gokhale taught them to serve the Country. Sir Chandavarkar spoke of Gokhale's mission and the lesson which his life taught and proceeded to remark that if Gokhale's noble example proved as an incentive to future generation to follow in his foot steps, he would not have lived in vain. Gokhale's sole ambition was to produce a healthy nationality in India".

Campus (To convert Presidents Bunglow as Nucleus of Gokhale Memorial Museum)

The Secretary Shri S. S. Ajgaonkar during his Weekly visit since 1983 conceived the proposal to set up a fitting memorial to late Gopal Krishna Gokhale on the campus of the Servants of India Society (Pune) with the foundation of Gokhale Memorial Museum with the cottage (Presidents Bunglow) as nucleus occupied by him, where he lived and worked, met great personalities - Indian and foreign, inspired numerous intellectuals, social reformers, political leaders and passed away in harness on 19th February 1915. The proposal was passed in the Council meeting presided over by the late S. S. Misra in 1988. The Indian National Trust for Art and Cultural Heritage (INTACH) was appointed

consultant for proposed Museum. Shri Narendra Dengle, architect specialising in this type of work was given assignment to prepare schematic proposal for the Gokhale Memorial Museum. The job of coordination and actual conversion of the building (Gokhale's residence) was worked out. It was agreed to involve experts to make the final list of items that the Museum should represent e.g. photographs, letters, speeches, furniture and personal effects, paintings of important incidence in Gokhal's life to be displayed. It was also decided to involve experts in the field at the preparatory Tentatively the Society's stage. contribution to the Museum was Presidents bunglow, adjoining Secretary's cottage (protected and closed with iron rods where Gokhale's murder was planned during apology incident) and stretch of land upto B.M.C. road. It was thought that documents, souvenirs, mementos related with Gokhale which lie scattered all over the Country as well as abroad could be brought together and displayed in the Museum with the object in mind that the display should effectively create an atmosphere which would be most inspiring. Accordingly it was decided that such a display should project in a sequential manner, among other things, the politics of Gokhale, Tilak and the National Congress, his activities in England, approach of British intellectuals and rulers, Gokhale's association with Deccan Education Society, foundation of S.I.S. his relationship with Gandhiji, his life style and family origin. The display was to be done by photographs, his correspondence with leaders all over the world, speeches and writings on the development of Indian economy and the

political and the social evolution in the Country and his personal belongings. Material was to be gathered from within the Country, U.K. and private collections.

Shri S. S. Ajgaonkar invited Shri. B. R. Nanda, then in-charge of Nehru Memorial Museum and Library (Trimurti Marg, New Delhi) and Gokhale scholar of Pune after he delivered Gokhale's 125th Birth Anniversary address in Bombay on the 9th May 1991. Shri Nanda visited Pune and saw the proposed scheme of Gokhale Memorial Museum. He approved the scheme and layout of the Museum. He narrated his frustrated experience with irregularity of receiving Government grants when he was incharge of the Nehru Memorial Museum, New Delhi and advised to seek sources from other agencies. There was also a proposal from financial wizard late Shri H. T. Parekh of I.C.I.C.I. and founder Chairman of H.D.F.C. He assured help in finding out sponsors whose financial help would be regular than Government grants. There was a temporary set back for the memorial Museum project with new problems cropping like progressive deterioration due to vandalism, negligence and systematic thefts of wrought iron decorative girders in the varandha after keeping it open for vandals to enter. There has been a danger of losing open land adjacent to the heritage bunglow due to encroachment. The new breed of builders, proliferating in the area, would compel Trustees to be aware of new problems and to be aware of new problems and speed up the Gokhale Memorial Project.

Remembering D. R. Gadgil's Contributions to Gokhale Institute of Politics and Economics

Sulabha Brahme'







Namdar G. K. Gokhale Founder, Servants of India Society

Professor D. R. Gadgil Founder Director, Gokhale Institute of Politics and Economics

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Rao Bahadur R. R. Kale Founder, Gokhale Institute of Politics and Economics

I. Genesis and Vision

The Gokhale Institute of Politics and Economics - a pioneering research Institute in economics was established on 12th June 1930 in Pune by Prof. D. R. Gadgil with the help of a magnificent donation from R.B.R.R.Kale.

The Institute is situated in the Campus of the Servants of India Society (SIS) in the Deccan Gymkhana area, Pune. The SIS was founded by Namdar G. K. Gokhale in 1905 to train national missionaries, committed to devote their lives to the cause of the country and promote the national interests of the Indian people. The campus was ideal for research pursuit as the SIS library had an excellent collection of British Parliamentary papers, Government (U. K. and India) documents, reports, council debates and journals and books in political science, economics, history, sociology and allied subjects.

The Institute was housed in a fiveroom cottage with a row of elegant neem trees in front and behind. The cottage stretched the verdant canopy of a magnificent Banyan tree symbolizing the lofty ideals of the Society and the Institute. The Institute was established by Prof. D. R. Gadgil with the specific aim of carrying out research on political and economic problems of India and to train research workers for undertaking such studies. The focus of research was on fact-finding investigations in specific economic and political problems and analytical studies of problems of contemporary interest. The Institute was to function in cooperation with social activists engaged in the work of

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providing practical solutions to the problems plaguing the Indian Society. Appropriately, the SIS was appointed as the Trustee of the Institute and it was named after G. K. Gokhale, one of the founding fathers of the Indian Political Economy.

First Director : The founder director, Dhananjaya Ramchandra Gadgil (10 April 1901 – 3 May 1971) hailed from Nagpur, graduated from the Cambridge University (1918-1923) where he was sent by his parents for joining the ICS. Gadgil was, however, deeply concerned with the poverty and exploitation of the Indian toiling masses and considered that he was duty-bound to utilise his talent not for personal prestige and wealth, but to help ameliorate socio-economic inequity. He considered the study of history and political economy as basic for deepening ones understanding of the ground – level reality, essential for arriving at appropriate policy measures. He, therefore, completed History and Economics Tripos at the Cambridge University and for the post-graduate research degree - Master of Letters (M. Litt.) he chose 'Industrial Evolution of India in recent times (1860-1914)' as the topic of his thesis. He had planned to embark on economic research and teaching after his return to India. The plan could materialise in 1930 because of the generous donation extended by Rao Bahadur Raoji Ramchandra Kale, of Satara to found the Institute and the library facilities and accommodation provided by the SIS for the Institute.

The Founder : In 1966 after his retirement Prof. Gadgil was invited to deliver the Annual Kale Memorial lecture at the Gokhale Institute. In his introductory remarks Prof. Gadgil briefly referred to the key role of the founder, "R. R. Kale was a distinguished and highly successful lawyer of Satara City. He was also keenly interested in public affairs and actively participated in them. He played a prominent part in the provincial legislature and in the University. He was a Sanskrit scholar, and was attracted towards the Prarthana Samaj. In politics he was the follower of Gokhale both in insistence on a deep and careful study of problems and in the belief in need of moderation in the expression of opinion. When Rao Bahadur Kale learnt of this (that Gadgil – his son-in-law contemplated to initiate work in the field of economic research and training) he made an offer to the SIS (Kale was an Associate of SIS) of an endowment. He did this at a time when he had retired from active legal practice and though it meant giving away immediately a significant part of his capital resources. The President of the SIS (Shri. G. K. Deodhar) made the suggestion that the Institute might be named after the founder. However, he felt that naming it after Gokhale, the founder of the SIS, would be more appropriate. The assistance and cooperation of many has been responsible for the growth of the Institute in subsequent decades. However, these could have had no chance to operate but for the imaginative, courageous and generous initial endowment by the founder."¹

The Society : Regarding the SIS, Prof. Gadgil said, "It is only proper that I should take this opportunity to express my gratitude to the President and members of the Servants of India Society for their cooperation and assistance through all these years. In accepting the endowment, the society agreed to house the Institute and to give it the use of its library. Though in later years the Institute was able to command its own resources for these purposes, the use of the premises and the nucleus of the library have been vital to the growth of the Institute. The terms of endowment created a Board of Management for the Institute in which naturally the major role was that of the Society. It is a pleasure to record that this responsibility has been discharged by the President and concerned members of the society² with great consideration and understanding."³

Kale Memorial Lectures : An annual lecture - Kale Memorial Lecture is being organised by the Institute from 1937 in memory of the founder (who died on 17-1-1936). These lectures are delivered by persons of eminence in academic or public life. The lectures have made significant contributions on various issues of contemporary interest and are published by the Institute. The first lecture in 1937 was delivered by the noted economist, V. G. Kale. In the subsequent years eminent scholars and luminaries viz G. S. Ghurye, B. R. Ambedkar, K. T. Shah, V. L. Mehta, John Mathai, C. D. Deshmukh, A. D. Gorwala, P. C. Mahalanobis, V. K. R. V. Rao, K. P. Chattopadhay, H. M. Patel, B. N. Ganguli, A. P. Appadorai, M. L. Datwala, Pitambar Pant etc. had been invited to deliver the lecture. These public lectures are well-attended and wellreceived.

Teaching in Economics : From 1930 post-graduate teaching in Economics for M. A. degree is being conducted at the Gokhale Institute. In the initial years together with Prof. Gadgil, professors from Poona Colleges, viz., Deccan College (G. B.Jathar, S. G. Beri), Fergusson College (D. G. Karve, B. G. Sapre) and S. P. college (S. C. Bose) lectured at the Institute.⁴ Students for M. A. and Ph. D. degree by research in economics were also enrolled. The postgraduate courses were affiliated to the Bombay University till 1949. When Poona University was established (1949) the post-graduate teaching was centralised at the Poona university campus and the Gokhale Institute along with the colleges contributed teachers for the M. A. course. A constituent research Institution of the University of Poona, the Gokhale Institute virtually functioned as the economics department of the Poona University with a large number of Ph.D. Students working at the Institute.

Research in Economics : The Gokhale Institute was the first independent Economic Research Institute in India, pioneering in the field of grass-root level fact-finding economic research. Gadgil envisaged that social science research in the tradition bound Indian society experiencing traumatic economic and political changes under the British imperial rule should contribute meaningfully towards a better understanding of the processes of social change by addressing itself to the multitude of real life problems. Societal issues have to be analysed with sensitivity and an acute awareness of the environment and the constraints in order to suggest feasible alternatives to bring about changes towards desired goals.

The objectives of social science research, according to Prof. Gadgil,⁵ is to understand the origanisation and working of social institutions and actions and reactions of people towards them, to identify the origins and drives behind social forces and the mechanics of social change, and to chart out the possibilities and limitations of directing social change with full consciousness of its immediate and longterm implications. Because of the complexity of social and institutional processes he considered it important for

social scientists to have a thorough grounding in field experience. Association with and involvement in social activities were thought necessary to deepen the understanding of issues and for obtaining a better grasp of methodology. This would enable the researcher to set out the questions logically and to analyse the data discerningly, and to arrive at policy suggestions keeping in view the broad framework of desired social values and objectives viz. justice and equity. Prof. Gadgil always emphasized that the diversity of conditions and peoples in India calls first for a local level experimentation before widening the scope of application of any programme. The knowledge obtained through involvement in specific field studies and social activities was considered valuable to lay the foundation for arriving at reliable generalizations.

Pioneering Studies : The major contribution of GIPE is its pioneering work in systematic empirical socio-economic inquiry and research methodology pertaining to grassroots level research and decentralized planning upto district level. We are fortunate that in tracing the early development of the Institute we are able to put it in the words of Prof. Gadgil from his introductory speach⁶ on the occasion of the first Kale Memorial Lecture in 1937.

"The importance of the work of the Institute can be judged from the titles of its publications, the opinions that have been expressed regarding them and the use it has been possible to make of them. We would merely draw attention to a few important special facts. The pamphlets on Salaries and Imperial Preference attacked problems of urgent topical importance and the former will continue to be important as long as salary reform is not grappled with as a

whole. The marking survey was undertaken by the Institute long before the recent marketing survey project was launched by the Government of India and was absolutely the first work of its kind in India. The same description may truthfully be applied to the survey of road transportation, which is a contribution of considerable importance towards the solution of the problem of road traffic control and coordination⁷ and it is not necessary today to emphasize the importance of the study of artisan industry. It has always been our aim to achieve outstanding work of a pioneering nature. Hence the agricultural investigation that we have now in hand is concerned with the testing and establishing of the survey method in farm business studies, a work which has nowhere yet been undertaken in India. And the other work in hand is a comprehensive economic survey of Poona City, somewhat on the lines contemplated by Messers Bowlay and Robertson in their report, but not yet attempted elsewhere in India."8

The farm business study⁹ proved highly valuable when in 1948 the Government appointed National Income Committee for laying down a framework for the measurement of National Income. To meet the challenging problems faced in the estimation of agricultural income the various parameters necessary for estimation of production available from the Wai study proved to be invaluable.

The other pioneering study taken up in 1939 was the study of direct and indirect benefits of the Godavari and Pravara canals in Ahmednagar district.¹⁰ Till then, only the aspect of the return to the government from the capital investment in the canal irrigation project had received attention. This study developed the methodology for the study

of costs and direct and indirect benefits of irrigation projects. This was extensively used during the fifties when several large irrigation projects were launched. The study clearly indicated the need for a comprehensive approach so that the full benefits of irrigation can be reaped by the rural community. It was noted in the study that the introduction of irrigated crops like cotton, fruit, sugarcane and fodder crops that have a forward linkage to processing industry and dairy business, if set up under farmer's cooperative, can yield substantial benefits to the farmer, create considerable employment and give stimulus to the economic development of the stagnant rural economy. This study, thus, provided a basis for the organization of the Pravara Cooperative Sugar Factory that Gadgil pioneered in the mid forties.

The socio-economic survey of Poona City was completed during 1936-37. The study was pioneering in evolving the methodology of city survey that provided the basis for the several city surveys taken up from the fifties funded by the Research Programmes Committee of the Planning Commission. Poverty line as worked out by the Bombay Textile Labour Inquiry Committee (Gadgil was a member of the committee) was applied and the incidence of poverty in various occupational groups and the causes of the same were analyzed. The most important cause of poverty was the low level of earnings (and not largeness of family). The study of poverty came to the fore in India during the sixties. Gadgil had the foresight to pioneer studies into these issues during the thirties. These economic investigations were anchored in social and historical materials, and served as a tool for gaining social knowledge for striving towards humanist egalitarian social order.

Gadgil emphasized symbiotic approach to society, economy and polity to understand the reality in the context of the Indian Society. At the level of comprehension there was a totality of vision of social science as a unitary science though at the level analysis there was subject specialization. Through the establishment of the Gokhale Institute, foundation of India's Social Science Research was thus laid. The Gokhale Institute initially housed economics, political science, demography, economic history, and statistics. From the fifties political science was shifted to the Poona University but sociology, education, econometrics were added.

Research and Praxis: As the Institute was concerned with securing involvement and participation of the peasantry and other toiling masses in the process of socio-economic development, the Institute took wide ranging responsibilities in public affairs and was involved in studies relevant for the formulation of economic policy and participated in actions for promoting appropriate institutional set up to implement the measures suggested.

The problems were handled with deep sensitivity to the social environment and genuine human concern for the people. Some of the important studies¹¹ carried out during this period by the Institute were demographic studies, socio-economic surveys of Pune, Kolhapur and Solapur, primary education, rural sociology, village studies, working of land legislation, rural indebtedness and credit, input-output analysis, etc.. The Institute dealt with national problems like federal problem of India, draft constitution of India, salaries of public officials, war time controls, problems of economic development and planning, human rights, etc.¹² The institute initiated

with the cooperation of public workers. officials and concerned experts, social action in relation to famine relief, employment guarantee, irrigation development, introduction of the three-tier cooperative credit network and crop loan system and the establishment of the first successful cooperative sugar factory in India that played a crucial role in changing the socio-economic dynamics of rural Maharashtra. The institute contributed towards providing a theoretical basis for the formation of linguistic states and was actively involved in preparing a wellreasoned case for the establishment of Samyukta Maharashtra with Bombay as the state capital which was being hotly contested. Rigorous logic and systematic exposition of these various issues under consideration helped shape public reason. In the context of national planning and development policy, the Institute made significant contribution in relation to formulation of agricultural price policy, buffer stocks and public distribution of food grains, banking and credit policy, nationalization of the imperial bank, rational policy for village and small-scale industries, national cooperative organization and multilevel policy, planning. experimentation in decentralized planning. In all these endeavours the basis for policy formulation was provided by the in-depth grass-root level investigations and analysis carried out by the Gokhale Institute. Moreover, the Institute made substantial contributions in evolving suitable methodologies for systematic study of farm management, cost-benefit analysis of irrigation projects, population studies and city surveys. There was a two pronged. approach of developing appropriate research models and methods, and meticulous ground-level data collection that involved

stay at the locale of study and continuous interaction with the people for obtaining reliable data for perceptive conceptualization.

In 1961, the Institute took the responsibility for experimentation with 'planning from the bottom' through preparation of a development plan for the Wardha district.¹³ The work began with an in-depth survey of the district followed by a seminar. Encouraged by the response of the people in this planning process, it was decided to prepare block-level plans on the basis of field data. These were circulated and discussed with the people and then consolidated to evolve a coordinated district plan in October 1962. By this time Zllla Parishads were duly constituted. The plan was put into operation in April 1964 with the support of the Planning Commission. The Institute continued to help the Z. P. in working out details of the plan and concurrent evaluation.

The distinctive aspects of Wardha Plan were (a) it was based on an intensive survey in which local but crucial problems were identified and quantitative interrelationships between present and potential local resources and the population were brought out and (b) cultivators, nonofficial experts, social workers and others were involved at different stages of plan formulation. Within the broad theoretical framework and diagnostic analysis provided by the researchers, solutions were worked out through a continuous dialogue with the concerned people.

The specificity of the approach to research and data collection at the Gokhale Institute can be brought out by comparing it with that of the organisation engaged in national sample surveys to build up macroestimates. Such estimates are no doubt important, but they do not help to link macro-level planning and policies to microlevel needs and behaviour. For this purpose well-directed grass root level empirical studies and the participation in social action are both essential. This is the approach, which Gokhale Institute consciously developed and followed from its foundation in 1930 until the retirement of Prof. Gadgil.

Wide-ranging Horizons : By the fifties the Institute had acquired international reputation and Funds (without strings) started pouring from National and International Agencies. The institute has developed a world class library and excellent data-collection and dataprocessing infrastructure. The Institute though located in a provincial city, attracted research Faculty from all over the country, from Punjab, to Assam and U.P. to Kerala. From the sixties Gokhale Institute used to figure in the itinerary of many visiting international economists both from the capitalist and communist countries.

Numerous scholars and visitors frequented the Institute, representing a wide spectrum of ideologies and areas of work. For public issues like famine relief and drought mitigation, Panshet dam disaster and rehabilitation Samyukta Maharashtra, all party platforms were setup at the initiative of the Institute. S. A. Dange, Datta Deshmukh, S. M. Joshi, Shankarrao More, Bhausaheb Hire, N. D. Patil, Shankarao Kharat and several other leaders and activists participated in these platforms. In the cooperative field Vaikunthlal Mehta, D. G. Karve, Vikhe Patil, Hambirrao Mohite, Walchand Shrishimal, N. S. Kulkarni, V. M. Joglekar and Vasantdada Patil frequented the Institute for discussions or meetings on various issues in cooperation. The economics, politics, sociology faculty from the various colleges and the Poona university participated in seminars, lectures and other academic events at the Institute. World renowned scholars that interacted with the Institute included Professors Simon Kuznets, Richard Stone, Joan Robinson, Wassily Leontief, V. I. Pavlov, G. Kotovsky, Shigeto Tsuru and others. Several eminent Indian and foreign scholars participated when the Institute hosted all the important all India economic conferences in the Silver Jubilee year (1955) and the Golden Jubilee year (1980) and organised an International seminar on "Paths to Economic Growth" in January 1961.

II. The Karmabhoomi

Born two years later, I grew up with the Gokhale Institute. We used to visit the Institute as children; it was a 25 minutes walk by the winding well-shaded mutha left-bank-canal path from our bungalow located on the Law College Road. Father daily cycled to the Institute by the canal path. Time permitting, we preferred the long enchanting hill-route via Law College hill and Hanuman hill and climb down straight in the SIS campus located on the sloping grounds at the foot of Hanuman hill. The main attraction was the magnificent Banyan tree behind the five-room, stone cottage with tiled roof that housed the Gokhale Institute. We would play surparambya. Before leaving we would just spend a few minutes in father's office - the left-hand corner room, very plainly furnished, lined with shelves full of books, files and papers. Plainly attired in a short coat, *dhoti*, black cap and chappals, absorbed in the papers at his table, father did not mind taking a few minutes off his work.

By the late forties the attraction shifted to the Library and in early fifties to the machine room as well, with rhythmically

moving sorting and tabulating machines and the calculating machines processing the National Sample Survey data (Poona Schedules) and later the Rural Credit Survey data. Working on machines was exhilarating. By this time, the association with the Institute had turned into a close, life long commitment to the principles and the ideals upheld by the Institute. The Institute became an inseparable part of my work life from 1954 when I enrolled for Ph. D. at the Poona University and worked at the Gokhale Institute (1954-57). Gadgil was my Ph. D. guide. As a guide Gadgil would give full freedom to the research students to find their way into the yet unknown field of research starting the work with preparing a long, thorough bibliography and then plunge into reading, exploring and experimenting. In a way, he would put the students on the path of selflearning and being independent researchers. His unique style helped in building confidence, and a grasp over methodology. conceptualization, analysis developed as the work progressed. He would offer advice, if necessary to make sure that the presentation is logical, well-argued and insightful. We, the Ph.D. students found this experience fulfilling since we could acquire, within a short span of our Ph.D. work interdisciplinary approach, and the capacity for independent thinking and handling of complex problems. A sound foundation was laid out for pursuing purposive research not the so-called value-neutral, but imbued with values of justice, humanism, and egalitarianism, thanks to Gadgil's insightful initiation.

The Institute though still small had by now somewhat expanded. A new office building was built and Gadgil had his office at the left hand corner on the first floor of the new building again a modest sized room plainly furnished with a small adjoining

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room furnished with an oval table with chairs around for meetings, discussions.

The Faculty : Prof. N. V. Sovani joined the Institute in 1942 and Prof. V. M. Dandekar in 1945, Kumudini Dandekar in 1950, and N. Rath and M. V. Namjoshi in 1951. With the establishment of the Agro-Economic Research Centre for Western India at the Gokhale Institute in 1954 by the Ministry of Agriculture, Planning and Development Unit which specialised in the field of input-output analysis, grants from the Ministry of Health for demographic studies, research project funding from the Research Programmes Committee of the Planning Commission, and the U.G.C. funded four research sections, several research faculty members hailing from different parts of India joined the Institute - P. N. Mathur, input-output analysis, Kshitij Mohan Mukerjee, who worked on national income, Durgabai Bhagwat – a sociologist, and a well-known Marathi writer, V. S. D'souza, Ajit Singh, G. Parthasarathy, K. Krishmurthy, T. N. Krishnan, V. S. Patwardhan, G. R. Mulla, Ravi Varma, D. K. Bedekar, Editor, Artha Vijnana, the Gokhale Institute Journal started in 1959. I joined in January 1959. During 1954 and early sixties A. R. Kamat, statistician, Vatsala Mukeriee mathematical economist, A. Bopegamage and M. G. Kulkarni, (rural sociology), R. K. Koti, P. Venkatramaih, (input-output analysis), Amalendu Guha - economic historian, S. C. Joseph, R. S. Rao, R. Radhakrishna, R. Hashim, Y. K. Sovani, etc. joined the Institute. D. P. Apte was the registrar - almost the sole administrative authority. Gadgil had delegated full powers for taking any positive decisions. Only if a request was to be refused then the director had to be consulted.

It was an enriching and exhilarating

experience to work with talented colleagues coming from varied cultural ethos and ideologies - liberal bourgeois to Marxist attracted to the Institute from different parts of India mainly because of the Unique standing, scholarship and culture of the Institute. The debates were often sharp but never bitter and usually vigorous and insightful. Most of the then faculty members reached high / top positions in the subsequent years.

The institute recruited competent individuals and used to fit them into one section or another depending on the individuals interest. The researchers were free to pursue their research interests in the broad area of their specialization. The formation of the research frame, the conceptualization theoretical and methodological approach, the pace of work etc. was left to the individual researcher. Many research workers were engaged in field studies and analysis of the voluminous data. This was a tedious and timeconsuming task with little publishable results over a period of two-three years. Gadgil made it a point to encourage the research workers engaged in the arduous field work with a firm assurance that those who work to provide the building blocks for societal policy making will be fully recognized by the Institute even though the results of their work do not see the light. Everybody's contribution was recognized and treated with equal respect by Gadgil.

Common Room : Every Saturday morning, the faculty would meet in a seminar. It was a platform bringing together all the research faculty, the visiting scholars and Ph.D. Students and it was called 'Common Room'. Gadgil was invariably present and conducted these seminars. Every one looked forward to these weekly meetings as this was the forum to discuss the academic output of the Institute. With Gadgil in the chair the atmosphere used to be somewhat tense, even though Gadgil himself was always understanding and soft in his criticism of the juniors. Dandekar was always very sharp in his attack. Gadgil was a balancing factor. In the annual Common Room meeting the research faculty including the Director reported on the work done and the plans for the following year. Thus the research staff was in a way accountable to the Common Room. Saturday seminars were the nerve centre of the Institute, they were taken seriously by the research faculty and students alike. The exercise fetched fulfilment of creative energies for the serious scholars.

A variety of subjects were discussed at these seminars. In one seminar, Dandekar made a suggestion that every faculty member should maintain a diary and faithfully record the work he did for the day. The faculty did not relish the idea. Acrimonious discussion was carried on for several weeks both at the seminars and outside. Dandekar suggested that the increments should be based on the record of work in the diary. Gadgil queried, 'Now that I have reached the maximum of the grade, does it mean that I do not have to work?' This put an end to the debate. Gadgil closed it after assuring the members that the views expressed by Dandekar were his own and did not reflect the views of the management. One point that Gadgil often cautioned was to avoid mental laziness at all costs. He would chide the senior staff gently on this point.

Institute Ambience : Gadgil treated all the faculty, students, as well as clerical and subordinate staff as his equal. This was symbolically demonstrated during *Makar Sankrant* Celebration – the winter solstice Hindu festival. Gadgil went around the office, meeting each member of the staff, at her/his table offering home-made *tilgul ladoo* – the traditional sweet. Gadgil maintained the atmosphere congenial and free; inculcating honesty, integrity, uprightness. All the staff members from professors to sub-staff were treated with honour and dignity. The sub-staff was employed exclusively for the office work and was not to be called in for personal service. A scholar who had just joined the Institute asked a peon to fetch a glass

of water. The peon informed him that there was math (an earthen pot) with a Pela in the corridor and he was welcome to help himself. There were no privileges, no luxuries, no waste. The taxpayer's money flowing in for research was used with utmost care and economy and for the societal benefit and not for individual careerism. The faculty, by and large was happy with the freedom they enjoyed, the serious yet open discussions and candid exchange, the high academic standard, the excellent library facilities, gentlemanly and upright cultural atmosphere and the green and serene campus. The relations among research faculty were frank and friendly. There was no favoritism, no discrimination, no petty squabbles, or political interference. It was a pleasure to work among colleagues accomplished in their own fields devoted to academic pursuits that were of significance in formulation of policy for economic development and planning.

Landscape Garden : Gadgil used to take personal interest in the plan and design of the new buildings and had taken particular interest in the gardens around. The new office building and the library building built during the fifties were artistically landscaped embellished with lush green lawns, gorgeous flowering trees and shrubs and colourful seasonal flowerbeds. The

garden was designed by Shankar Brahme, a practicing landscape architect in Pune – Mumbai. In the early sixties the profession of landscape architecture was just getting established in India. Brahme was trained in landscape designing in England. There was a good scope for imaginative designing as the office building was located on the hill slope. The principles of integration of the garden with the building and the garden with the surrounding landscape were skillfully applied in the terrace garden designed around the office building artistically placing the stone curbing, retaining walls, pathways and screens. Fine balancing of mass (trees) and void (open spaces - mainly lawn) was also achieved by appropriate use of trees, shrubs, climbers and ground-cover and lawn. Harmony in texture and colour of the foliage and flowers was effected beautifully making judicious selection of the plant varieties. My room was on the first floor with a window overlooking the garden. We used to enjoy at the beginning of spring a festival of colours - the golden yellow blossom of Cassia fistula, the delicate pink bloom of Cassia javanica and the deep red blossom of Cassia grandis, the fragrance of jasmine climbers and the sunbirds, butterflies, skipping from flower to flower. In the evening the garden was visited by outsiders also to enjoy the Unique splendour of the Institute gardens.

The Library : The greatest and everlasting treasure and a place of immense joy and erudition of the Institute is of course, the 100 year old library named Dhananjayarao Gadgil Library in 2001 to commemorate Prof. Gadgil's birth centenary. From the early fifties I have been spending more than half of my working life in the library or with the books borrowed from the library and still continue to do so. Every visit to the library is exciting and unique; every time one develops new insights and vistas, discovers new ideas and approaches. The collection is rich in economics, history, politics, sociology, statistics and in reference material including year books, encyclopaedias, various government reports and documents. It is a depository library of the U. N., European Community, IMF and International Court of Justice. The library with over 2.5 lakh books and a large number (over 500) of periodicals and newspapers is open to the public.

Alma Mater : The Institute shaped my life-philosophy and mission. The Institute ethos gave inspiration for serious scholarship and diligent work. It inculcated a spirit of social mission during my college days. The Ph.D. work contributed immensely to conceptual clarity and the development of sound logical and analytical approach to the subject under research. After I joined the research faculty in 1959 I had the opportunity to work along with Prof. Gadgil in the study of the impact of the Panshet Dam disaster in Poona on 12th July 1961 and the Plan of rehabilitation¹⁴ and subsequently on metropolitan planning for Bombay, Poona regions and in regional planning. The experience was rich, varied and intellectually stimulating as well as rewarding. It prepared me fully to handle with competence during my entire research career at the Gokhale Institute till 1992 and in the subsequent period, a range of issues centred around development and planning for the economic and social betterment of the peasants, adivasis, women and other downtrodden sections of the society.

Gadgil was to retire on April 1, 1966. We presented him a bibliography of his works that we (some of the research faculty members) had compiled and English translation of the introduction¹⁵ to his book 'Planning and Economic Policy in India' which was translated into Russian. We had arranged a farewell evening on the lawns of the institute. It was a warm and friendly function, the young faculty was full of enthusiasm but introspective!

The Glorious Era : It was a memorable evening – memorable because of the precious and unforgettable memories of the glorious era that was ending – an era in which the Institute grew from a staff of four to over 100 and the research faculty from three (D. R. Gadgil, V. R. Gadgil and L. V. Gogate) to 35, achieved an outstanding position in socio-economic grassroots level research, in national, state and district planning and development, in cooperative banking and metropolitan and regional planning, input-out analysis, - an era in which the staff enjoyed full freedom in work, there was an atmosphere of mutual trust and harmony, egalitarianism in interpersonal relations, respecting the dignity of individuals of all ranks, the work place was austere, the pay-scales moderate, but the work rewarding intellectually, - an era in which there was a feeling of belongingness to the Institute and oneness with the Institute's societal mission and satisfaction in the contribution one was making to humanistic research for the larger social cause. One did not work for personal fame or monetary rewards but for the fulfillment in participating in socially useful research and praxis. Societal values, intellectual culture and the humanist world view that Gadgil had inculcated in the Gokhale Institute ambience could be retained by many of us at the personal level.

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13. (a) Wardha Jilha Vikas Yojana (in Marathi) GIPE, 1964
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- 15. I had completed Intensive Russian language course during 1964. In 1965 V. I. Pavlov spent a few months in the Institute. Taking advantage of this we set up a Russian language group studying during the tea recess (3 to 3.30 pm). There were eight members including Venkatramaih. The Group translated the Russian Introduction.

In The Sixties and Seventies

I remember the Institute as it was during these two decades. Just after completing my Ph.D., I saw its advertisement. In those days, candidates looked for it and they had to make a serious effort to find it. It appeared in the classified ads and ran into about six lines only. But the reputation of the Institute being what it was, the trouble was worth-taking. Persons working as lecturers in permanent positions elsewhere considered it an honour if they were selected as junior research fellows for a term of two or three years. Hence, when I saw the advertisement, I applied without a second thought. When the interview call letter came, some people in the Jai Narayan Vyas University in Jodhpur discouraged me to attend the interview because they said that an appointment in the Institute was very difficult, if not impossible.

Anyway, I decided to take the chance. In those days also, the interview was held on the basis of a research proposal which I submitted on a problem of economic development. Since my thesis was in the area of economic history, V. M. Dandekar who was the Director then, called it a big jump from one area to another. He asked for a copy of the thesis and perused through it while the other members of the interview committee asked questions. Within minutes, he was ready for the onslaught. He questioned a number of points made in the thesis. I defended my conclusions but secretly felt that the points which he made were valid to a certain extent. I left the hall filled with admiration for his quick reactions.

N. Benjamin*

After I joined the Institute I found that my first impression was to be my last impression also. In those days one or two staff seminars were held every month. But Dandekar was not satisfied with the frequency. He wanted them to be held every week. He often said that with so many people sitting round, it brought them no credit if a weekly staff seminar could not be held.

Papers for the staff seminars were circulated ten to fifteen days in advance. It gave enough time to read them and to react on them. Some staff members circulated written comments. The paper contributor did not take more than ten minutes to introduce the paper in which he/she highlighted the main points made in it and also the issues on which the comments would be more useful while finalizing the paper. The discussion was pointed and criticisms could be severe. Once a writer mentioned while introducing the paper that he would like to correct some minor mistakes which had crept in it. Dandekar's comment was instantaneous, "And what about the major mistakes?" On another occasion two writers contributed a joint paper. Dandekar commented that he would be harsh in his criticism. They said that they would not mind that. Dandekar clarified that

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even if they minded, he would express his frank views. Thus, when the papers were presented for discussion, there was practically a rain of fire and brimstone. But Dandekar was not necessarily critical of the papers. There were occasions when he appreciated them. When I presented a comment as a full-length paper and severely criticised the paper earlier published by a colleague, the staff members eagerly awaited the reaction of Dandekar. But he concluded the seminar by saying that I had shown interest in the work of a colleague which was better than showing indifference which was more common.

The most heated staff seminar was the one in which Dandekar presented his paper for discussion. It was his first and the last stint with Marxian Economics. A dozen staff members circulated their comments. Many others made severe criticisms in the course of the discussions. He heard them patiently and replied to them. He was fair to each one of them beyond doubt. It was indeed a rare academic feast. Subsequently, the paper as well as the comments were published in a special issue of the *Artha Vijnana*.

The seminar hall as well as the Kale Hall witnessed several seminars and talks in which outsiders came and participated. Some of the names which immediately come to my mind are Leontief, Amartya Sen and Joan Robinson who became Noble laureates in course of time. An international refresher course in Economics was also held in which Don Patkinson and others of world reputation were the resource persons.

Many of the facilities which the staff members take for granted today were nonexistent in the early 1960s. Although computers had reached Bombay, they had not reached Pune. Those staff members who wished to use them had to go there. The Institute had Facit calculating machines both manual and electrical. There were also punch card machines and naturally a large number of punch card operators were employed. Now all these machines have become scrap.

Similarly, the Institute did not have its own housing complex. It had taken on rent some flats. Some staff members lived in the hostel of the Servants of India Society. Then the Boys' Hostel was constructed and the staff members occupied rooms there. The staff quarters came thereafter. There were only "A" and "B" Buildings. Then "C" and "D" Buildings were constructed. This explains why the existing "C" Building is located between "A" and "B" Buildings. Once these buildings were ready, the staff members shifted there. Flats were allotted practically on demand and there was hardly any waiting period. Hence, when a grantor expressed its willingness make grants for the construction of additional quarters, Dandekar said "No, thank you" for the simple reason that they were not at all required and their construction would have entailed waste of public money.

Time management in the Institute was done well. All the staff members including the Director stood in the queue to sign the attendance register. When some staff members persisted in coming late in spite of warnings, they were penalized and their leave was cut. They saw the justification for the action and no protests were made.

Whenever a staff seminar was held, it started in time and also ended in time. The tea-break was from 9.00 to 9.30 am and the Institute closed at 11.30 am on Saturdays. The seminar, or for that matter talks by the visitors, ended at 9.00 am or 11.30 am whenever they were held on Saturdays. On week days the Institute closed at 5.30. Therefore, the seminars and talks ended five minutes before that. Staff meetings also maintained the deadline. Working outside the working hours brought no extra credit because the normal working hours were considered to be sufficient for the normal work load. In fact, it was like this ever since the establishment of the Institute in 1934.

After leaving the Institute in 1987, I joined the Tata Group and I found that a similar culture prevailed there too. Working outside the office hours brought discredit rather than credit since the employee was treated as being slow in completing the allotted work on the one hand and for causing avoidable expenditure to the employer by way of extended use of the infrastructure.

The decades also witnessed one of the saddest days in the history of the Institute. D.R.Gadgil resigned as the Deputy Chairman of the Planning Commission together with some other members of the Commission. He decided to leave Delhi immediately for Pune against medical advice. A doctor accompanied him in the train. As the train was nearing Palghar, he returned from the toilet and the doctor noticed sweat on his face. It was the fatal heart attack. The doctor tried his best to cope with the emergency. But it was all in vain and Gadgil passed away before Palghar arrived. The news reached the Institute as a stunning blow. The staff was looking forward to welcome him back. A room had been cleaned and prepared for him in the Institute. But all this ended in disappointment. On the following day in the morning the staff gathered in full strength. It was not to welcome Gadgil. His corpse arrived in a truck. The staff members paid their last respects to him. After a while it left for cremation. With this ended the first phase of the history of the Institute.

I may conclude this brief account by quoting from a poem in Hindi,

> Karvan guzur gaya Gubar dekhte rahe!

The Institution is steadily moving towards achieving the goal of a National Centre of Excellence – The National Assessment and Accreditation Council Peer Team, 2003.

Glorious Life in GIPE

I had the privilege of working in GIPE as Lecturer during the period from October 1962 to November 1970. In this piece, I wish to present a few bits of my memories relating to this period.

GIPE was in its prime during this period. The founder of the Institute, Prof. D. R. Gadgil, began working in one room in 1930. By about 1962, it had a huge staff, some of whom had international stature, an enviable library with large collections, IBM 360 computer in Bombay on a sharing basis, three office buildings, beautiful garden, staff quarters, guest house, hostel, etc and was well known through contributions in academic journals and publications. Grants from various quarters in the country, and from international organizations had flown in. Indeed the institute was nationally sought after and internationally acclaimed for its high academic standards. For all this, devotion and continued commitment of the Trinity -Prof. D. R. Gadgil, Prof. N. V. Sovani and Prof. V. M. Dandekar - were mainly responsible and I looked at them with great reverence and awe.

I began my work by assisting Dr. N. Rath in the study to assess impact of US assistance under PL 480 on Indian economy. Besides doing literature survey, massive data were collected, and I was churning out regressions with the use of Facit electrical calculator. It was a pleasure for me to meet him with results, and listen to his brilliant analysis and loud thinking in a confident and clear voice. His guidance always encouraged me to look at some more options. He was polite, friendly and unassuming. This project was completed by the middle of 1964 and later published.

Raghunath K. Koti*

After this project, I joined Prof. P. N. Mathur. He had returned from Harvard in 1961, after two and a half years of work under Prof W. W. Leontief and had adopted Input Output Economics as his main pursuit. I picked up IO Economics, moved on to construct a capital coefficients matrix, carried out a study of industrial capacity utilisation, and worked with him till he left the institute in 1970.

Prof. Mathur had a large number of Ph.D. students, a limited staff and many associates. He had a knack of enabling each person to develop from his position of strength. This enabled him to multiply the resources available with each person, through the technique of weekly workshops. All the members were expected to be present and problems of any member ranging from data to methodology and thorough results were discussed. The mood used to be informal, cooperative and constructive, duly moderated by Prof. Mathur in such a way that it was productive and lively. It was an admirable experience for all of us. It also fostered fraternity feelings. After the workshop, interactions continued with each other. Venkatramaiah, and I were the only lecturers in the group,

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and between two of us, Venkatramaiah had a large share in these interactions.

Prof. Mathur had conceived of several studies in input output framework with 1963 as base. While Venkatramaiah undertook the massive task of constructing IO flows table, I began work on capital coefficients based on company balance sheet data. Other members of the group were involved in various sectoral, industry and other studies. A stage came when Prof. Mathur thought that an all-India IO Seminar could be organized in the institute to discuss not only our papers but also papers to be received from others outside the institute. Our enthusiasm rose when he told us that

Prof. Leontief would preside over week-long deliberations of the Seminar. The Input Output Seminar was held towards the end of August 1965 and was well attended by experts from all parts of India with several stalwarts like Prof. T. N. Srinivasan taking active part in the seminar. Deliberations were enlightening, with Leontief encouraging every author.

Later, Prof. Mathur asked me to study capacity utilization in industries in 1966-67. A preliminary study was completed. Subsequently, a detailed study was undertaken for the year 1967-68, based on survey of industrial units. The study was completed expeditiously, with Latika Argade's able assistance, and the same was published as a mimeograph. It had good circulation and when a copy reached Economic Times, it published the entire mimeograph.

As regards my seminar paper on capital coefficients, it was heartening for me to note later that my paper was extensively used by World Bank officials for revising upwards their estimates of capital output ratios for India.

The institute had a practice of discussing papers in its weekly seminars. Since the seminars were internal and intended to examine the paper from all angles, comments were quite varied and delivered with varied skills of communication. Comments were made not only on important aspects of paper, but also on matters like relevance of presenting figures upto two places of decimal, propriety of title, need to add footnote, etc. Discussions were lively. Obviously, some comments had side effects. Undoubtedly, some seniors used to mitigate the side effects, and offer constructive suggestions.

However, authors would anxiously wait for Prof. Dandekar's comments, as his wit could make or smash the paper. He was sharp, highly articulated, very witty, had a special analytical insight and offered valuable suggestions. On the whole, despite trivial side effects, weekly seminar was a place where quality of paper got enhanced. It was a very good training ground.

The institute always had the tradition of learning at all levels. As part of training, courses on research methodology were being conducted. During summers, the institute conducted refresher courses to enable some college teachers in economics to acquire insight into various quantitative techniques. I used to teach statistical analysis. That was also the period when planning models, activity analysis, linear programming techniques, etc were doing their rounds in economic analysis. In about 1967, celebrities like Sukhamoy Chakraborty, Amartya Sen, gave lectures in the institute over a week, giving an opportunity for the wider academic community to participate in the new techniques. The institute was in the forefront in hosting large number lectures and seminars by eminent persons and its atmosphere was always charged with intellectual activities. Some of us were teaching in Pune University. I taught mathematical economics.

Periodically, members of staff were being sent abroad for further study. A. P. Kulkarni was sent to Germany in March 1965, I was sent to Harvard, U.S.A., to study under Prof Leontief in January 1969, and Venkatramaiah to Cambridge, U.K. to study under Prof Richard Stone in September 1969.

My contact with Prof Gadgil was limited. He was a towering personality, dignity personified, and at the same time affable. I remember the annual Sankrant day of "tilgul ghya, goad bola" when he would go to every person, peon to professor, and offer the small "laddu" with warmth and personal touch that lasted very long for some of us. Whenever I think of Prof. Sovani, I get a picture of his serene face with a book in his hand sitting in his room with door open or discussing with some one in a soft voice. In seminars, he was gentle, offered valuable comments and provided references that helped authors.

I always admired Registrar D. P. Apte who provided an excellent interface between management and staff and was helpful to the staff. He would listen to staff with rapt attention, talk softly, give hints and take steps timely and calmly.

The institute was not "all work and no play". In late 1963, A. P. Kulkarni and a few others decided upon a medium

through which humour could be "disseminated" across the institute. He brought out a 4-page cyclostyled in-house journal entitled PEGI. It was filled with humorous articles, pun, satire and cartoons, presented by some staff members and the same was circulated. Even the author's names were twisted, like Apak, Pasre, Toki etc. I remember a satirical piece on Dandekar's huge car in which many of us were given lift. PEGI was well received even by victims of satire. PEGI made its special appearance through 3 or 4 issues and, after spreading enough humour, it retired, while A.P.Kulkarni left for Germany.

In one of the tea sessions in 1964, we hit upon the idea of having a Social Gathering. A. P. Kulkarni and I appointed ourselves as General Secretaries. Many persons enthusiastically participated. There were several outdoor games including cricket (played in BMC College of Commerce ground), kabaddi, several indoor games including chess, carroms, field events, etc and the institute wore a festive look during those days. Kabaddi game was spectacular, with Dandekar in his shorts playing as a team member.

One evening was devoted for variety entertainment programmes held in Kale Memorial Hall with full attendance. Baldota and his group enacted one Marathi drama. Dandekar and party sang bhajans. Music, mimicry, songs etc were interspersed. The three hour programme was memorable. Subsequently, there were similar entertainment programmes and dramas presented periodically by staff members including Mrs Pore. Sumati and others.

On some other occasion in the evening, dinner was arranged. The area

behind the main building was well lit and decorated for this purpose. Some of us were in fancy dresses. Before dinner, there was a programme of "do-as-bid" and seniors were targeted for this. Prof. Mathur displayed his skill of making chapattis, Prof. Dandekar raised and tied his pyjama, and presented a few amazing steps of Bharata Natyam, and so on. It was very enjoyable. Dinner was laid out and the entire ambience was very informal and pleasant. Just before starting to eat came the clear and loud voice from Dandekar "Om Sahana Vavatu, Sahanau Bhunaktu, ... " and many voices joined him in chorus till "om shanti, shanti, shanti hi". While eating, it was for the persons sitting next to foreigners to explain to them the divine significance of this shloka.

On another occasion, participants from all parts of India had attended a seminar. When the seminar concluded in the evening, that evening happened to be the eve of New Year Day. Prof. Dandekar spoke on the occasion. At the end, he said "wish you all Happy New Year" and I specially request my Bengali friends not to say "same to you". All burst into laughter. This period also witnessed changes at top level. It began with Gadgil retiring in early 1966. Sovani left for Geneva. Dandekar became Director. After about two and a half years, towards the end of 1968, Dandekar resigned the post of Director and continued as professor. Prof. Mathur became Director. Once again, Dandekar took over as Director in the later half of 1970. Prof. Mathur left the institute. The workshop got dismantled.

Sometime after Dandekar became Director in 1970, he asked me, "there is a study which requires your involvement for at least a year. With whatever has happened, or has not happened recently in the institute, what is your view?" I told him that I was trying and I wished to leave.

Looking back, I feel indebted to the institute. It was a lively and an excellent place, encouraged academic freedom, provided and atmosphere conducive for research, and had a galaxy of stalwarts approachable anytime. I am proud to have worked in this prestigious institute and cherish sweet memories of my institute and its people.

Many in this country must be aware that there exists in Poona an institution which is called the Gokhale Institute of Politics and Economics, working under the direction of D. R. Gadgil – B. R. Ambedkar, leader of the Indian Nationalist Movement and an Architect of the Constitution of India, Kale Memorial Lecture, 1939.

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The Institute with a Human Face

It was in 1959 that I joined the Gokhale Institute of Politics and Economics as a Ford Foundation Fellow. After getting through the post-graduate degree in Economics, I had taken a decision not to take up any job till I acquire the Doctorate degree. The Fellowship was very helpful to me to fulfill my ambition. I was getting Rs. 150/- per month, which was raised to Rs. 200/- after six months. At to-day's price level, the amount looks small indeed, however, those were the days when I could manage my 'lodging and boarding expenses' within a hundred rupees!

The topic of my dissertation was 'Agricultural Income Taxation in India'. Dr. T.M.Joshi was my guide. Rooms were allotted to the Ph.D. students in the adjoining building. I along with A.T. Akolkar and A.P.Kulkarni, occupied one of them. We used to come daily to the Institute at 9 a.m. and leave the premises at 5.30 in the evening. Needless to say the library facilities were excellent and M.V.Sovani, the Librarian, and his colleagues were extremely friendly with the staff and the students. I remember, I wanted to go through the Parliamentary debates of 1860 and I found to my pleasant surprise, the volumes related to that period were well maintained in the ground floor of the Library building.

The atmosphere in the Institute was very cordial. All the members of the staff – from the Joint Director to the Research

Assistants and investigators – were treated equally. The service rules for all of them were the same. The Muster was kept on the table, near the entrance of the main building. All the members of the staff, including the Director, Professor D.R.Gadgil, used to stand in a queue to sign the muster. It was never taken to the Director's cabin. Gadgil was my teacher when I was studying for M.A. in the University of Poona. He taught me 'Organisation of Production and Labour' and 'Agricultural Economics' for junior and senior years respectively. After I passed M.A., I was appointed as a tutor in Economics by the University for the postgraduate students. Initially, I was a little hesitant to approach him as his personality was somewhat awe-inspiring. However, later on, I found him extremely suave and soft-spoken. Tall, erect, immaculately dressed in the traditional Maharashtrian dhoti, long coat and a black cap, Professor Gadgil was a picture of grace. When I joined the Gokhale Institute, I got an opportunity to observe the functioning of the Institute closely. The Institute attracted both national and international scholars for a variety of programmes and projects, but the focus of attention at the centre of all activities was the concern for the upliftment of the rural population. The trials and tribulations of the rural poor echoed in the corridors of the Institute. At that time, Professor Gadgil's experiment of replacing the well established sugar magnates in the

Pravaranagar area by the co-operative sugar factory owned by the farmers met with the phenomenal success. Several meetings were being organised in the Director's cabin where the Director himself used to discuss the various problems with almost illiterate but very dynamic group of farmers. Professor Gadgil would explain to them the complex Economics of Co-operation in very lucid and simple Marathi language.

Professor Gadgil was to complete 60 years on 10th April 1961. The Felicitation Committee was formed under the Chairmanship of Professor V. M. Dandekar, the Joint-Director of the Institute. The variety entertainment programme was arranged in the evening in which the staff and the students took part. I had written the one-Act play in Marathi: 'R.A. goes to a Village'. Right from its inception, the Institute had undertaken a number of village surveys. It was the Institute's policy to employ the rural folks, who passed the matriculation, as the Research Assistants. After completing the training programme in the Institute, those R.A.s were sent to the villages to fill the questionnaires. Even though they were well-acquainted with the rural life, they had to undergo the trials and the tribulations during their stay in the villages. They used to narrate to us their experiences, whenever they came to the Institute for a short-break. The play 'R.A. goes to a village' was the humourous account of their grievances. Avinash Akolkar enacted the role of R.A. and the R.A.'s were the respondents in the play. The audience, including Professor Gadgil, enjoyed the show thoroughly.

The entertainment programme was followed by the sumptuous feast. The felicitation committee was generous enough to serve five sweet items which made the dinner unforgettable for all, especially for the Punekars!

The Research Fellows were expected to be either in their rooms or in the Library between 11.30 a.m. to 5.30 p.m., with tea-break from 3.00 to 3.30. All of us used to come down in the open space of the rare building to take tea. Groups were formed and a tray was served to each group, consisting of five members. Four other members of our tea-club were Prof. B.D.Kanetkar, Mrs. Sudha Kaldate and Soudamini Sardar. Our group remained intact till June 1962. That time, I remember, the Australian Cricket Team was on the Indian tour to play the Test Matches, (No country played ODI's those days). T.V. was non-existent. The only source of information about the latest cricket score was the commentary on the All India Radio. The only radio set on the campus was in the Servants of India Society's office. On the final day, the Test had reached the climax and India was on the verge of victory. All three of us – myself, Akolkar and A.P.Kulkarni could not concentrate on our research. We left our room at 12.00 noon and, with the permission of Shri Ambekar of the Servants of India Society, sat in its office, listening to the running commentary on the Radio. At 2.30, the match was over. We came out of the office in a cheerful mood, as the match was won by India. Suddenly, we noticed that Professor Dandekar was waiting for us.

'Hi folks! So, what is the result? What is the final score?' He asked. We told him all the details.

'Oh! Now that the match is over at two-thirty, what are you going to do till fivethirty?' He enquired, in his sarcastic tone. All three of us rushed back to our room without uttering a single word!

The Panshet Dam disaster occurred in July 1961. The Institute asked its entire staff to visit the flood-affected areas of Pune city. The detailed information was collected by all of us which was helpful in drawing a plan for the rehabilitation of the affected people.

Meanwhile, I visited Patna, the capital of Bihar State, to undertake the case study of the Bihar

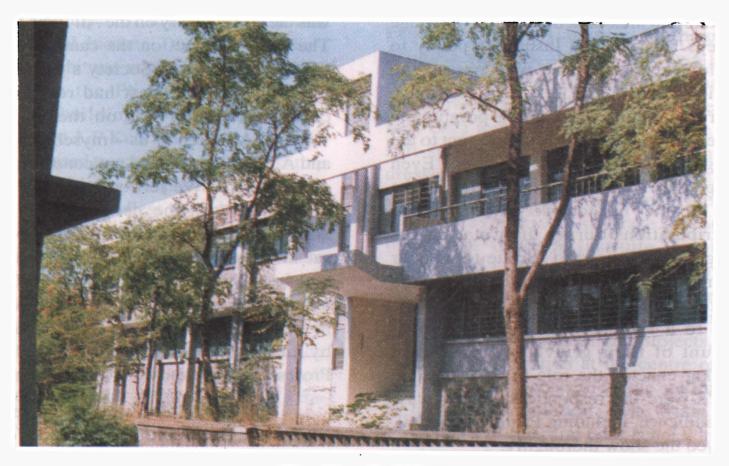
state in respect of agricultural income taxation. I stayed there for 40 days.

The Institute had informed the

government about my requirements.

The authorities allotted me a special cabin in the Secretariate. They offered me whatever facilities I needed. I had an access to all the files concerning my project. I realised that all the people there, occupying high posts, had a great respect for Professor Gadgil and the Institute. This facilitated my work considerably.

I submitted my thesis to the University on the 15th of June 1962 and left the Institute to take up lecturer's job in Goa. Every parting in life is sad, however, reminiscences of research fellowship, today, give me immense pleasure. Those were the golden days in my life!



The M A Building

Innovative Teaching and Gokhale Institute

V.S.Patankar*

I joined Gokhale Institute as a Research Student in June 1956 soon after completing my M.A. Economics Course at Pune University. In those days we used to have our post-graduate lectures at the University campus, while the weekly tutorial classes were arranged at the Institute. The Institute had already attained by then international recognition as a premier centre of teaching and research in Economics. The more ambitious and perhaps deserving amongst us were eagerly looking forward to opportunities for participation in the activities of the Institute leading to their individual career advancement. As it turned out, I was lucky enough to realise my dream.

An innovative research training programme commenced at the Institute in 1955 which aimed at developing requisite skills amongst students in pursuit of a career in the field of Social Science Research. Accordingly five students were selected each year on an all India basis. I belonged to the 1956 batch. In our batch two were freshers while the remaining three had some teaching/research experience to their credit. Initially we were exposed to a rigorous but well designed training programme of the year duration at the end of which we had to appear for a formal test before embarking upon our individual research activity. The main areas covered were social science

research methodology and related disciplines such as economic development, rural sociology and mathematical and statistical prerequisites. Apart from lectures by the Institute staff and guest speakers, practical in coding and classification, weekly seminars and library assignments, were the major components of the training course.

We were singularly fortunate in having Prof. D. R. Gadgil to deliver lectures in social science research methods. their evolution and applications to the real life situations. As always, these lectures were masterly expositions of themes pertaining to basics of research such as methods of logical testing reasoning, hypothesis, research designs and methods of gathering and analysing data among others. Professor N. V. Sovani dealt with issues in social and economic development in developed. and developing countries in his lectures and often provided useful insights into research areas against their setting. Professor D'Souza gave lectures in rural sociology with special reference to Indian rural social structure, while the teaching assignment in Mathematics and Statistics was handled by Professor P. N. Mathur who helped us develop our acquaintance with the analytical tools in the relevant areas.

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In keeping with the long and distinguished tradition of the empirical studies at the Institute (mainly in the field of demography and rural economics) it was felt that 'I should take up a suitable theme involving field investigation but from a different area i.e. Urban Economics. Choice of Urban theme was guided, apart from personal convenience and liking, by a variety of considerations. Prof. Sovani himself had made significant contri-bution to the literature on urbanisation and urban development in the early 50s. It was also felt that strengthening of the pace of develop-mental effort through industrilisation was bound to lead to more rapid urban growth throwing new challenges for both policy makers and researchers. Transport appeared to be one of them which at once stimulated and hindered expansion of urban areas. In view of all these I decided to focus upon some specific aspects of urban transportation as the main theme of my study.

The Institute offered us excellent academic environment. It had already built a sound tradition of research and scholarship

over a quarter century of its existence. It could boast of a devoted band of research workers with proven merit in their respective areas of study and specialization. We used to have ample opportunities for interaction with our teachers, senior colleagues and fellow-researchers on matters pertaining to our individual assignments. We worked under an atmosphere of freedom and self-imposed discipline. As if to crown perhaps all these features, we had rich library resources managed efficiently for the benefit of the readers. All these made life at the Institute enormously pleasurable as well as instructive.

Of late, there has been a lot of discussion about the fixation of eligibility criteria for those pursuing studies leading to research degrees in different disciplines. While the merits or otherwise of the suggestions offered could be debated the fact stands that the Institute, some five decades back had shown the way as to what needs to be done in order to improve quality of research in the field of social sciences. What applies to social research obviously does so to research in any other field.

Rao Bahadur Kale was a great liberal and progressive in his days; and there cannot be a more fitting tribute to his memory than [the] institute itself which, since its very modest beginnings in the early thirties, has now grown to become one of the country's premier research centre - S. L. Kirloskar, industrialist, 1967. My Formative Years at Gokhale Institute

Sumati Kulkarni*

My entry into Gokhale Institute was a planned one but my entry into the field of Demography was a sheer coincidence. I had read Prof. Gadgil's articles on Samyukta Maharashtra during my early college days and also his papers later while studying for B.A. and M.A. in Economics. Before my M.A. examinations, I had come from Sangli to Pune and spent hours reading in the Institute library. That was when I decided that finally I would be coming to the institute to pursue my career in Economics. After getting an M.A. degree, I worked for one year in a small town as a lecturer in a college, attached to Shivaji University. There I heard that Prof. Sohoni of Gokhale Institute was to organize a summer course in Mathematical Economics for Poona University college teachers. I approached him and, as a special case, he allowed me to attend it. Immediately after that I applied for research assistantship in the institute and got selected. In the interview, Prof. V.M.Dandekar asked me whether I had any queries to the committee. When I asked whether I would know the result of the interview within 2-3 days, he was slightly amused and said in Marathi "Evadhi kay ghai aahe? (What is the big hurry?)." I said that I had to communicate my acceptance or otherwise to the Demographic Training and Research Centre (D.T.R.C.) Bombay where I was selected for a course leading to Ph.D. programme, but I would prefer to come to Pune. That one sentence decided my future. When I joined Gokhale Institute in August 1965, I was asked to work in the Demography section which was headed by Prof. Kumudini Dandekar. I worked in the institute upto June1971, when I joined the D.T.R.C., now known as the International Institute for Population Sciences (I.I.P.S.) Mumbai as a lecturer.

When I joined the Gokhale Institute, it was at its peak. Prof. Gadgil was the Director. Prof. Sohoni was yet to go to Geneva. After a few months, Prof. Dandekar took over as the Director. In the Demography section, the first job assigned to me was the coding of data collected for the project 'Resurvey of Six Villages in Satara District'. Initially I had very romantic ideas about research. So I found the work of coding the data from hundreds of schedules, rather dry but soon I learnt all the steps of data processing and started enjoying the whole process - cleaning the data, consistency checks, tabulation (at that time it was done on a sorter machine), especially interpreting the tables, drawing meaningful conclusions and finally putting them across clearly but cautiously. Later on at I.I.P.S., when I conducted surveys and finally became the All India Co-ordinator of the famous National Family Health Survey-2, I often remembered these early apprenticeship days which equipped me with the essential basic skills.

Side by side, to get the basic knowledge of Demography, as suggested by Prof. Mrs. Dandekar, I started reading Royal

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Commission Report as well as the books by Barclay, Wolfenden, Cox Kingsley Davis and Coale S. Hoover.

In the beginning itself, I had one good experience which I always cherish. In November 1965 i.e. within 4 months after I joined, an All India Seminar on Sterilization Programme was to be held at the institute. Mrs. Dandekar suggested a topic and asked me to write a paper for the seminar. I had never attended any seminar before that. So the first seminar that I attended was the seminar where I presented a paper. I could also respond to most of the points raised by other participants about my paper. Not only was Mrs. Dandekar happy about it but one day even Prof. Gadgil called me to his office and expressed his appreciation. I felt greatly encouraged. Later on one of the senior faculty members from I.I.P.S., who had come to attend that seminar, said to me "you were looking so 'simple' at that time that we never thought that you had come there to present a paper". Yes, I was rather unsophisticated by Pune-Mumbai standards and I had yet to learn many things, which I learnt during my Gokhale Institute days.

During 1966-67, I completed one year training programme of the Institute for research fellows. Prof. Gadgil taught us Research Methodology. I tried to take down detailed notes of his lectures but half of his teaching went above our heads. I always felt that it would have been more beneficial if we had this rare privilege of attending his lectures, after getting some practical research experience.

In fact, the in-house seminars on Saturdays provided a good opportunity to have a practical training in research methodology. To be frank, the atmosphere in the seminar hall was hardly conducive for juniors to open up. Juniors and even some seniors were scared of asking questions, though Profs. Mathur, Kamat, Namjoshi and Amalendu Guha were quite encouraging and appreciative. No doubt, Prof. V.M. Dandekar's aggressive style was quite intimidating. Yet, one could learn a lot from his rigorous logical thinking, the way he got to the core of any problem and the flaws that he pointed out even in the apparently sophisticated analysis, by using just robust common sense. It certainly helped one to develop analytical ability. The emphasis was always on conceptual clarity. After the advent of computers, it has been easier and common to use the techniques of multivariate analysis. Today, when I see many papers where regression analysis is applied without bothering about the logic of including different variables in the regression and their relationship with each other, I always remember how Prof. Mrs. Dandekar or Prof. Rath criticized any blind mechanical application of statistical techniques to the data. Though this might appear obvious to many, it is essential to place due emphasis on these things in the training at the early stages of a research career.

In Saturday seminars, one also got a good exposure to a variety of topics related to current issues in Economics. Later on, at IIPS, for 30 years I taught the course on the inter-relationship between population and development and initially for many years I was the only faculty member with a background in Economics. I always feel that the exposure and the overall perspective which I got during my days at Gokhale Institute was a great help to me in this respect.

Our Demography section consisted

of only ladies. Whenever any guests came, during introduction, the Director used to say jokingly, "Our Demography section is manned by women". Prof. Mrs. Dandekar was a hard taskmaster and we were expected to maintain strict discipline in the section. She believed in keeping a certain distance from the staff. Looking at the difference in our age and the stature perhaps it was natural. Besides, coming from a small town like Sangli, my confidence was never very high. So there used to be hardly any discussion as such with her. However, later on, when I was working at I.I.P.S., on some occasions, we travelled together in India and abroad to attend seminars and conferences and even shared hotel rooms. Then we had quite a free and frank discussion on many topics.

By and large, the atmosphere in the institute was intellectually stimulating but serious. I also feel I have inherited from the Institute certain important basic values. The institute's emphasis on simplicity, austerity and a kind of egalitarianism meant a lot to me. There can be a difference of opinion as to whether there should be a muster for researchers. But I always remember that seniors including the Director used to stand in the queue along with us to sign it. Once a new faculty member asked one of the peons to bring a glass of water. The peon had the courage to point out the 'matka' (earthen pot) kept in the corridor and tell him that even the Director takes it himself from that 'matka'. Mrs. Dandekar used to tell us one funny incident with great pride. There was a rule that nobody should ask the peons to carry the books from the library to his /her room. Once a peon saw Mrs. Dandekar getting some books issued. Since it was quite a load, he, without her knowledge, was taking them to her room. On the way Prof. V.M. Dandekar saw him and asked whose books he was carrying. He asked the peon to carry them back to the library and phoned Mrs. Dandekar to say that she should go to the library to bring them back.

Not having fans in the rooms was also a part of this austerity. It was based on the assumption that Poona climate is very cool throughout the year. It was difficult to agree with this assumption even in those days.

After 1968, there was a great turmoil in the institute, following the change in the Directorship. We were witness to that very unfortunate period in the history of the institute. Looking back now I feel even that whole process taught me a lot about human beings, about institutions and about the world in general.

During 1969-70, Prof. Mrs. Dandekar was away on a U.N. assignment. Prof. Mathur, the then Director encouraged me to take a few classes for the Pre- Ph.D. Programme. Most of the students in that batch were my friends from the hostel. Even now Amitabh Kundu jokingly introduces me to others as his teacher. Next year (1970-71), Prof. Mathur gave me an opportunity to teach a paper on 'Demography' for M.A. (Economics) class in the Poona University, which was a big boost to my confidence. Nothing much, however, was happening on the research front as Mrs. Dandekar was away. Besides, we research assistants were generally not given authorship or any credit in the project reports on which we worked. So by that time, I had started thinking that I badly needed a change for better career prospects. It was Prof. Guha who came to our hostel one fine morning, he gave

me the advertisement of I.I.P.S. and told me to apply. When I was interviewed in the Health Ministry office at Delhi for the lecturer's post, Dr. Agarwal, the then Director of T.I.P.S., after asking a few questions said. " you have worked in Gokhale Institute for five years, but you do not have any formal training in Demography. I don't think you have knowledge of technical Demography." I gathered all my courage and said "If you ask me questions on technical Demography, I am confident I will be able to answer." The committee asked me questions on technical topics including life tables. Obviously my answers must have satisfied the committee because they not only selected me but placed me, in terms of seniority, above the other selected candidates including the internal candidates who had a formal training.

I met some of my best friends at Gokhale institute. The bond was so strong that even today, after nearly three and half decades, I continue to have a close friendship with some of them. I still recollect our lively discussions and heated arguments in the tea club (often Prof. Kshitimohan Mukherji used to join us there) as well as in the Indian Coffee house and later in Vaishali. Talking to Mrs. Pore on various topics also used to be quite a pleasant experience. The Annual Social where we staged 'Sare Kase Shant Shant" a hilarious Marathi one-act-play by Pu. La. Deshpande is another event which I shall never forget. Later on whenever I used to meet many of my friends and contemporaries - Dr. Radhdkrishna and Dr. Atul Sharma at I.C.S.S.R. meetings, Dr. Amitabh Kundu at JNU. Drs. Michael Vlassoff and Carol in the seminars abroad. or even now when I meet Mr. Koti in Mumbai and Dr. Vidya Pitre, Dr. Sanjeevani Muley, Mrs. Nikam and Dr. Ashok Mitra at Pune we are all quite nostalgic about those days, despite the disagreement on many points.

Today, my feelings about the institute are like those of a person who had a very strict parenting and who realizes that the basic values and the solid foundation given by the strict parenting made it a lot easier to face the world. Still I sometimes wonder whether a little more liberal atmosphere, a little more freedom and trust would have made the early days of struggle not only more pleasant but also more productive.

...An Institution which has played and continues to play a vital role in shaping economic thought and policy in the country. – I. G. Patel, Economist and Former Governor, Reserve Bank of India, 1983.

An Eventful and Memorable Journey Through Four Decades

A. K. Mitra*

My insight into the realm of economics towards building up a sound logical and analytical approach to economic issues was initiated when I joined Gokhale Institute of Politics and Economics as a Junior Research Fellow in the year 1966. Since then it had been an exciting and eventful journey for over three decades culminating with my superannuation in November 2000. During that period, I have had the opportunity of working in the Institute, firstly, as a research student (fellow) leading to Ph.D. degree and subsequently as a member of research faculty in various capacities. Conducive academic environment of the institute and encouragement from the senior faculty members provided many opportunities for the willing and desirous young research scholars to blossom in their respective areas of interest.

In sixties when I joined the Institute as a junior research fellow, the Institute used to run a pre-Ph.D.training programme of one year duration and only those who successfully completed the programme were allowed to register for the Ph.D. programme. The programme which included courses on economic analysis (micro and macro), quantitative methods, statistics, and research methodology was very rigorous and demanding. We were fortunate to have been taught and trained by stalwarts like Prof.D.R.Gadgil,Prof.V.M.Dandekar, P.N.Mathur and other eminent senior faculty like Prof.Nilkantha Rath, Prof.A.R.Kamath, and Prof.Kumudini Dandekar. At the end of the one-year training programme every scholar had to present a research proposal on which the scholar intended to work before the faculty in a student's seminar. In this way by the time, a research fellow was ready to plunge into his/her research work he/ she was well prepared to undertake the task. Those days the Institute was full of academic activities for the young scholars be it class room teachings, tutorials, weekly tests, seminars, workshops, and group discussions. At any point of time there used to be at least 15 to 20 research scholars in the Institute engaged at various stages of work. Those formative years (1966-72) were the most exciting fruitful years for me at the Institute, especially as I had the good fortune of having the formidable Prof.V.M.Dandekar as my research guide.

Unfortunately, by mid seventies the pre-Ph.D. training programme lost its momentum, was discontinued, and was later replaced by M.Phil. programme in early eighties but, even that programme was discontinued later due to lack of interest among the young aspiring researchers and to an extent among the research /teaching faculty of the Institute. In my opinion, it is indeed a loss to the young and aspiring research scholars (fellows) entering into the academics at the Gokhale Institute.

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Men's Hostel for the students (research fellows) came up in the staff quarter campus in 1967 and I was among the first proud occupants of that hostel. My days in the hostel from 1967 to 1971 as a research fellow and subsequently in the staff quarters as faculty from 1972 to 1983 were the most enjoyable and memorable days of my life. The kind of camaraderie we enjoyed among ourselves as colleagues in the staff quarter campus and the kind of cordial and intimate relationship the family members of the faculty enjoyed are worth remembering.

Needless to say, the Institute's library has been from the very early days one of the most outstanding libraries in India in social sciences and continues to be so. It is heartening to know that in the past few years the institute's library has been able to computerize most of its operations and functions.

The other infrastructures in the Institute (like hand and electric calculators, punching and sorting machines, etc.) for data processing appeared to be adequate until the seventies. The Institute was using IBM 1620 mainframe machine of the University of Mumbai located at Jamnalal Bajaj Institute in Mumbai for data processing and programming. However, the Institute was very slow in responding to widespread changes that were sweeping the premier social science institutes in data processing and computational facilities in early eighties even though Gokhale Institute was considered as the only institute primarily engaged in empirical research. It took almost 10 years to bring the Institute's data processing and computational facilities to a reasonable level with the introduction of PCs; the

connectivity with other national and international research centers though still remains to be improved.

Similarly, in the field of research also, the changes were very gradual and slow when the situation in eighties demanded more aggressive approach and rapid changes in the coverage and expansion of research studies in diversified areas. Gokhale Institute was pioneer in developing methodologies for village studies, farm management surveys, district level planning and benefit cost studies of publicly funded projects, specially major irrigation works, and also contributed significantly in the First All India Rural Credit Survey of Reserve Bank of India. In the decades of fifties. sixties and seventies, the Institute's contribution in research studies on rural and agricultural economy under the able leadership and guidance of Prof. D. R. Gadgil and Prof. V. M. Dandekar was remarkable. A number of studies of methodological and analytical nature relating to irrigation development and management in water scarce region of India was carried out in the institute from early eighties to early nineties. I was associated with many of those studies along with Prof. Dandekar and Prof. Rath. Those studies made significant contribution towards policy formulation for water distribution and efficient manage-ment and utilization of scarce water for irrigation. In eighties and nineties however, the Institute missed many opportunities in extending research activities in many newer areas and in undertaking joint and collaborative studies with institutes/ universities in India and abroad.

We understand now that things are changing for the better at the Institute. New people with fresh ideas, updated knowledge on recent developments, new techniques, and changed approach, suitable to current situation, are at the helm to bring about the required change befitting the Institute of such repute.

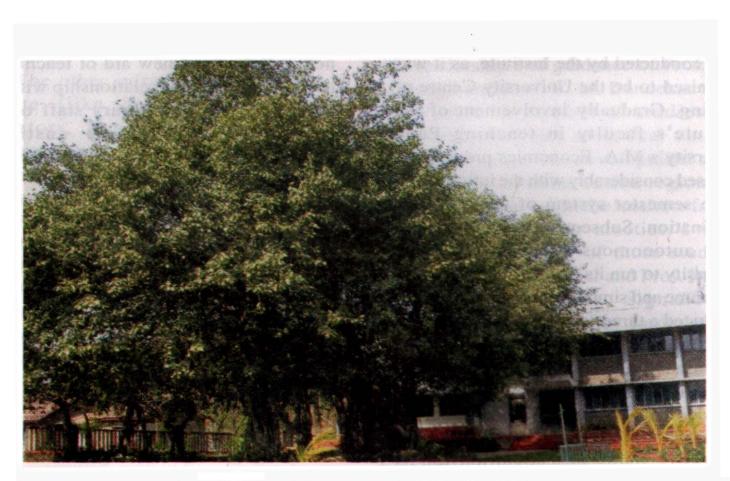
The Institute's position primarily as teaching and/or research organization came in for a great deal of debate in mid-seventies. That was primarily because for the first time a three-year undergraduate course (B.Sc. in Economics), affiliated to the University of Poona, was introduced on an experimental basis in 1966, which eventually was given up at the completion of the first batch. Historically institute's involvement in teaching was confined to contributory teaching by some of the faculty in the Pune University's M.A. programme in economics being conducted by the Institute, as it was recognised to be the University Centre of teaching. Gradually involvement of the Institute's faculty in teaching Pune University's M.A. Economics programme increased considerably with the introduction of the semester system of teaching and examination. Subsequently Institute was given autonomous status by the Pune University to run its own M.A. Economics progamme and simultaneously Institute also introduced a three-year B.A. in Economics programme, which however was discontinued after completion of 3 batches. In addition, M.Phil. teaching programme was additional responsibility on the faculty. Finally, in 1993 Institute got the deemed University status in recognition for its contribution in research and teaching. Those developments through eighties and nineties tended to shift the focus of the Institute from primarily a research institute to a teaching

and research institute.

My initiation in the teaching programme began with engaging undergraduate classes and then as a tutor in post-graduate classes. I became a fullfledged teacher in the post-graduate programme only after two-year period of apprenticeship. Because of my training and experience of teaching at the undergraduate level and as a tutor at post graduate level I could subsequently shoulder the responsibility of post graduate teaching with a great deal of comfort. I thoroughly enjoyed my teaching commitments and the systematic manner in which the semester programme used to be conducted. The only cause of disagreement in the teaching programme was non-sequential teaching, which was raised repeatedly. I understand the problem has now been taken care of with new syllabus and new aid of teaching. I have had the best of relationship with the administrative and library staff of the Institute who gave me unstinted cooperation in all my academic and related activities.

Being associated with the teaching and research of the institute of such repute provided me with ample opportunities of visiting universities and institutions overseas as a visiting fellow as well as for presenting papers in international conferences. In particular my visits to Japan for extended period for a joint collaborative studies on irrigation development and management with the Daito Bunka University, Tokyo was very fruitful and rewarding.

The Institute has produced many good scholars who had occupied and have been occupying important positions in universities, research institutions in India and abroad. Almost every year a few students after completing Institute's M.A. programme, proceed abroad, mainly to U.S.A. to pursue their Ph.D. studies. When I reflect back on my days in Gokhale Institute a sense of fulfillment and satisfaction emerges. Certainly there had been moments of despair but what is life without such occasional setbacks. I cherish my remembrances of good old years that I spent in the Institute.



The Banyan Tree and the UGC Building

Looking Back...

Anjali Monteiro*

It was a rainy Monday morning and I sat on the edge of my seat, across the table from a piercing pair of eyes: "But will you be able to cope with the course? You have no Economics at the BA?" I looked back confidently, ignoring the butterflies within: "I assure you, Prof. Dandekar, I will work really hard and catch up on everything that I have missed. I'm really interested in this course". And that was how, after a Bachelor's degree in psychology from Bombay University, a month late into the course, I joined the M.A. Economics class of 1975-77.

It was towards the end of the heady student and left movements of the late 60s. I was 20 and ready to change the world. Marx, Che Guevara, Mao...I was committed to a dream of becoming a part of struggles for social justice and equity. After two years of American behavioural psychology, I was convinced that a shift to Economics was the cure for what I felt was the irrelevance of the educational system to the crucial issues of the day: hunger, poverty, inequity, neocolonialism...

The first few months were really hard work, leaving me with little time to think about anything beyond just catching up. Gradually, I realised that while Economics was more interesting than psychology, it was able to address only in parts some of the answers I was looking for. There was also, within Gokhale Institute, a somewhat anti-Marxist ethos. Nevertheless. by the time this realization dawned, I was fully absorbed in cracking the system, and doing well, along with my friends. I had a close group of friends (including Vikram D'Souza, Amita Vasavada, Shaila Patkar and Anand Halbe) and we all helped each other, with notes and reference work. The daily routine was inflexible- get up early, study, lunch at 10, classes from 11 to 3, dosas and tea at Roopali, then back to the library till 6. And so the days passed. Compared to many students today, we had limited avenues of possibilities for entertainment (no TV, very occasional movies, no discos or malls) and little money to spend. That did not stop us from enjoying ourselves- I remember taking long walks, eating bhelpuri, going for picnics and just chatting for hours on end.

Of our teachers, I particularly remember Prof. Rath and Prof. Chitre for their thoroughness, Prof. Pore and Prof. Brahme for stimulating us to raise question and Prof. Venkatramaiah for his quirky humour. The latter was a great cricket fan. In those days, Gokhale Institute was a muster bound institution, with everyone, from the Director onwards, having to keep to strict timings. The Registrar had an office facing the main gate, enabling him to keep an eye on comings and goings. As the story goes, on test cricket days, when the match had reached nail-biting proportions, Venky (as we called him) would quietly jump over

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the back gate behind the library, and dedicate himself to the cricket commentary at home! That made him even more of a hero in our eyes! We were all in awe of Prof. Dandekar, who took occasional sessions with us. Even if one didn't agree with his line of thinking, one could not help being impressed by his sharpness and his ability to articulate his point of view. He was a man of few words, who never spoke more than was necessary. Years later, when I was making my first documentary film, I came back to Gokhale Institute to interview him on the economics and politics of water distribution in Maharashtra. Though he knew that I was an alumnus of GIPE, he did not make any small talk about the past and stuck to the topic of the interview. His wife, Mrs. Dandekar, was a warm and friendly person, very approachable and informal; we did interact, though I was not a student of hers.

At the end of two years, though I managed to do rather well, I felt somewhat dissatisfied. The course had certainly helped me acquire analytical rigour and a perspective on macro issues; that was only a part of what I felt was important. I was offered doctoral fellowships from GIPE and CDS. While I was undecided about what exactly I wanted to do (a luxury that few young people can afford these days), I knew that I wanted to take a break from academics and intervene in the "real world". I shifted back to Mumbai, took up undergraduate teaching and got involved with popular science education and using media with slum communities. In the process, I found that I had to unlearn and rethink the mindset acquired through years of working at being a "successful student" within the educational system. I had to rediscover my creativity, flexibility, sense of aesthetic pleasure and curiosity, for which there is little space in our classrooms.

When I look back on my Gokhale Institute days of nearly three decades ago, from the vantage point of today, I have mixed feelings: I cherish what I learnt, within and outside the classroom, the friendships I made, and the tremendous hard work I put in. At the same time, I feel grateful that I chose to get out of an academic career in Economics and to muddle my way through a range of experiences, becoming a documentary filmmaker and media studies teacher and researcher in the process. But that is another story!



Gokhale students celebrating holi

At the Library

I joined the Gokhale Institute in June 1978 as a reader in Economics and retired in September 1990 as a professor in the Institute's Centre for Advanced Studies in Soviet and East European Socialist Economies. My decision to shift from Pune to Mumbai was due among other things, to the rich Library, now rightly named after its Founder Director D Gadgil.

If one wants to do research in any branch of Economics, be it agricultural economics, international economics, mathematical economics, monetary economics, for it the Gokhale Institute's Library is an unfailing source for it. It was my practice to spend time of the day in the Library browsing through the rare reports of the 19th century famines in India or the precious reports of the international institutions such as the IMF or the World Bank or the ILO. In the IMF section, I found the three volumes of history of the IMF, which contains several competing proposals for monetary reconstruction of the post world war authored by the then leading men of international affairs.

For some time, I was interested in the Marxist literature section of the Library. The collected works of Karl Marx, Engels, Lenin, Stalin and others helped me quench my thirst for thorough understanding of Marxian and Soviet five year plans. That section in the Library also helped me a great deal to prepare my lecturers on Socialist Economics, a compulsory subject for the then M. A. (Economics) course at the Institute. I say with some pride that I could write a biography of Karl Marx in Marathi because of the rich bookshelves of the Institute's Library. Later, I wrote a book on Gorbachev's Perestroika and Glasnost proposals and policies. It was, I say with humility, the only book in Marathi which dealt with the achievements and failures of the Soviet type planning from Stalin to Gorbachev era. In this, I admit, I owe a great debt to the GIPE Library.

I could go on describing the stimulating role of the GIPE Library in my life but I have to restrain the spontaneous overflow of my feelings concerning the Institute's Library. However, I can not leave unmentioned the unstinted and ungrudging help of the Library staff to locate some books which were, I feel sad to mention, untouched and unread since the time they were acquired by the Library.

The Library now wears a new look with new gadgets and reader friendly service matching with the modern manners.



view of the old library building

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GIPE Library: A Brief Sketch

The Gokhale Institute Library, now Dhanajayarao Gadgil Library, is a joint library with the Servants of India Society's Library founded in 1905. Hence, the Library has inherited valuable books from the collections of eminent personalities like Shri Dadabhai Naoroji, Sri Pherozshah Mehta, Justice M. G. Ranade, Sardar Abasaheb Mujumdar, Shri Mohan Dharia and of course, the late Shri Gopal Krishna Gokhale. The Library is one of the highly specialised libraries in economics and other related Social Sciences. The collection of the Library is very rich but just to mention some of the unique collections, some come to the mind immediately. Among the

- 1. A rare collection of old British Parliamentary Papers of the 18th and 19th century
- 2. Proceedings of Legislatures in India, both Central and State
- 3. Union and State Budgets

special collections are -

- 4. Survey Settlement Reports
- 5. Reports of Committees and Commissions
- 6. Various Administrative Reports of the East India Company
- Over 100 titles of periodicals like American Economic Review having a complete sequence from Vol. I onwards

- 8. Complete sets of the works of Mahatma Gandhi, Marx, Keynes, Mill and Kulvrittanta
- 9. Depository Library for publications of the United Nations and its specialised agencies, European Communities and a partial depository for publications of the Government of Canada
- 10. Census Reports In book form from 1901, on Microfiche from 1891
- 11. Imperial Gazetteers published around the year 1880

As a research and academic Library of the Gokhale Institute, it has exchange contacts with State and Central Governments. Exchange relations also exist between the Institute and several Universities and Research Institutions in India and abroad.

The Library has always been receiving many researchers and visiting scholars from all over India and abroad. It was really a rewarding experience to work in this renowned Library, so rich especially in rare books. To cite very few examples – there is a copy of a book entitled 'My Journey into Africa' which is autographed by Sir Winston Churchill. The oldest book in the Library is Machiavelli's 'The Prince' published in 1680 and still in excellent conditions. There are many travelogues but one of them which stands out in memory is 'The Oriental Memoirs' by James Forbes.

Asha Ogale*

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Visiting scholars also would sometimes give some very interesting information. One scholar was not able to find one annual report of the Posts and Telegraphs Department, I think for the year 1922 as very few copies were available and the Gokhale Institute Library has it. A French scholar who was looking for information on tribes was very happy to consult the second volume of Enthoven's Castes and Tribes of Bombay. He told us that the National Library in Paris did not have this particular volume as it was out of print at that time though they had Vol. I and Vol. III and he had been wanting to refer to Vol. II. Another interesting experience was of a British scholar who wanted to refer to various Gazetteers. He happened to be the student of a British Officer who had prepared the Amritsar Gazetteers. The Officer had got transferred just before the partition and was not able to see his own work in print. So, this scholar requested to give him a xeroxed copy of the same so that he could show it to the author. The author was delighted and did send a letter of thanks to the Library.

Governors of Maharashtra State quite often requested for books from the Library for reference. Shri C. Subrahmanian, for instance, when he was Governor of Maharashtra, wanted the constitution of some very small country. The request was forwarded through Jaykar Library, university of Pune and sure enough, the Institute's Library had a book on Constitutions of the World. The Library also had the experience of officials coming from Delhi to refer to U.P. Budgets in the G.I.P.E. Library because they could not find the whole sequence in one place.

On the lighter side, I shall cite two experiences. As all are aware, the trend these days is to come to the Library, take the xeroxed copies of the material needed instead of sitting in the Library and taking notes. At that time, the Library did not have a xerox machine and the practice was to send all requests for xeroxing outside for getting them xeroxed and collect them the next morning. No need to say all requests for xeroxing are always very urgent. The Library had quite a few Irani students as members. One of them came with his wife and asked me to issue the book to him for getting some pages xeroxed from outside as he wanted them urgently. I explained to him the usual practice of the Library and the inability to issue any book to anyone for xeroxing purposes and that he had to follow the Library's regulations and collect his copies the next morning. He just refused to accept the Library's procedure. First, he offered to leave as much cash deposit for the book as the Library wanted. I politely declined and tried to explain to him that if I start this practice once, everyone would want to do the same and that the Library valued the book more than money. He was very insistent and finally as a last try, he said he would keep his wife in the Library until he returned the book and I should allow him to take the book out. No need to say that I had a good laugh but a tough time convincing that I neither wanted his money nor his wife. Another incident was with an African student from French West Africa. I heard him arguing loudly with the Counter Staff and came to find out what was the matter. He was a Casual member and wanted to borrow a book. The Library staff was only trying to explain to him the

conditions for Casual membership. But still he would not stop arguing loudly and said that because he could not explain himself well in English, we were not allowing him to take the book. I had no idea what language he was good in and asked him what language he was familiar with. His reply was 'French' as he was from the Ivory Coast. Since I happen to know French, I replied in French saying okay, if he wanted to fight in French, I could also fight with him in that language. The next minute, he became extremely polite and apologised to the Staff.

The fifteen years that I have

worked in the Library were a wealth of experience from the point of view of librarianship as well as human relationships. The resources of the Library are so vast that one can spend a lifetime familiarising with them. Each query helped to explore and know more about the Library.

The Library is now entering its Centenary Year and I earnestly wish that it always gets enough grants for enriching its resources on the one hand and for preserving the very valuable old material which sometimes does not allow to be touched.



Students in the library

Reminiscences of Statistical Section

D.B.Sardesai *

It is a great pleasure to recollect my thirty-five years of association with this Section of the Institute. Formerly known, as Tabulation Section with a humble beginning in 1950 of some assistants and mechanical devices like Powers Samas Punched card equipment with 36 column punched cards to cater the tabulation needs of all Sections of the Institute. Prior to that we had what is known as Cope Chart method for data analysis. These were rectangular cards with round holes all along the border like spiral binding perforations on all sides. The code will be decided by cutting the whole by a punch so that a wire can select only the cards having no V cut, the cards falling on particular column giving us the frequency. Even after addition of punched card equipment the workload involved in pre-coding the survey data, collected in the form of questionnaires, "schedules" as we used to call them. The coding was done on the schedules themselves and punched into 36 column cards and tables were manually written using sorter and tabulator. The gains obtained in economizing the number of punched cards by using often the nonconventional multiple codes often resulted in enormous delay in tabulation due to the mistakes in coding. Forty column punched cards were later added by the Ministry of Agriculture for their Agro Economic Section at the Institute. The major work load undertaken was the extensive twenty percent tabulation of Census of India 1961.

Thework of coding, punching and tabulation with the midget forty column equipment covering 20 per cent sample of all the household slips of two States namely the then Mysore and Andhra Pradesh took us nearly 10 months to process. Still we beat in time the Maharashtra State tabulation, which was done for Maharashtra alone by the Government department. We handled more than 50 young students and workers from Mysore and Andhra Pradesh as the slips were in local languages of these States.

Subsequently, around 1963 80-column punched card equipment was purchased. One sorter, one tabulator and data entry machine was all that we had. We were introduced to computer processing as late as 1964-65. I got my training at Berkeley, California under the Ford Foundation Exchange Visitor's programme. I was trained in the then "state of the art" computer techniques and data retrieval methods at the Survey Research Center Berkeley, California. I was not at all impressed by the techniques of data cleaning operations adopted there after the survey was already published by the Researchers. Especially the studies brought in for depository with the Center were in the form of data cards/magnetic-tapes and card layouts and sample data schedules used for data collection. It was a common practice that since computers were not used for the analysis the tables generated on punched cards were corrected for coding

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errors, without correcting the data cards. Strict validations could not be taken on unit record machines as we can adopt now with the use of computer. This obviously cast a shadow on the otherwise sincere efforts of the researchers, as the data cards showed often some variance with the printed tables in the survey report. This was especially noted in case of studies collected from the developing countries. The efforts in cleaning operations often resulted in reduction of sample counts. In any case, all the efforts in developing a cleaned data archive depend on the possibility of reuse of these machine readable survey material by new researchers for comparative studies or as teaching material for the students of research methodology. I will come to this point again later.

Besides the use of our own punched card equipment, mostly for small surveys, it served as input device for preparing data cards as input to computer. We used to work at the Bombay University computer located at the Jamnadas Bajaj Institute. This was second generation computer IMB 1620 with meager capacity, opened a new vista and areas of data analysis and students working for their doctoral thesis used methods of data and statistical analysis which was hitherto not possible or were tedious by purely manual methods of data and statistical analysis. Part of the work of World Health Survey was done in record time of 6 months, developing our own programmes when corresponding assignments in Shri Lanka and other countries took more than six months for getting familiarized with the statistical packages used for tabulation leave aside time for tabulation.

This was the time when some of the intricate programmes in tabulation and

statistical analysis were developed in house. During the conference of Input Output Analysis at the Institute, Prof. W.W.Leontief was with us for the Conference. He was impressed when he gathered from us that all the programming was done in house, as we had no easy access to, nor were there good statistical packages available. Our work in Input output Analysis, Demographic and Agricultural Section was pioneering. After recognition by the ICSSR as one of the institutes for introduction of their scheme of Guidance and Consultancy to research students and scholars, the Institute handled processing work of our own as well as students from other colleges and institutions. By 1990 more than 75 students were helped in data analysis on computer. The work on computer often called on our strenuous physical load. At one time in inverting 241 x 241 matrixes/matrices for Indian economy, I had to spend at a stretch more than 26 hours on the midget 1620 machine. Gone are those days when we used to wait for hours at the Pune University ICT 1900 computer. The punched card as input had its severe limitations. The time gained in computer speed was totally lost for the want of correct timely input.

From 1990 onwards with the liberal grants from the Government, the Institute has installed several computers in the Institute (I don't know the exact number but I gather that it is 70 plus). All the research faculty is now having one machine on his or her table.

The Institute had done inventory of about 200 machine-readable studies of the Institute. However as most of the earlier studies were on 36 and 40 column cards now almost out dated and must have done away

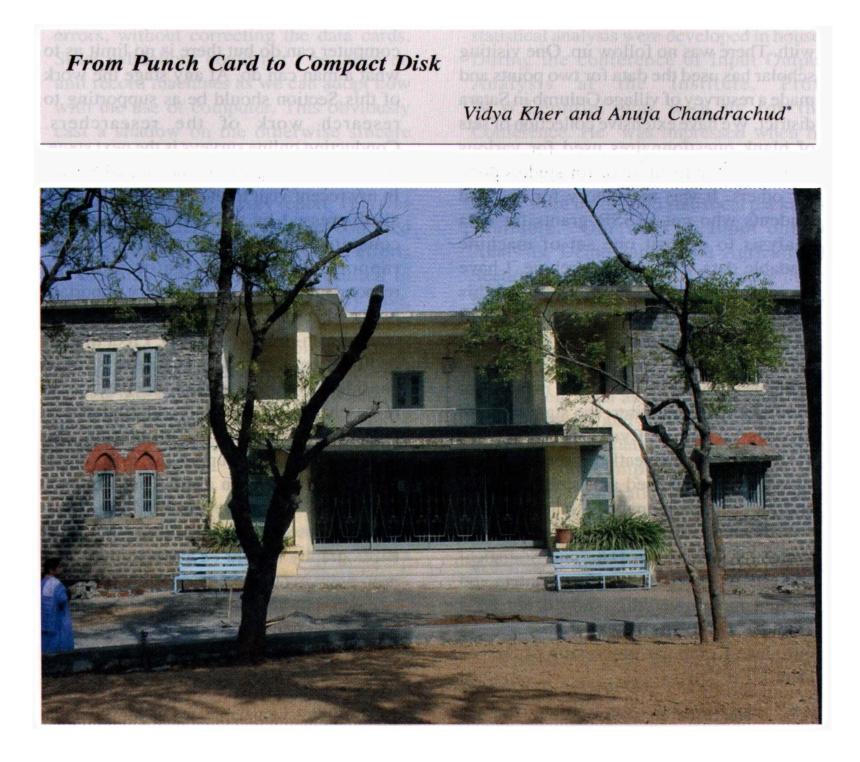
with. There was no follow up. One visiting scholar has used the data for two points and made a resurvey of village Gulumb in Satara district. We have extensive collection of sets of blank questionnaires used for various surveys of the Institute or for studies done for others. It was mandatory for doctoral students who got ICSSR grants for data analysis to deposit one set of machine readable data with ICSSR archive, I have no idea about the present status of this project after my retirement in 1989. It will be a good idea to keep in neat form the studies for which we have the machine readable data. As for the data in manuscript form like questionnaires, the state of these records is worse. Even 400 years old Peshwa Daftars are neatly preserved. These surveys could be used as study material and for secondary analysis. It is also high time that the Institute should start a training center for scholars in Data and Statistical analysis. With a number of computers and trained manpower this should not be a problem. During Refreshers course one can introduce Computer processing of Survey Data.

The research work of the Institute is not measured in terms of the number of machines. There is a limit to what a

computer can do but there is no limit as to what a man can do. At any stage the work of this Section should be as supporting to research work of the researchers. Conducting online surveys is the next stage, now being adopted in the United States. In my recent visit to the States I was not at all impressed by the dominating role of computers in Social research. I find no rapport of the investigator with the respondent. A point which is very important in social research. The answers received could be un-trustworthy too. I feel that it is high time that the Institute should consider developing a training center for the research faculty and doctoral students in particular, keeping in mind that the machines are only supporting to research and its not the end in itself. The computer can be an aid in research. The study undertaken some years back like Annotated-Bibliography should be perused but there is no point in developing a system of online research. The time, money and efforts would be colossal and could only be justified if it is really going to help in research.

I have written the above lines on my 75th birthday. I am happy for whatever small INPUT that I could give to this esteemed Institute.

The Institute is a prestigious one, which has rendered yeomen service to the growth and development of social sciences – Raja J. Chelliah, Former Director, National Institute of Public Finance and Policy, 1993.



Gokhale Institute's Platinum Jubilee souvenir is a perfect outlet to make the new generation aware about the evolution of present statistical section from its foundation. Authors witnessed these changes since late 1970s. It was great fun to explore the methods adopted for data analysis prior to this period.

This year, Gokhale Institute is celebrating its Platinum Jubilee. We were

invited by the Platinum Jubilee Souvenir Committee to write an article on the development of the Statistical Section. We have been working in the Statistical Section of the Gokhale Institute since 1976-77 and we are closely associated with all its activities. Here, we are presenting a small article, which will give its history, mode of working and its contribution to the Institute. It will be interesting for the readers especially students and young researchers

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to read about the evolution (as far as Gokhale Institute is concerned) and the transformation of the Statistical Section from a machine room to a computer section.

To obtain the earlier information, we interacted with many people who have retired from the section. We came across people who worked in the Institute, from almost the beginning of the Statistical Section. They enlightened us about the facilities then available at our section for data analysis.

History

The institute was founded on 12th June 1930 on the occasion of the 25th anniversary of the Servants of India Society at Pune. The objective of the Institute was to conduct studies of various economic problems of India and to train workers for the conduct of such study. The staff of the Institute undertook research work and carried out detailed investigations in specific socio-economic problems.

Investigation work had begun tentatively in the second year of the Institute's existence with a study of the 'Marketing of Fruit in Pune'. It was only in the third year, however, that the full resources of the Institute began to be utilized by the appointment of a second investigator. The first project in the agricultural domain was the study of fruit marketing. Work on farm business studies started after this. Here, the Institute felt the necessity of gathering a large amount of data, cheaply and expeditiously and adapted a system known as the 'Survey Method' in the other countries. On the non-agricultural side, the first survey undertaken was that related to motor bus transportation. Originally, the second survey was planned as a survey of small-scale industries in Poona but fortunately it was possible to expand this project into a complete economic survey of Poona with the financial help granted by the authorities of the Poona City and Suburban Municipalities.

The marketing survey undertaken by the Institute was the first of its kind in India. It has always been our aim to achieve outstanding work of a pioneering nature.

The Institute had always to pay considerable attention to statistical aspects of collecting data and of the techniques of analyzing them. Quantitative data gathered as a result of past investigations at the Institute were also voluminous. The Institute had carried out extensive tabulations for all-India surveys. The Institute helped in tabulation of data of the other research organizations, which were not suitably equipped. Thus, our Institute had a vital interest in the development of a Statistical Section. It became necessary to mechanize the Statistical Section. Because of all this, an independent Statistical Section had been established at the Institute around 1960. This is the 'Gangotri' of the Statistical Section. From this initial period onwards, Statistical Section has worked for a variety of projects in different fields like demography, agriculture, planning etc.

Infrastructure

The Statistical Section performs work in various stages, viz., data collection (fieldwork or from published formats), coding, punching of data, verification of data, sorting, tabulation, library work etc. Investigators, who do the job of the data collection, have mainly to do fieldwork. Tabulation assistants and statistical assistants analyze this data. The Statistical Section's work is to furnish the researcher with basic raw information in a systematic form for the project. So it is the borderline work of an academic and nonacademic nature.

Evolution of Computer

In the earlier days, data were hand tabulated. Afterwards, various types of machines were being used by the Statistical Section. Thus, the Statistical Section has worked with Hollerith's punch machines in late 1940s as well as the latest IBM computers. It will be interesting to see this transformation with the help of pictures of the different machines used here.

Previously, statistical analyses were characterized by manual processing which was tedious, monotonous, time consuming, prone to errors and boring. Herman Hollerith invented and developed a punchcard tabulation machine system in 1890 that revolutionized statistical computation. For his tabulation machine, he used the punch card invented in the early 1800s. Hollerith's machines proved themselves to be extremely useful for a wide variety of statistical applications, and some of the techniques they used were to be significant in the development of the digital computer. In February 1924, Hollerith's company changed its name to International Business Machines or IBM

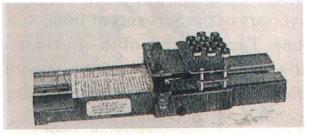
Now, we'are furnishing a little bit of information regarding these machines from Hollerith to IBM in our Institute.



Punching Machine for Cope Chat cards

Earlier, data tabulation was done with tally marks or by simply counting,

which was time consuming. Prior to 1950, the Institute had Cope Chat Method for data analysis. These were yellow cards, about 9" X 4" in size with 26 holes punched around periphery. Categories were allocated to each hole and depending on the data for a case, the hole was converted to a notch by a special punch. Information was recorded by writing on the card as well as the 'notching'. Analysis was carried out using a long needle or wire pushed through the holes and lifting. Cards, which had been 'notched', dropped out. So it was possible to easily collect a subset of cards with a specific charcteristic. It was quite a tedious job.



Hand Punch Machine

Hand punch machines and verifiers were installed which were improved versions of earlier machines. 10-12 machines were in operation at that time. Each machine was a steel instrument with a wooden base and of 12" X 5" X 3" dimension. A card was inserted into it from the left-hand side and the keyboard was on the right hand side. The pointer, on the rod indicated the column to be punched. After every stroke of punch, the card used to move from the right to the left. There were 36 columns on the card. After completing the last stroke, one had to take out the card. All punched cards were verified on verifier by keying all the data again. If there was a mistake, the card would get stuck. With the help of the eject key, they could be retrieved for rectification. Sorter was used to find out the frequencies.

Surveys like,

- Socio-Economic Survey of Pune City and Suburbs (1938, 1952)
- Agro Economic Survey of Five Villages in Wai Taluka (1946)
- Socio Economic Survey of Kolhapur City (1948, 1951, 1952)
- Survey of Economic Conditions of the Tract of the Bombay Deccan most liable to Famines (Tata Famine Survey, 1950)

were completed by hand tabulation and with the help of the above machines.



Punching Machine

In the mean time, about 1951-52, automatic punching, verifying machines, sorters, tabulators etc. were introduced in the Statistical Section. For these machines 36 column punch cards were used. After completion of the survey, coding was done on the schedules itself. Then coded data were punched on 36 column cards and verified on verifying machines by keying all the data again.



40 column Sorter



40 column Tabulator

Frequency tables and other tables were prepared manually by using the sorter and the tabulator.



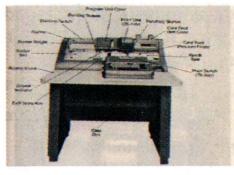
Hand FACIT



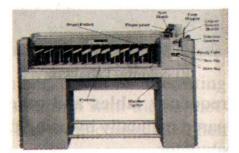
Electrical FACIT

Tabulation of uncoded data used to be done by hand FACIT and electrical FACIT machines.

After 1955, 40 column machines were granted by agriculture ministry and were installed. These were the extension of the 36 column machines. 40 column punch cards were used for these machines. Their working was similar to 36-column machines.



80 column Punching Machine



80 column Sorter

Around 1961, 80 column card punching, verification and sorting machines were installed. There was a great difference in space and speed as compared to the earlier ones. 80 column punch cards were used for these machines.

This decade witnessed many projects with all 'in house' means of data processing i.e. 36, 40, 80 col. punching machines, sorter, tabulators etc.

National Sample Survey (NSS-Pune Schedules: 1950-51 (1953), NSS-Eight Round Survey (1957)) was handled solely by the Statistical Section of the Institute by using punching machines. Survey methods designed by the Institute for this enquiry, were used in one-third of the total villages in the National Sample all over India. Thus, for the first time, the Institute was handling an all-India enquiry in all its aspects, like designing of questionnaire, coding, punching, tabulation etc.

Another important venture by the Institute through Statistical Section was

Census 1961 for Karnatak and Andhra Pradesh. The Institute did many important projects using punching machines.

For data tabulation/analysis, programmes were used which were written in FORTRAN, COBOL, PASCAL etc. and were stored in the 80 column cards along with the data. These were processed at Bombay University's Computer Center. All results were made available in a printed format. Earlier, results were available in a hand written format. Mr. Sardesai, who was in charge of the Statistical Section, used to visit Bombay University for processing these cards. Many a times, the computer was available during the night shift and he always ensured that the programme was run by making small corrections there itself. Thus, the allotted time was utilized effectively.

The International Data Library at Berkley was interested in acquiring machinereadable data to store in their data archives as they had explored the possibility of collecting machine-readable studies from Asian countries. By this time, the Institute had large depository of survey material for research studies in different areas like punch cards, record layout, and questionnaires. The International Data Library at Berkley was interested in data exchange between the two institutions. In 1965, the training of Mr. Sardesai at Berkley was a step in this program.

Preliminary data analysis used to be carried out on 36, 40 & 80 column sorter and tabulator. Statistical analysis which was earlier carried on hand FACIT machines or electrical FACIT machines, was now carried out by computer, using specially developed programs. Computer programs, though initially time consuming, required skilled professionals.

However, these could be used by many users and were eventually economical. These programs could handle complex data.

When Pune University installed similar computers, the trips to Bombay were reduced and eventually stopped. All processing could be done at the Pune University Computer Center.

The following are few projects, which were completed with the help of the Institute's machines and computers in other organizations.

- Farm Management Studies for different Districts (1968).

- Input Output table with Capital Coefficients Table (32 x 32) for the year 1963 (1967).

- Capacity Utilization and Factors affecting it in certain Indian Industries (1967).
- Rural Electrification in Maharashtra (1978).



DCM Mini Computer

Gradually 36 and 40 column machines were phased out. In 1979, first DCM mini computer was installed in Gokhale Institute. It was equipped with 20character one line display, 40-column printer and one 8" floppy drive. It was a table model. It was equipped with DOS and its communication language was HI-BASIC. Large projects were completed in time with the help of this mini computer. The programming of Subject Index and Author Index of Library was completed on this computer. This program was used till the arrival of SLIM readymade package in 2000.



KELCOM Computer with two 8" Floppy Drives

KELCOM Computer with two 8" Floppy Drives

In 1983 KELCOM PC was introduced having two 8" floppy drives, large size CPU and separate screen. No readymade softwares were available at that time. BASIC and DOS were the communication media. Statistical Section has completed many projects including one voluminous project with 2,00,000 cards within 6 months on KELCOM machine in addition to the regular work. For data entry, DCM mini computer was used continuously for 24hrs/day and data analysis was carried out on KELCOM PC. This was an example of sharing available resources effectively. Following are the studies in which the above computers were used.

- Economic Problems of Fisheries in the Coastal Regions of Maharashtra (1984).

 Impact of Agricultural Development Program on Scheduled Castes(SC) and Scheduled Tribes(ST) Population in Maharashtra (1988).



DCM Computer with two 51/4" Floppy Drives



DCM XT with Hard Drive and 51/4" Floppy Drive

In 1986, smaller DCM computers having high capacity and speed were installed with readymade softwares such as LOTUS123, dBASE, WORDSTAR etc. Besides these readymade softwares data analysis was also done by writing programs in FORTRAN, COBOL, BASIC using compiler. Hard drive was introduced and floppy size was reduced from 8" to 5¼".



HCL PC with two 51/4" Floppy Drives



HCL AT with Hard Drive and 5¹/₄" Floppy Drive

In 1989, HCL computers were installed having mathematical coprocessor which reduced time of processing. Hereafter administrative staff started using computer for typing purpose because of editing facility.



ICIM Computer (CPU)with 5¹/₄" Floppy Drive and one CD Drive

In 1995, ICIM 486 computer with Windows O.S., colour printer, office software (EXCEL, WORD etc.), $3 \frac{1}{2}$ " floppy drive were installed.

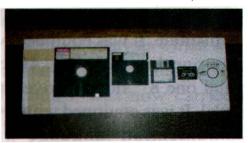
During the 90s, with the help of our own computers, the Statistical Section handled many voluminous projects, like,

Evaluation Study of Land Development Works (Part II) in Command Area of Bhima (Ujani Project) (1995).

Impact Study on Integration of Population Education in Adult Literacy Program (1999).

Programmes done in 1979 are compatible with newer computer systems with a slight modification in the programme. It was really a challenging job to convert data from the old data storing devices to the newer one such as

8" FDD→5¼" FDD→3½" FDD→CD.



Data storing devices

The size of data storing devices shrank but its storing capacity increased phenomenally over a period of time.



COMPAQ PC with printer

After 1997, processing speed remarkably increased due to installation of Digital PCs and laser printer and also due to networking. Subsequently COMPAQ and IBM machines entered the Institute, enhancing processing capability and speed.



Different types of cartridges

Compatible printers and data storing devices were part of the respective computing systems. Technological advancement in printers from dot matrix to LaserJet has increased the printing speed and quality considerably. Technology of cartridges has changed from ribbon to toner, which contains ink in the form of powder.

Now, in 2004, everyone is equipped with Pentium IV based computer, readymade softwares, twenty four-hour Internet connection, separate colored printer and networking.

From their inception, Demography section, i.e., Population Research Center

(PRC) and Agro Economic Research Center (AERC) have completed many projects with the help of different machines in the Statistical Section.

Thus, we have seen the Statistical Section has undergone transformation and worked for many voluminous, policy deciding surveys and studies. In the earlier days, it was very difficult to manage data. Now, with the help of readymade softwares, it is comparatively easy. We have noticed that whenever readymade softwares are unable to handle the huge data, in-house developed programmes rescued us. With the increase in number of personal computers, computers' management aspect has gained importance. At the same time, with the availability of statistical packages and almost everyone being conversant with the use of computers, the burden of data processing has somewhat softened. As a consequence, we could get some time to develop programmes, which are suitable for our working and ease of operation. In this way, our expertise in development of program gets better utilized.

Following are some systems developed by the Statistical Section.

- Developed programmes for Library for Subject Index, Author Index, Depositors List, etc.
- Helped accounts section for Salary System, Income tax Calculations, PF calculations and all types of arrears calculations (4th pay, 5th pay, 12 year increment) etc.
- Developed MA Result Program
- Assisted ICSSR students for Ph.D. work.
- Trained participants of refresher courses, administrative Staff, Students of Computer Class etc.
- Developed system for maintaining computer information

• Developed programme for Leave Register

Finally, with all humility the Statistical Section would like to express its desire to extend its prompt and reliable assistance, to all the wings of activity including academic work. All this will be done under the able guidance of Dr. Sanjeevanee Muley, who heads the Statistical Section.

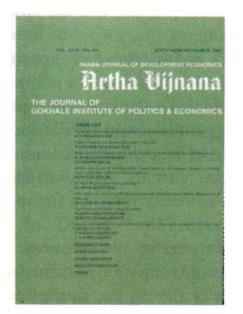
For interested people all the machines are available for display in the Statistical Section.

Gokhale Institute deserves to be congratulated for keeping alive the tradition of disseminating the findings of academic research through public lectures in the best traditions of the city of Pune - Amaresh Bagchi, Former Director, National Institute of Public Finance and Policy, 2001.

One of our finest research Institutes. The range and depth of its scholarly output has gained widespread recognition in academia – A. Vaidyanathan, Professor Emeritus, Madras Institute of Development Studies, 2000

Artha Vijnana

Kunda V. Kulkarni



The cover page of the recent issue of Artha Vijnana

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Artha Vijnana Editorial Board

The Gokhale Institute of Politics and Economics the oldest research and teaching institution in Economics in India, was founded in June 1930.

The Institute has been publishing a quarterly journal in English, *Artha Vijnana* (ISSN 0971 – 586 X), since 1959, which is subject to a peer-refereed and reviewed process. It is a highly reputed journal. Professor D. R. Gadgil was the first Editor of the journal.

After completing 22 years of service in the journal section, I thought, I should write a small piece about our journal.

Since its inception, the journal has had Editors like Prof. V. M. Dandekar, Prof. N. Rath, Prof. K. S. Srikantan, Prof. D. C. Wadhwa and Prof. V. S. Chitre. At present, the journal has received the able and scholarly editorship of Prof. Ajit Sinha. Now, I think, the journal will scale new heights of academic excellence.

The objectives of the journal are to encourage new thinking on concepts in theoretical framework in the various disciplines of Economics and new ideas, which would help in formulating various policies that are related to the short-term and long-term needs of the economy.

This journal publishes results of research work carried out in the Institute, as well as, works of Scholars from outside the Institute. The journal has endeavored to publish papers from leading academicians, researchers. The journal also invites articles, notes etc., based on research work supported by relevant evidences. The Institute has been publishing many of its

^{*} Publication Section, Gokhale Institute of Politics and Economics, Pune.

studies in full, first in its journal and subsequently bringing them out in a book form in its Reprint Series. Besides, the Institute publishes its research results in the form of books and some in its Mimeograph Series. Some special issues of Artha Vijnana have also been published on areas like, Input-Output Economics (Vol.9, Nos.3 & 4: 1967); Karl Marx-Marxism-Philosophy and his Theories (Vol.10, Nos.3 & 4: 1968) and Regional Input-Output Matrices, India 1965 (Vol.21, Nos.3 & 4: 1979).

This journal also includes Author Index, Title Index as well as Books Reviewed Index in its 4th issue (December issue) of each volume since1991. Previously, the Index was published separately. From 1996, the whole job of the journal is processed on computer and set on laser prints.

This journal is currently subscribed by nearly 200 subscribers. Its subscription rates (Rs.400.00; \$85.00 and £60.00 per year) are quite affordable. It has also been sent on exchange agreement to various libraries in India, as well as, those which are abroad.

A condition has been put since the inception of the journal, that the Articles, Notes, Comments etc., should be based on original work and that they have not already been published or submitted for publication elsewhere and that it should not be reprinted without the permission of the Editor (i.e., the copyright of the published materials has to be with the journal). Manuscripts may be rejected, edited or returned for specific revisions on the basis of the recommendations of the referees. The journal also reviews important books published recently in the disciplines of Social Sciences.

I take this opportunity to thank our Director, Prof. Ajit Sinha, Dr. Smriti Mukherjee and Dr. Jayanti Kajale for giving me an opportunity to write about our journal.



The Administrative Buidling

Two Marathi Articles of Professor D. R. Gadgil

S. H. Deshpande*

As a tribute to the memory of its first Director, on the occasion of the Platinum Jubilee of the Gokhale Institute, it is proposed here to consider together two articles of Professor D.R.Gadgil, both in Marathi, one written in 1924 and the other in 1942¹.

The first, "The Necessity of an Independent Indian Economics?" (Swatantra Hindi Arthashastrachi Avashykata?) appeared as a reaction to a sub-section of the entry on "Economics" in the Marathi Encyclopaedia edited by the reputed sociologist Dr. S. V. Ketkar. This particular subsection in the encyclopaedia bears the same heading as the title of Gadgil's article minus the question-mark.² Ketkar's sub-entry is in fact a summarised version of his English book, An Essay on Indian Economics, published in 1914³.

In the Encyclopaedia article, Ketkar asked for a separate, indigenous, Indian Economic Science (more strongly than in the English book). Gadgil, fresh from Cambridge, reacted to say that an independent Economics for India is unnecessary and that an insistence of this type is liable to produce misconceptions about the nature of Economics.

Ketkar argues that in formulating an Indian Economics, social, political and psychic conditions peculiar to India must be taken in to account. Gadgil in his criticism concentrates mainly on Ketkar's discussion of the social conditions, especially the caste system.

In respect of the caste system, Ketkar makes the following points: The caste system and the custom of untouchability have had "dreadful" (bhayanak) effects on the economic conditions of India. In particular (1) because of the varying customs and manners of different castes, demand gets fragmented and large scale production with its specialization of functions is hampered, (2) since the lower castes do not imitate the manners of upper castes, their style of life does not improve and (3) intelligence, capital and labour being associated with different castes, the co-operation of these factors of production, necessary for productive enterprises, is not forthcoming. Ketkar cites examples from Indian life in support of his observations.

On the whole, Gadgil tends to dismiss these effects as of little consequence. He says: "The obstacles created by the social structure, in today's conditions, are not very important; we are of the opinion that because of them the friction in the operation of economic laws will increase somewhat."⁴

However, Gadgil himself makes a point in favour of Ketkar. The caste system prevents the spread of the

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knowledge of arts and sciences. He gives the example of different castes in the same village following different methods of farming. He also agrees with Ketkar that homogenization of demand is prevented by the caste structure but points out that now the tendency is being reversed.

Gadgil criticises Ketkar on many other counts, such as mixing up the categories of "national" (regional) and caste differences, ignoring the evidence which runs counter to Ketkar's views, citing examples of a minor nature, and adduces evidence showing that in respect of important products and services the demand is already large. He argues that some effects which Ketkar attributes to the caste originate in a variety of other causes. On the whole, "Although about fifty to seventy-five years ago, identity existed between caste and occupation, the situation is now no more so". He makes a pregnant remark when he says that the Hindu society may be socially divided but not economically. He also says that the "economy triumphs over the society"⁵.

His conclusion of this discussion can be summed up in his own words: "The question of our industrial development is extremely complex. Development is stunted because of illiterate labour, scarce capital for a share of which there is competition between agriculture, trade and industry, absence of mineral wealth like coal and iron *etc*. The caste system affects this in a very small way and even if there were to be no caste system one wonders whether the rate of development would have been higher."⁶ I found Gadgil's arguments on the whole balanced, cogent and persuasive, based as they are on his own keen observation as well as on the evidence supplied by Government reports on various occupations.

Only two contentions of Gadgil I find debatable. (1) "In the last century the economic structure of many countries resembled that of ours and even at present some countries show a resemblance to our economic structure"⁷ (2) "The social structure counts for little in Economics".8 In regard to the first statement Gadgil seems to devalue the role of the caste system which, being unique to India, exerts its influence on the economic structure. In respect of the second statement it could be said that what is termed as "economic structure" is basically made up of social arrangements. Take modern Economics for example, which moves round the fulcrum of markets. It is plain that at the basis of the markets of economic theory are the ideologies and institutions of individualism, private property, laws of contract, various basic freedoms such as the freedom to produce and the freedom to consume etc. In other words the *data* of economic theories are supplied by the social structure. Of course, the economic processes do, in their turn, affect and modify the social structure but there is always a social structure corresponding to an economic structure.

I turn to the second article, again written in Marathi, eighteen years after the first. Its title is "Foundation of Indian Economics" (*Hindi Arthashastracha Paya*). The occasion was the death centenary of Justice M.G.Ranade and fiftieth anniversary of Ranade's lecture on "Indian Political

Economy" delivered at the Deccan College, Pune in 1892⁹. Gadgil talks in reverential tones about the breadth of Ranade's vision and his farsightedness. He calls him a "seer" (Drashta)¹⁰ In this article Gadgil has changed his stance and candidly confessed having erred on the earlier occasion. In a parenthesis in the midst of his discourse on Ranade he says, "here I must frankly note one thing. When this author returned to India eighteen years ago after obtaining a foreign degree his views were different; he, in his very first Marathi article in the Vidyasevak, vigorously contested Dr. Ketkar's justification for the necessity of an independent Indian Economics in the Encyclopaedia. However, today his (Gadgil's) thoughts are closer to Dr. Ketkar's than to those he (Gadgil) expressed earlier"¹¹.

Gadgil in this article does not ask for an entirely independent Indian Economics in so many words but comes very near to arguing for it. For instance he closes the article with the following words. "....We have to proceed by the path shown by Ranade and partly traversed by Dr. Ketkar. Our Economics is, after all, the Economics of the poor and backward people. Its form and colour are bound to be different from the Economics of affluent and advanced nations and it is only after the development of Indian Economics in this manner that economists can make substantial contributions to the national economic policy."¹² Never does Ranade himself clearly ask for an Indian Economic Science but he contrasts the assumptions (twelve in number) of English Economics with elements of Indian reality, almost

equal in number, so dramatically as to make the reader feel that he is prepared to discard the whole corpus of English Economics.

What does Gadgil do in this article? He approvingly writes about Ranade's basic dictum that propositions of social science are relative and not absolute and therefore it is risky to apply the principles of Economics as set out in the books of English economists without regard to time and place. He elaborates this theme in ways which by now are familiar to social scientists. He then summarises Ranade's examination of a few propositions of English Economics such as the international division of labour, the landlord's natural right to rent, the role of the state etc. and Ranade's recommendations to the Government regarding what steps need to be taken in order to initiate industrial development. Finally he discusses why the trail blazed by Ranade and Ketkar was not followed by later economists and attributes this to the strong grip of English economics on the mind of Indian economists, their absence of broad-based thinking, their lack of self-confidence and the prestige that a foreign degree carried.

It will be seen from the above account that Gadgil in the article under question, deals mostly with generalities like the relativity and subjectivity of social science and is short on the specifics of his new position. One does not get a clue as to why his opinions underwent a change and in what particular respects. In contrast his earlier 1924 article is a detailed exposition of his objections to Ketkar's views. If he were to take up each of the points he made earlier and had reviewed them afresh, the article would have been more enlightening from the point of view of evolution of his own thoughts and also from the point of view of the light it would have thrown on the subject.

In the absence of such clarifications, Gadgil's change of stand is somewhat puzzling.

The question, for instance, arises: Earlier Gadgil had noticed the tendency of rigid taboos of caste slowly giving way before the advance of the economy; did he not find these tendencies gathering further speed in the interval of eighteen years? What happened to the "triumph of economy over the society"?

Another lacuna I find in Gadgil's second article is the following: Both Ranade and Ketkar are more worried about the problems of economic development than static economic theory. Their principal grouse is that they do not get much by way of guidance from English Economics in so far as the business of development is concerned. However, Gadgil does not make his position clear; the reader of his article is left wondering whether Gadgil has in mind the propositions of Static Equilibrium Economics or the laws of economic development, when he talks of the inapplicability of English Economics.

Now, is Gadgil explicit about what he really wants: total abandonment of English Economics in favour of a really 'independent' Economics based on an entirely different set of assumptions or modification of received theory in the light of peculiarly Indian conditions?

Unfortunately Gadgil never wrote a word on this subject in English, nor did he take it up again in Marathi. In view of the importance of the theme and the seriousness with which he treated it, this is somewhat strange. As Sovani aptly remarks, his second article was "a flash in the pan"¹³.

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2 Maharashtriya Dnyanakosh, Part 7, pp. 463-473.

- 3 S.V.Ketkar, An Essay on Indian Economics and its relation to Social, Psychic, Political and Linguistic conditions in India, and on the laws of economic evolution and on the acceptability of socialistic measures and the fature outlook, Thacker and Spink, Calcutta, 1914.
- 4 Dha.Ra.Gadgil Lekhasangraha, op.cit.p.144.
- 5 *Ibid*, *p*.149

- 6 Ibid, p.148
- 7 Ibid, p.149
- Ibid, p.150 8
- 9 M.G.Ranade, "Indian Political Economy", Essays on Indian Economics, Natesan and Co., Madras, 1970.
- 10 Dha.Ra.Gadgil Lekhasangraha, op.cit.p.166
- Ibid, p.168 11
- 12 Ibid, p.171
- N.V.Sovani, "Translator's' 13 Notes", op.cit., p.331.



Oldest Book of the Library by Nicholas Machiavel

Reports of the Deccan Riots Published in 1680 authored Commission, Published in 1875

Encyclopaedia of India Published in 1858

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Reflections on Method and Methodology of Economic Research : My Experience

K. K. Dasgupta*

Introduction

The question of method and methodology while perusing economic research acquires an important position because whether we admit or not, to identify the different facets of purposive human action both at the individual and collective planes, whether in the past or at the present time, can not be devoid of tools of interpretation of events.

In the following lines a modest attempt has been made to examine various dimensions of this contention

(A) Methodology of Economic Science :

My first interest in this particular branch of knowledge has reached to the highest level because of my acquaintance or rather a comprehensive study of the methodology of economic science as expanded by Nicholas Georgescu-Roegen. The most important point among many others that he raised in his expounding of the philosophy of economic understanding was the question of History and Hysteresis.

History and Hysteresis

Georgescu–Roegen's view on this can be summarised in the form of one simple proposition:

In the domain of social sciences it is impossible to conceive of a process in the broad sense of the term with the Zero Level of History. Therefore, in social scientific investigations, for any given History H, there can not be so that H + = 01

I am raising this point because there is a misconception among economic historians that a social formation known as Capitalism should not be regarded as something emerging at a particular point of history but rather the spirit of capitalism had been existing since the early stage of civilisation. Surprisingly Max Weber and Werner Sombart are among the distinguished scholars who believed that the spirit of capitalism or the psychology of making profit had been existing since the early days of history. Now, my contention is that there were some businesses even in ancient Babylon, ancient China, ancient India and when you do business you have to make calculation such that you don't incur losses. Does that mean that two thousand years ago there were people who believed in the capitalistic spirit because Weber himself has written a monumental piece of work not in size but in meaning entitled 'Protestant Ethic and the Spirit of Capitalism'. He tried to explain how capitalism developed in England alone not simultaneously in the continental Europe because of the presence of the protestant So he himself admitted that ethic. capitalism emerged at a particular point but his other point that he insists on is that "for the purpose of this conception all that matters is that actual adaptation of economic action to comparison of money incomes with money expenses that takes place no matter how primitive the society was. Now in this sense, capitalism and capitalist enterprises even with considerable

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rationalisation of capitalistic calculation have existed in China, India, Babylon, Egypt, East as well as economic documents permit us to judge. This way of economic calculation not merely was isolated adventure but economic enterprises which were entirely dependent on the continued renewal of capitalistic and even continuous operation"². Sombart on the other hand, identified the spirit of capitalism as Dobb has pointed out, "not in any one aspect of economic anatomy or its physiology but in economic totality of those aspects which are present in the Geist or spirit that has inspired the life of whole people. Therefore, he sought the origin of the capitalism then in the development of states of mind and human behavior conducive to the existence of those economic forms and relationships which are characteristic of the modern world"³ and some time in the distinct past Sombart says, "this capitalistic spirit must have been in existence in embryo if you would like before any capitalist undertaking could become a reality". So if we consider the statement, the level of history of capitalism is zero and it can be said without any ambiguity that there was no such society which was non-capitalistic or rather all socio-economic formations could be subsumed under the broad generic term, 'capitalism'.

Dialectics, Arithmomorphism and Intuitive Continuum:

In the methodology of economic science which tries to go deeper into the conditions of human actions cannot be devoid of condition which can be illustrated by saying that we can have a phenomenon which is a combination of both A and non-A. This is very much Mediterranean countries and Middle east as well in modern

times. All civilised countries of the earth have so illustrated when we say that GDP has been increasing over time by several percentage points which is ever increasing. Now we can not simply rely on this fact and think of the develop-ment of economies There will be a logical fallacy assured. and also mistaken understanding of genuine conditions of the population because it may be an increase in the GDP but a substantial part of the population may not be receiving the minimum amount of welfare that is needed for minimum condition of survival. This is very much prominent in countries in the third world, India being no exception. Therefore, this quantification of criteria of growth and which can be termed the 'Arithmomorphic criterion' has always pleased the elites but has never given relief to all others. Rather I would say that it has seldom given relief to the people who do not understand the sophistication of economic explanations. Another point is very important in this connection that is, beyond Arithmomorphism there is a world of perception or what is called as Intuition. Let us take an example - given the condition of the level of satisfaction of all groups of people, there is a particular level which is not according to the standard stated by economic pundits or economic thinkers as sufficient to have minimum comfortable Then if you assumed that an existence. increase in income of such population to. ensure better standard, then increase is minimal, then arithmomorphically there is an increase but in reality there has not been any relief. This is the point that is usually taken up by intuition and perception of the subject or thinker who wants to understand the real situation. It is interesting to note that Einstein stated categorically that intuition is a very important element in the

proper understanding of reality in the physical world.⁴ It is universally known today that in 1919 Einstein's theory of Gravitation experimentally was demonstrated and proved by Arthur Eddington of Britain in which he showed that the Sun's rays band according to the inference of the theory of gravitation. It was held as a great discovery in the field of physics. In his own room Albert Einstein when told about it by his assistant that such a thing happened did not show any emotion and his assistant asked, "Professor why are you not excited"? Einstein had answered at that time that "I knew intuitively that my theory was right. I would have been sorry for the god if it was proved otherwise." This is the clear case of the reliance on intuition to understanding science like physics. Georgescu -Roegens' critique of Arithmomorphism which I have outlined, and which I personally believe to be a great tool of methodological study has to be understood from two angles: first he is not against mathematical method or quantitative analysis because he himself was an expert of both but he thinks that widespread use of Arithmo-morphic tools for the ultimate analysis does not reveal the reality because of its nature of application of the real conditions of human existence. Therefore, the best solution is to find a dialectical method or dialectical way in which to combine the necessary part of Arithmomorphism with the necessary part of non Arithmomorphic tools. Let us take the case of biology. In spite of the fact that all elements that constitute life arithmomorphically when united, do not predict the life because there is a qualitative leap from Arithmomorphic edifice to the production of existence of life. There lies the importance of two things that is, intuitive

understanding and non- Arithmomorphic probing into reality without which our science, especially dealing with society and economy and which has its subject-human beings of different economic categories, some of which are not well endowed with the requirements of life can be understood correctly.

(B) Former Soviet Union and East European Socialist Economies : Methodological Approach of Research :

As is very well known to everyone today the socialist system that existed, I am not at this moment interested or even in deciding whether these economies were socialist or not. For the purpose of my investigation, especially in methodological field what I am interested in is the approach to understanding these economies. When I say that I am interested in understanding the economies what I mean is that let this be understood from a distance or I shall try to identify myself with a scholar of these countries who consider certain aspects of the economy within a comprehensive framework of socialistic economic planning and the existing paradigm. If I did not do that I consider that there are lapses in the scholarly judgement of economists or set of economists and which are dissimilar from the market economy all around the world. The first problem that a researcher used to face was the problem of languages. In Eastern Europe there are quite a few countries and Soviet Union was again another country with a different language and all the countries had the languages of their own without any common language between them if we leave aside Russian which used to be dominant in all these countries. A researcher of necessity had to

probe into the depth of these economies and while doing so must had to have knowledge of that language however basic and elementary it might be. By elementary I don't mean that the knowledge of language is such that it is of no use to understand economic literature. By elementary I mean the knowledge is not beyond what is needed to understand an economy through their writings in their own language, through their publications of books and scientific journals. This understanding of languages does not entail an understanding of literature or publications in other branches of knowledge. It is true that such efforts require tremendous amount of time but it is not possible to do scholarly work or scholarly study of Soviet Union and Eastern Europe without dispute. Why I have raised the question of Soviet Union is because Eastern European socialist countries came after the second world war. The socialist economy of Soviet Union existed from the day October Revolution became successful. I am not arguing at this stage whether it was revolution or Coup as some scholars do, but we cannot deny the effect of 1917 November onwards of the work of Soviet Union on the type of planning which came later to be known as Command type of planning and which existed till the period when the Eastern European economies came into existence. In fact even in the initial days of East European socialism, the command type of planning was in full force. A researcher without knowing the history socialism and its economic of experimentation cannot understand and cannot hope to understand what is happening in other socialist countries which came into existence later or much later. So, my method of investigation included first

learning the language and secondly equipping ourselves with capacity for research in the language of any socialist country. This issue became important because Gokhale Institute was the Center of research in East European Economies. Materials could be obtained as translation in English. The problem was this -if you could get one translated paper on say socialist central planning in any of these countries or all the countries together including the Soviet Union, the problem for the researcher was to find another article in the same language where perhaps the author has not agreed to the point made earlier in the article in English because the literature of translation used to include one particular article or paper out of a number of papers and then used to translate and the importance of the article used to be decided by the editor. But why should we depend as scholars on the decision of an individual without knowing other rejoinders or supplementary observa-tions of the development of the idea which has been included in that English article? If we could not do that in the strict sense of the term, a researcher could not call himself a researcher but simply an elaborater of some events written in a language which is not that of the countries of which we are interested to know. But it was not so easy for the method to be very much applied in the research of the center in East European Economies. Side by side, as has been mentioned, the Soviet economy was studied in-depth. The question that was most important while studying these economies was, what Paul Sweezy said, that the study of socialist economy is not exactly a study of such economies which were in existence. But at the same time it is a study of

development of society from one stage to another. If these economies did not exist for a long time and tumbled due to various circumstances then it does not follow that we should not study the origin of the process of development and later how these went out of existences as a scientific study. The first important piece that could be regarded as very important, was its application in socialist economy the paradigm of Marxian Economics that was actually intended to apply only to capitalistic economy. A question may be asked how a Marxist approach to post-capitalist economy is valid when Marx himself did not see any socialism or did not formulate any economic paradigm for a socialist economy. Paul Sweezy has said that the Marxist framework in the 60's-70's varied in content from the later phase of capitalism. Accordingly, it was no longer valid excepting in a few cases of capitalist development and he introduced or rather applied the paradigm of Thomas Kuhn whose famous book 'Structure of Scientific Revolution' pointed out that when there are crises in the intellectual foundation all around and on the basis of previous paradigm which was named as 'normal science', progress was not possible, a revolutionary science emerges and there is a shift in paradigm and to use his own expression a Gestalt shift. This Gestalt shift comes therefore in a period when a particular paradigm is rejected as tool of explanation of scientific phenomenon after a period of normal science which when becomes critical then the new paradigm comes forth due to the efforts of scientists. The paradigm of Marx has been called a revolutionary paradigm which is rather preceded by the normal scientific method.

The question is when the Marxist paradigm came in the 19th century, could Paul Sweezy say that it was a revolutionary. paradigm and a 'paradigm shift' from the pre-existent paradigm of market economies because in the 19th century there was no economy which superseded the market economy and embraced the Marxist model of economic explanation. One might say that Marx, as the Marxists claimed, explained capitalism in a different way and in a very scientific manner. So it was a revolutionary paradigm even granting the case that his theory of capitalism did not, whether in the ninetieth century or early twentieth century ever corresponded to the idea of transforming these economies towards a type of economy which satisfied the description of Marxist paradigm. As a result, Marxist methodology and Marxist paradigm became very valuable tools for the people and the population who wanted to oppose the painful method of capitalist development. It was rather a weapon against exploitation. This paradigm was a paradigm for opposition, and not for continuation of exploitation. It is interesting to note that Marx's own formulation of price which is known as a 'production price' was used extensively in Soviet Union and East European Socialist countries of the past. It was also his 'Theory of Value' which was extensively analysed and applied in socialistic economic principles. As a result, in any language of Eastern Europe or Russian from Soviet Union one could see and try to understand what efforts have been made in scientific writings to make Marxist paradigm applicable to socialist economies. It is not true that such an effort is baseless and meaningless. Today perhaps very few

persons with scholarly interest want to know about but the rise and fall of socialist economies of Europ including that of Soviet Union and try to go deeper into their mechanism of price formation, planning of economy of a comprehensive nature was first introduced by socialistic countries themselves and not in any other country then. One could see that an enormous amount of things which could be taken on this background. It could be said that a comprehensive study among other studies were completed in the Center for East European Economies in Gokhale Institute of Politics and Economics. One could say with pride that because the scholar had to consult both books and journals not only in English language but also in the languages of the countries, the study became authentic. The library was the best not only in India but I would say in Asia. The knowledge of languages as I have mentioned earlier including that of Soviet Union and of course East European countries could be regarded as one of the huge academic issues which included all of these economies into one particular study. I emphasize here that in the study as a precondition. I believed that to understand the economies there should be some amount of empathy. Without emphathetic approach it becomes impossible to understand or rather to go deeper into the different facets of an economy from afar. It could be said with satisfaction and without any immodesty that there is only another work of this type and that is by Professor Michael Kaser of Oxford University, St. Anthony's College who wrote the book on Economies of Soviet Union and Eastern European Countries. It has to be mentioned that I am emphasizing only the individual efforts.5

(C) Marx, Chernyshvskii and theory of non-capitalist development :

As is well-known, to all students of Marxist thought, Marx and Engles derived the theory of historical change from one society to another which has been known as the historical materialism in which it was declared that any particular social formation will crumble and from the debris will emerge another like say, a slave society would be replaced by a feudal society and then that would be replaced by capitalism because of the contradiction within the society between relations of production and productive forces. By relations of production Marx and Engles meant property relations, efforts applied to production, technology and method of production. So both of them thought and declared that it was scientifically derived from the experience of history the fact that ultimately capitalism would be superseded by socialism where there will be no more class conflicts or class differences in the strict sense of the term. Because in his theory of historical materialism it was the class war which was determining the force for change of society from one to the other. This class conflict was due to antagonism between mutual interests. As a result, Marx thought that the passage to socialism was inevitable and an inexorable law of history. Now the question is - what happened in history actually? One may recall the statement of Gramsci who declared or rather stated categorically that if one looked at the emergence of socialistic society before the second world war that is Soviet Union and even after the second world war he was referring to the Soviet Union only, then the predictions by Marx are proved to be

wrong. Marx said as the dialectical law of negation of negation that is negation of feudalism by capitalism and then negation of capitalism by socialism did not take place because in those countries which were regarded as socialist, that is socialist Soviet Union never had in the strict sense of term the developed capitalist economy and society. Marx even was called a 'bad prophet' because the simple reason is whatever took place was signalling progress of capitalism. From the middle of the nineteenth century capitalism started to show genuine progress. There was a question of whether one should stick to this Marxist prediction in the then developed capitalism or think of socialism.

From the middle of the nineteenth century a sociological dimension to the nature of consumption could be discerned in condition of capitalism at that time because of the differences in the degree of opulence in the society and because of availability of consumption goods in sufficient quantity and wider variety. Two distinct specificities could be identified in this period; first, there was no problem of saturation even from a theoretical point of view, because it was always possible to desire a commodity or type of consumption considered to be of a socially superior This striving in a broader stratum. perspective could be compared with that for 'conspicuous consumption', but still at a rudimentary stage. This also demonstrated a striving for some economic strata for transition to a higher level within the range of economic possibilities. In this situation, the saturation of such a group was due to biological constraints alone. On the other hand, the great mass of workers, historically, in spite of improved level of wages were unable to satisfy a level of

consumption beyond subsistence according to the standards of time. Secondly, in the case of the affluent, mainly the capitalists, in the past pursued only a single philosophy, that is, in the words of Marx, 'accumulate and accumulate' were now in a position where this pursuit became economically unsafe because of the emergence of business classes from the middle of nineteenth century itself. and gaining strength at the time we are talking about that is seventies of nineteenth century. In the case of wage-earners there was no question of saturation or diminishing utility. For them there was no question of a hierarchical structure of demand that tends to be guided by performance schedules in the market of consumption goods⁶. This shows that there was not only a stability of capitalism but the emergence of middle class. In my opinion, a middle class is a benign class as far as revolutionary thinking or actions are concerned. Marx was convinced after the Paris Commune when an attempt of the working class to seize power in 1871 was defeated by the ruling class. Marx was convinced that revolution in Europe or rather revolutionary change in the European economies would not be that easy. In the mean time the revolutionary movements in the Imperial Russia were gaining momentum every day and in the late sixties Marx started to learn Russian to get acquainted with the situation in Russia for the first time. There were secrete revolutionary groups in Russia which were not too unpopular as far as general understanding with regard to secret revolutionary groups is concerned. These groups wanted to bring a change of society in the Imperial Russia. Here importance comes the of N. G. Chernyshevskii. He was a radical in the days of revolutionary activities. He 'contemporary' edit used to (Soveremennik). This journal, inspite of the fact that it contained radical messages and radical undertones in the articles, had the largest circulation in Imperial Russia. This fact alone establishes the contention that Russian people especially the ordinary people including the educated class were just hoping for a change of substantial nature in the society. Chernyshevskii became the ideological leader of all the secret groups of radicals in Russia without a direct connection. The government did not find the situation very healthy. So they managed to bring Chernyshevskii to trial on the basis of concocted evidence and he was sentenced to prison and exile in Siberia. It was very saddening to know that he spent twenty-seven years of his life in prison and exile in Siberia and only released six months before he died in 1889. One of his most famous pieces that was published in the above journal, 'Philosophical prejudices against communal land ownership' is a part of his vast quantity of economic writings. He wrote on political theory, on history, literary criticism and he also wrote novels one of which was the most popular in the history of Russian literature or any writing upto that time since the days of invention of the Russian printing press. Marx was very much interested to know about the Russian situation after learning the Russian language but also of the ideas of Chernyshevskii. He was so much engrossed in learning Russian that his wife 'Jenny' wrote to Engles stating that learning Russian had became a life and death question to Marx and that he was neglecting his health. After learning a sufficient degree of Russian, Marx came to the conclusion that Chernyshevskii was a great thinker. Chernyshevskii's main contention could be stated in only three

statements: (a) in any development including social life, there are logical moments which are in intermediate stage: (b) if the conditions are favourable, then some of the intermediate logical moments can be by-passed and (c) in the case of economic transformation there is no need for capitalism to develop and society can go straight to socialistic economy from predominantly agrarian society. He also emphasized the point that economic development and capitalism and industrilisation were not synonymous terms. Development and modernisation could be achieved in socialism even without going through the path of capitalism.⁷ Now, this particular theory and the revolutionary ardour of Russian people and the ideological leadership that was emanating from Chernyshevskii's writings inspired Marx so much that he even said that the latter was an 'Apostle'. He had two photographs in his house; one of Engles and the other was of the Russian leader. He was ready to rescue Chernyshevskii from Siberia and sent one of the translators of 'Capital' in Russian to Siberia for arranging escape the of Chernyshevskii. His name was Lopatin and the second translator's name was Daniel'son. But unfortunately Lopatin could not fulfil the mission in Siberia. On the other hand, he was arrested by the police but fortunately for him he was not detained for a long time and was released. When Marx was asked by his followers that why was he deviating from his theory of historical materialism which was the real Marxist principle then Marx ironically replied to him that if that is Marxism then he was not a Marxist. In two of his letters Marx categorically stated that he was supporting and in favor of non capitalist approach to transition to socialism as was expounded by the great Russian. He even expressed the fact that he had great

for the respect for the brilliant ideas that Chernyshevskii had espoused in his revolutionary writings. The two letters that Marx wrote were addressed first to the journal, ' v'notes from the fatherland' (Otechestvennyi Zapiski) and the second one to a Russian follower of his, named Vera Zasulich. The first letter was circulated among Russian radicals during his lifetime and was published only after ... his death. In these two letters Marx completely agreed to the path that the Russian leader had expounded and thus became a joint or rather a combined effort at the ideological plane of both Marx and Chernyshevskii for evolving a paradigm of social transformation from one stage of society to another. He even wanted to write on Chernyshevskii in his fourth volume of capital and in a letter to Engles he expressed strong desire to do that. Marx was hesitant rather undecided in which volume to include this writings. Also he was always indignant at the Imperial Russian government about the treatment meted out to the Russian revolutionary. This is about the theory of non capitalist development in brief. If we look at the history of emergence of socialism, it will be very clear that most of the countries that embraced socialism first in Russia and then after the second world war in European and Asian Countries and elsewhere, were not capitalist or rather capitalism could not develop that much in these countries and actually there was bypassing of capitalism to enter socialist society. It is not the fault of the theory of non capitalist development that these socialist countries did not remain socialist for a long time. Most of these countries or rather most of the socialist countries perished along with the society. It was not the theory of continuation of non-capitalist path but the transition to socialism. Because continuation introduced some deficiencies due to perhaps political and economic weaknesses which could not be avoided

perhaps due to absence of democracy and inefficiency in the economy. If I again bring Thomas Kuhn's observations, then it will be clear that the theory of non capitalist development is actually a 'paradigm shift' or 'Gestalt shift' from normal scientific paradigm which was the historical materialism of Marx and Engles. Revolutionary paradigm of non- capitalist development remained for the last hundred years a Scientific zig-saw puzzle which was never solved although the pieces remained scattered here and there. The reasons are clear because of the fact that to understand how to solve a zig-saw puzzle one has to think deeply and must have strong empathy. Now when I am speaking of the scientific zig-saw puzzle I am using the expression 'scientifically' not in the positivistic sense but in a slightly broader perspective because the positivists never believe that any thing can be science unless it is of exact nature. Now, social science can not be of exact nature. Therefore, it can be said without any hesitation that any exploration or research with uncontes-table evidences to prove that the paradigm of non capitalist development was scientifically expounded by Marx and Chernyshevskii through the writings is definitely an effort which could be termed path-breaking. There have been attempts over the last few decades including one by Shanin but going through the literature one can notice that, there are important collections of some valuable documents and some opinions. I am sorry to say that the treatment of Chernyshevskii by Wada is rather perfunctory and inadequate.8 There is no political and analytical unity in the book. But there is no doubt that there has been meticulous effort in presenting the materials. Finally, I am glad to say that Marx was not after all a 'bad prophet' where the evidences have pointed out to the conclusion which we cannot doubt.

Concluding Remarks :

Probing deeper into the facts which emerge from research however challenging or painstaking that might be, creating a space of homogeneity from analysis of these facts out of a scatter of heterogeneous manifestation of events after identifying as a distinguished philosopher of science, has pointed out "the criterion of pre selection and thema" have been the foundation of my methodological position throughout. Within the methodological condition the method that comes in section 'B' is that one of the methods of study of the East European Economies was to at least as far as possible apply their own languages in the sense that reading their literature to understand the point of view.9 The same method has been obligatory for section 'C' in the article which led to the unfolding of undiscovered results for more than hundred years relating to Marx's Epoch-making paradigm of social change with Chornyshesskii.

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The house of Gopal Krishna Gokhale

Beyond Traditional Research Methods

I was in Gokhale Institute of Politics and Economics during 1958 to 1970. After passing M. Com. from the University of Pune in 1958, I received the scholarship from the Institute to undergo a one-year full time course in Research Methodology. After complet-ing this course, this scholarship was extended for 3 more years to do a Ph. D. in Economics. in the Institute. I worked under Prof. D. R. Gadgil and my subject of thesis was "Behaviour of Prices of Groundnuts in Regulated Markets in Maharashtra". After completing the thesis, I was employed in the Institute as Lecturer, to be promoted later to the level of Reader. During the course of my work in the Institute, I was deputed to Germany with the Ford Foundation and Alexander von Humboldt scholarships for 2 years to do a post-doctoral research on Agricultural Price Policies of EEC countries. Even after leaving the Institute in 1970, I continued to pursue Research as a career. For whatever I have achieved in life, I substantially owe it to the training in Research Methodology that I received in my formative years in the Institute and to the subsequent experience I gained there.

There is no doubt that Gokhale Institute is one of the pioneering institutions in India to recognize the importance of social science research and to initiate its systematic development by providing formal training in its methods. It also recognized that research in only one of its branch like economics requires a multi-disciplinary approach and that the development of economics depended also on the development of subjects like anthropology, sociology, psychology, political science, mathematics and statistics. Gokhale Institute also developed various tools of analysis, provided various facilities for analysis (like mechanical sorters and tabulators, calculating machines, etc.), encouraged data collection at the field level and its systematic compilation. It also stressed the importance of having a good source of reference material and took pains to develop one of the richest libraries for economics in India.

A. P. Kulkarni*

During the last forty years, there have been several changes in both the applications as also the methods of social science research methods. While initially, the social science research was more or less seen as useful for academic purposes, and at best for guiding some macro-level policy decisions on the part of the Government, today, it has become a major tool for decision making for both private as also public decision making processes. One of the emerging fields in India, for example, Marketing Research, covering is determination of market size and market share, assessing acceptability of changes in product design, packaging, pricing, distribution, brand impacts, brand loyalties, promotional measures and media mix, and overall assisting the decision making

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process in marketing and production. Similar research is also increasingly demanded by the human resources departments, finance departments and planning departments of the industries.

Education is another area where the demand for research is expanding. Here, the developments in the areas of psychology, sociology and anthropology are becoming critical. Similar increase in research is experienced in the field of public health and medical treatments. Several attempts of developments made by Non-Governmental organizations have also necessitated research in their effectiveness and replication possibilities. In fact, the need of research and systematic collection of information and its analysis is expanding in all areas of life and huge resources are being earmarked for enabling such research.

As the applications are increasing, various new types of social research are gaining ground. Besides traditional types of research, modern research covers "Ongoing Research", "Action Research", "Participatory Research", "Participatory Action Research", "Qualitative Research", "Forensic Research", "Ethnographic Research", "Neural Networks", "Research with Virtual Reality", and so on. Naturally, the new tools of data collection have also emerged with these new types. They include telephonic interviews, interviews with the hand-held computers, Group Discussions, interviews with the help of cameras, recorders, etc., observations of behaviour of the respondents, sensory methods, and so on.

During the last thirty years, an explosion of secondary information has also taken place. This not only includes a larger number of books, periodicals and reports; it also includes in-house generation of information which is assuming gigantic proportions because of the use of computers, and technologies like bar-coding, TV monitoring meters, and product-person identification systems. The vast resource of Internet has suddenly thrown new challenges for data mining and data interpretation.

Along with these developments, new analytical tools are also being developed. While computers with spreadsheet applications and data handling programmes assist in simple computations greatly. specialized PC based computer softwares both in private domain (like SPSS) and public or open source domains (like Open Stat) provide very sophisticated analysis using the tools like Factor Analysis, Cluster Analysis and Discriminant Analysis. Availability of digital maps from the Space Research Stations and computerized data like census information provide further impetus in using all this information for understanding human behaviour as also for decision making.

Along with the development of quantitative techniques, significant advances in qualitative techniques have also been made in the last two decades. The output from cameras, sound recorders and written records could now simultaneously be analysed, and some primary conclusions could now be drawn from such a large volume of data. Of-course, this development is still evolving and at present, restricted probably only to English language. Not many attempts are being made to develop the methodology for analysis of qualitative information in Indian languages. Even the quantitative tools are also restricted to English language.

Research is now slowly emerging as a rewarding career, with rising inclination to have in-house research departments, establishments of individual and specialized data banks, field data collection agencies, data analysing firms and software development companies. Unfortunately, no systematic training facility is available in India, providing short or long term courses in Research Methodology (on the lines of, say, Methodology Institute of the London School of economics) to foster these trends. This is both an opportunity as also a challenge for the Indian institutes promoting research in social sciences in the country. Such courses will not only be useful for India but also to other developing countries and besides satisfying the growing need of research, it will also improve the quality of post-graduate research in social sciences in the Indian Universities.



The old library hall after 100 years

Empirical Theory of Value

Rajas Parchure*

The quest of this paper is for a wholly empirical, operational and inclusive theory of value. Empirical in the sense that the theory should be founded upon precepts, postulates and constructs that have explicit empirical content. Operational in the sense that the technological, behavioural and institutional relationships should contain objective data that are amenable to description in terms of specific functional relationships. And inclusive in the sense that the theory should simultaneously cover the determination of growth and income distribution alongside prices and industrial outputs.

The economic system will be modeled as an interaction of three technologies

- 1. the technology of inter-industrial production as described by the Leontief-Sraffa system [Leontief (1941), Sraffa (1960)].
- 2. the technology of final consumption as described by Stone's linear expenditure system [Stone (1954)].
- 3. the technology of the organization of production defined by the authority relation articulated by Simon (1957).

It will be shown that the equations derived from the above determines a unique positive solution for

- 1. Relative prices of commodities
- 2. Absolute levels of industrial outputs
- 3. Growth rate of the economy
- 4. Functional and class distribution of income and property

Professor, National Insurance Academy, Pune

I would like to dedicate this paper to a legion of great teachers who taught us during 1979-82 and ever since. Those were golden years and it is no coincidence that the Golden Jubilee was celebrated in 1980 ! Prof. P. Venkataramaiah taught the practical beauty of linear economics and input-output analysis. Prof. Nilkanth Rath and Prof. Vikas Chitre guided us through the fascinating embroidery of neoclassical price theory. The late Prof. V.M. Dandekar taught Sraffa Systems and how to be skeptical of neoclassical theory. Profs. B.G. Bapat, S.V. Bokil, A.S. Nadkarni and B.S.R. Rao encouraged that skepticism in courses on international economics and public finance. Prof. Kalyan Dasgupta and the late Prof. Mrs. Kumud Pore conveyed the importance of egalitarianism in development economics. I imagine that each one of them would recognize their influence at various places in this paper.

2. Equations

Production takes place in a system of interdependent industries. In order to capture the continuous nature of industrial production as also to allow rates of profit

 $(\Sigma S_{ii} p_{i})r + \Sigma A_{ii} p_{i} + w_{k} L^{\bullet}_{Ki} + wL_{Li} = p_{i} B_{i} \quad i = 1, ..., n$ (1)

equations is⁽¹⁾

where S_{ji} is the stock and A_{ji} is the flow of commodity *j* used in the production of commodity *i*, B_i are the outputs and *r* is the rate of profit. The labour term has been split into the remuneration for ownermanagers and workers – subordinates. The authority relation and the span of control determines w_{k}/w i.e. the relative wage of the owners-managers and workerssubordinates. This can be used to translate units of managerial work into units of manual work, $W_k L_{ki}^{*} = WL_{ki}$ so that total labour employed by industry *i* may be written as $L_i = L_{ki} + L_{Li}$

earned on capital to differ from on-cost mark

up rates we shall include stocks as well as

flows. Then the system of supply / price

One of the unknowns in equations (1) may be fixed as a standard of value or *numeraire* – it could be one of the prices *a la* Ricardo-Walras or it could be the wage rate *a la* Smith – Keynes. Let us suppose w=1 and measure all values in units of labour commanded.

The national income is,

$$= r K + L$$
$$= r(\Sigma\Sigma S_{ji} p_i) + \Sigma L_i$$
$$= p_i F_i$$

where $F_i = B_i - \Sigma A_{ji}$ are physical surpluses of commodity *i* available for final consumption or a ccumulation after meeting replacement requirement. The

Y

national income is distributed between workers and capitalists; if μ is the proportion of capital stock owned by capitalists their incomes are,

$$Y_{K} = L_{K} + \mu r K$$

$$Y_{L} = L_{L} + (1 - \mu) r K$$
(2)

Linear expenditure systems that describe final consumption are based on the idea that people usually have a fixed "subsistence" component in their consumption and spread the variable portion of their income over the commodities in proportions that are determined by tastes, preferences and the strengths of substitutability between commodities. Thus,

$$= p_{i}B_{iK0} + \alpha_{i}(Y_{K} - \Sigma p_{i}B_{iK0})$$

= $p_{i}B_{iL0} + \beta_{i}(Y_{L} - \Sigma p_{i}B_{iL0})$ $i = 1, ..., n$ (3)

enditures of s. Letting he marginal propensities to consume, the saving by the two groups would be

$$S_{\kappa} = (1 - \alpha)(Y_{\kappa} - \Sigma p_{i}B_{i\kappa_{0}})$$
$$S_{L} = (1 - \beta)(Y_{L} - \Sigma p_{i}B_{iL_{0}})$$

ershipµitself savings of netti (1962)].

$$\frac{1}{1} = \frac{S_K}{S_L} = \frac{(1-\alpha)(wL_K + \mu rK)}{(1-\beta)(wL_L + (1-\mu)) rK}$$

c equation = B_{L0} and ion is

$$+[(L_{L} + rK - B_{L0}) + (L_{K} - rK - B_{K0})] \mu$$
(4)
_{Ko} - L_k) = 0

Intrequires that

$$S_{K} + S_{L} = I$$

$$S = \sum p_{i}(B_{i} - A_{i} - B_{iF})$$

$$= \sum p_{i}(F_{i} - B_{iF})$$
(5)

 $B_{iK} + B_{iL}$, i.e. the value of neeting final

economy g = S/K would be

$$\frac{\chi)(Y_{K} - \Sigma p_{i}B_{iK0}) + (1 - \beta)(Y_{L} - \Sigma p_{i}B_{iL0})}{\Sigma \Sigma S_{i}p_{i}}$$
(6)

y that the	which has been called the Pasinetti Paradox
tion (4) into	when it continues to appear even in the
result in	presence of saving by workers. This paradox
equation,	does not appear in our system of equations

because of our assumption that ownermanagers earn a part of their income in the form of wages. If owner-managers are not assigned wage incomes equation (4) becomes linear in μ and

The assumption of constant returns to scale implies that saving will be allocated for new capital formation between industries and between the commodities constituting the capital stock of each industry on a "proportionate" basis, i.e. proportionate to the value of

 $\frac{F_i - B_{iF}}{S_i} = g$

In other words the gross outputs B_i must be sufficient to (1) replace flow requirements of the economy A_i , (2) meet final consumption demand B_{iF} and (3) gives $\frac{(1-\beta)L}{K} = (\beta - \alpha)(1-\mu)r$ which when substituted in equation (6) results in $g = r(1-\alpha)$ irrespective of savings behaviour of workers.

that constituent of the capital stock in the total capital stock. Also constant returns to scale implies balanced rate of growth of all sectors so that the "own-rates of growth" of all commodities must be equal to one another and to the growth rate of the economy,

$$\forall i = 1, \dots n \tag{7}$$

meet new investment requirements ΔS_{ii} such as will give a uniform growth rate g. This gives a system of equations to determine outputs⁽²⁾,

(8 a)

$$(\Sigma S_{i} x_{i})g + \Sigma A_{i} x_{i} + B_{ir} = B_{i} x_{i}$$

which is the dual of system (1). To the n equations in (8 a) may be added the equation,

$$\Sigma L_i \mathbf{x}_i = \Sigma L_i \tag{8b}$$

Then the system of equations (8) determine n+1 unknown, the rate of

The equations (1), (3), (4), (6) and (8) describe the economic system and suffice to determine the unknowns. The unknowns are n prices (in labour commanded) n final consumption levels, n

The conditions for a unique positive solution of the unknowns are three,

growth g and n scale multipliers x_i of the n industries.

gross outputs, the rate of profit, the rate of growth and the ownership share, i.e. 3n+3 in number. And there are exactly 3n+3 independent equations.

(i) Hawkins – Simon condition viz. $B_i \ge A_i = \sum A_{ii}$ must hold for system (1)

(ii) Propensity to consume of [McKenzie (1960)]. In general capitalists must be less than of workers, $\alpha < \beta$ Condition (i) ensures that the primal and dual systems for the price and output determination viz. equations (1) and (8) have a dominant diagonal implying unique positive solutions for relatives prices and absolute outputs

We have a system of simultaneous nonlinear equations which can only be

3. Example

To get a flavour of specialities generalities consider the and following economic system,

condition (ii) obtains if the per capita income of the capitalists is greater than that of workers. The authority relation ensures $w_{k}/w > 1$ and span of control implies $L_{\rm k}/L_{\rm r}$ <1 and these in turn ensure that capitalists will earn a higher per capita income than workers.

solved by a process of trial and error. The algorithm is illustrated below.

$$(2p_1 + 3p_2)r + 5p_1 + 5p_2 + 3w_k + 41w = 25p_1$$
$$(1p_1 + 3p_2)r + 2p_1 + 3p_2 + 2w_k + 29w = 25p_2$$
$$(2p_1 + 2p_2)r + 3p_1 + 2p_2 + 5w_k + 50w = 35p_3$$

and suppose commodity 1 to be purely a capital good, commodity 3 to be a purely consumption good and commodity 2 to

serve both as a capital good and as a consumption good. Suppose the final consumption parameters to be,

 $B_{2L0} = 2$ $B_{2k0} = 1$ $\alpha_2 = 0.15$ β , = 0.3 $B_{310} = 3$ $B_{3k0} = 5$ $\alpha_3 = 0.10$ $\beta_2 = 0.5$ β = 0.8 $\alpha = 0.25$ $(1-\alpha) = 0.75 (1-\beta) = 0.2$

If $w_k/w=3$ the incomes of capitalists and workers would be,

$$Y_{\kappa} = wL_{\kappa} + \mu rK = 30w + \mu(5p_1 + 8p_2)r$$
$$Y_{L} = wL_{L} + (1 - \mu)rK = 120w + (1 - \mu)(5p_1 + 8p_2)r$$

To find the equilibrium of the economic system, (i.e. that state in which all markets are cleared and the economy is

on a growth path) we proceed in the following steps. Suppose w=1 is the numeraire.

1. Plug in a hypothetical value for the rate of profit say r=r,=0.25 Calculate prices from the system of price equations (1) 2

- 3. Calculate the value of capital stock K and the national income Y
- 4. Find the corresponding value of $\mu = 0.507$ from equation (4) and find Y_k and Y_L (from equation 3).
- 5. Calculate the final consumption demands $B_{2F} = 19.202$ and B_{3F} .
- 6. Calculate the growth rate and output multipliers that equate the demands to the supplies of the intermediate goods given the level of activity in the pure consumption good, commodity 3 (equation 8).

$$(2x_1 + 1x_2 + 2)g + 5x_i + 2x_2 + 3 = 25x_1$$

$$(3x_1 + 3x_2 + 2)g + 5x_i + 3x_2 + 3 + 19.202 = 25x_1$$

$$50x_1 + 35x_2 = 85$$

The values are g=1.247, $x_1 = 0.608$, $x_2=1.59$

7. Calculate the rate of profit corresponding to g, using equation (6) to get $r=r_2 = -0.468$ and use the bisection method $r_3=(r_1+r_2)/2=-0.109$ and plug it as the new trial value for the rate of profit. Multiply equation 1 by x_1 and equation 2 by x_2 in the price system and repeat steps (1) – (7) until the solutions converge.

In about 5 to 6 iterations the final equilibrium state is determined.

 $(1.15p_{i} + 1.73p_{2})r + 2.88p_{1} + 2.88p_{2} + 1.73w_{k} + 23.64w = 14.37p_{1}$ $(1.59p_{1} + 4.78p_{2})r + 3.19p_{1} + 4.78p_{2} + 3.19w_{k} + 46.26w = 39.80p_{2}$ $(2p_{1} + 2p_{2})r + 3p_{1} + 2p_{2} + 5w_{k} + 50w = 35p_{3}$

with $p_1 = 4.57$, $p_2 = 2.91$, $p_3 = 2.62$, g = 1.12, r = 1.49, K = 46.37, Y = 218.85, $\mu = 0.372$ Observe that $g \neq r(1-\alpha) = 1.1175$; it is slightly greater showing the influence of saving by capitalists from their wage income. Of the gross output of 39.80 units of commodity 2, 9.66 units are used for replacement purposes, 20.60 are used for final consumption and 9.53 are used for new investment.

The wage bills are 29.76 for managerial work, 120 for manual work with a total of 150.66. The profit shares of capitalists and workers are 25.70 and 43.38 so that their incomes respectively are 55.46 and 163.38. Note that the per capita income of capitalists 4.38 is greater than that of workers 1.3615 which basically justifies their lower propensity to consume.

The mark-up rates on prime cost $m_i = rK_i/C_i$ in the three industries are

 $m_1 = 0.2895$, $m_2 = 0.374$, $m_3 = 0.263$, where C_1 is the material plus wage costs

When there is more than one pure consumption good it is necessary to calculate the quantities demanded and move the quantities supplied in the direction of the quantities demanded in each iteration. This changes the values of and required in the consumption goods industries in each interaction and must be used in the output system above.

Only space constraints prohibit a full exposition of the comparative static viz. the effects of changes in technology, tastes, saving habits and changes in organizational design on the economic verities. It prohibits also a full exposition of the implications of the roughly pyramidal hierarchies that are used to manage production in real societies and which have a direct bearing on the personal distribution of income in the society. [Scarf (1982)]. And of course there are other limitations such as the persistence of different own-rates of profit in equilibrium, the inability to determine the competitive rate of profit and the difficulties of modeling capital accumulation and economic growth.

4. Discussion

Economic theory is necessarily required to co-ordinate the "hard" and the "soft" aspects of social production, i.e. supply and demand sides. The hard side consists of the resource endowments and the methods of production, i.e. science and technology. The soft side is made up of tastes, preferences, expectations and the power relationships in society, i.e. psychology, sociology and politics. The hard side is quantitative whilst the soft side is qualitative. Neoclassical general equilibrium theory [Arrow and Debreu (1954)] co-ordinates the two sides by proving some general existence theorems. The algorithm for actually determining the equilibrium turns out to be painfully complicated even in the most trivial of situations (e.g. for a 5 agent economy 6000 iterations are required for purely exchange economies), let alone a real economy.

The theory presented in this paper is well within the general equilibrium tradition in that it uses production functions that are homogenous of degree 1 and demand functions that are homogenous of degree 0. It is different in three respects. First, by using empirical functions that have specific mathematical form it is able to prove existence of equilibrium as well as give a constructive algorithm to determine that equilibrium numerically, and that too at the level of the whole economy. Second, it is free of the allegation of modeling the economic system as a one-way avenue from 'factors' to 'commodities'. Third, unlike the standard theory, the demand equations used here contain realized income as an explicit determinant alongside prices. As Clower (1965) would put it, demand equations are "income-constrained" in the manner of Keynes (1936) so that there is no of full-employment presumption conditions.

In closing this paper the readers' attention may be drawn to three distinctive features of the theory presented. Firstly, observe that the Pasinetti paradox, i.e. the idea that the relationship between the growth rate and the rate of profit is unaffected by saving habits of workers, simply does not arise. Also, capitalists' propensities to consume and save come to depend on their per capita incomes; these cannot be manipulated by them of their free will and hence Tobin's (1960) satirical criticism of the Cambridge equation stands dissolved.

Secondly, the theory can readily be used to describe the behaviour of the economic system in disequilibrium. For instance, in the state in which it was initially depicted in section 3 the economy was in disequilibrium as is evidenced by the inequality of the "own rates of growth" and the "own rates of profit". Industries producing commodities with high own rates of profit will realize low rates of profit due an excess of supply over demand and vice versa. They will contract output while industries with low own rates of profit will expand until equilibrium reached. Indeed it is possible to determine how the forward prices of commodities deviate from their spot prices in the situation of disequilibrium; commodities with high own rates of profit would stand at a forward discount while others stand at premium. As supplies adjust to demand these discounts and premia would disappear.

Thirdly, since the theory uses inputoutput matrices and linear expenditure systems as its basic inputs and these have (or can readily be) estimated for most economic systems, it can be put to practical application for planning for growth and income distribution in mixed economies that give liberal scope for markets to operate.

Notes

1. The Sraffa equations bring out the role of capital-to-labour ratios in determining the movement of relative prices consequent upon changes in the rate of profit. In our equations the stock-turnover ratios will also have an influence on relative prices besides the capital-labour ratios. Also, the shape of the wage-profit curve, though it will be necessarily downward, will also be affected by the stock-turnover ratios.

2. The system of equations that determines the industrial outputs is generalization of sorts of Sraffa's standard system. The *raisond'etre* of the standard system is to define the standard commodity to be used as a numeraire for the prices and the wage. The standard commodity. consists only of basic commodities, i.e. those commodities that are directly or indirectly used in the production of all commodities. The standard system will have to be redefined in the following way.

$$(\Sigma S_{ij} x_i) R + \Sigma A_{ij} x_i = B_i x_i$$
$$\Sigma L_i x_i = L_B$$

where R is the maximum rate of profit (corresponding to a zero wage) and L_B is labour employed in the basic good industries. However, the equations that determine industrial outputs will contain all intermediate goods, whether basic or not.

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The Institute Campus

Abstract: The international community through its collaborative efforts has initiated a programme of developing "Standards and Codes" covering a number of areas of economic and financial policy. The principal aim of this exercise is global financial stability through better information and improved governance of financial systems. India is much ahead of other emerging economies in the initial identification and implementation of relevant "Standards". The effort should now focus on sensitizing the public authorities and various stakeholders to "critical" issues involved in the process to secure a favourable public mindset towards the necessity of change.

Introduction

Over the past twenty years, there have been several examples of financial crises that threatened a wider systemic damage. From Mexico (1982) through other Latin American debt crises of the 1980s, to Mexico again in 1994 and 1995, and then the East Asian debt problems of 1997 and 1998 to Russia in 1998 and Brazil in 1999 - all called for intervention by the international financial institutions and/or by national authorities to control the effects of potential contagion. A major lesson learnt from these episodes was that in most of these countries either the "policy" or "transparency" about the policy-making process fell short of a recognized good practice. There were certain features of the financial infrastructure that had left their

financial systems excessively vulnerable.

However, there were many common experiences, which allowed general lessons to be drawn and the recent work on "international standards and codes" could be partly seen as a response to this felt need.

In the past, "standards and codes" were at the discretion of individual countries. But after these crises, more centralized arrangements are being worked out to monitor different countries' progress towards adopting and implementing these standards.

Need for Common Standards and Codes

Increasing inter-linkages as a result of globalisation and internationalisation have created a need for reassurance that every participant is playing by broadly the same rules and not exposing others to unreasonable risks. Furthermore, developments in telecommunications and computer-based technologies have made possible quicker transmission of financial shocks, which could be more damaging than that would arise from pure trade effects. Moreover, the significance of private capital flows has increased in the last decade in both developed and emerging markets. It is observed that highly leveraged large private corporate entities can have significant adverse impact on efficiency and stability. The principal aim of the "Standards and Codes" exercise is global financial stability through better information and improved governance of financial and non-financial corporate systems.

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Financial Stability Forum (FSF)

The FSF was convened in April 1999 by the G-7 finance ministers and central bank governors to promote international financial stability through international co-operation in financial supervision and surveillance. The FSF brings together national authorities responsible for financial stability, financial institutions, sector-specific international groupings of regulators and supervisors and committees of central bank experts.

The FSF has drawn together, in its compendium, the various economic and financial standards that are now accepted as relevant to sound, stable and wellfunctioning financial systems.

The FSF has identified 73 standards out of which 12 were selected as core standards in the three areas of "macroeconomic policy transparency", "institutional and market infrastructure" and "financial regulation and supervision".

The nature of these standards differs for each area. For example, in terms of "macroeconomic policy transparency", the standards do not deal with the macro policy details but about information provision and disclosure procedures. In the case of "institutional and market infrastructure", the standards are more prescriptive though in terms of broader principles. In the area of "financial regulation and supervision", it is a mixture. There are broad principles but few specifics on implementation. Adherence to "standards and codes" in these three areas is perceived as a fundamental step in reforming the international financial architecture.

Standards and Codes: 12 Key Standards

In specific terms, the 12 key

standards are as follows. The names of issuing authorities for these standards are given in the brackets following the information on "Codes".

(A) Macroeconomic Policy

Transparency

- 1. Code of Good Practices on Transparency in Monetary and Financial Policies (by International Monetary Fund)
- 2. Code of Good Practices in Fiscal Transparency (by International Monetary Fund)
- 3. Special Data Dissemination Standards / General Data Dissemination System (by International Monetary Fund)

(B) Institutional and Market Infrastructure

- 1. Insolvency (by World Bank)
- 2. Principles of Corporate Governance (by Organisation for Economic Cooperation and Development)
- 3. International Accounting Standards (by International Accounting Standards Committee)
- 4. International Standards on Auditing (by International Federation of Accountants)
- 5. Core Principles for Systematically Important Payment Systems (by <u>Committee on Payment and</u> <u>Settlement Systems at BIS</u>)
- 6. Forty Recommendations of the Financial Action Task Force (by Financial Action Task Force on Money Laundering)

(C) Financial Regulation and Supervision

- 1. Core Principles for Effective Banking Supervision (by Basel Committee on Banking Supervision)
- 2. Objectives and Principles of Securities Regulation (by International Organisation of Securities Commissions)
- 3. Insurance Supervisory Principles (by International Association of Insurance Supervision)

The International Monetary Fund (IMF) is in the lead in conducting assessments in respect of the data dissemination standards, the codes on fiscal, monetary and financial policy and transparency. The World Bank leads on the accounting, auditing, corporate governance and insolvency standards. The IMF and World Bank jointly undertake the responsibility of assessing compliance with the codes on banking supervision, securities regulation, insurance supervision and payment systems as a part of their "Financial Sector Assessment Programme (FSAP)". The FSAP is primarily designed to help countries enhance their resilience to financial crises. In FSAP assessments, the experts from the standards' setting bodies, national supervisory agencies and central banks participate and try to identify strengths, vulnerabilities and risks in the financial sector to make a judgment on how risks and vulnerabilities are being managed. This "judgment" is then being used to determine the financial sector's needs for developmental and technical assistance to guide the future policy actions. A range of tools and techniques including stress tests and analyses of macro-prudential indicators are being used in these assessments. However, the issues addressed in each FSAP are primarily guided by countryspecific circumstances and reform priorities.

Specific Concerns for Developing Countries

In the debate over the effectiveness of these international "Standards and Codes", it is repetitively pointed out that developing countries, in general, have limited participation in the process of the standard setting. The underlying reality is that many of these standards are derived from the benchmarks appropriate to developed countries and their application to developing countries is a potential source of competitive disadvantage for them.

It is also felt that there is an asymmetric treatment given to lending (developed) and borrowing (developing) countries under the "Standards and Codes". While the developing countries are expected to follow rigorous transparency rules, this is not necessarily expected of the lenders – the developed countries.

Reisen (2002) has shown that private capital flows to developing countries have been declining steadily since the process of implementation of "Standards and Codes" has begun. So there is a question whether investors are not paying enough attention to "Reports on Observance of Standards and Codes" (ROSC) prepared by the IMF on different countries on a regular basis.

Indian Case

India represents a special case among emerging economies. As a result of the massive economic liberalization set in motion in 1991-92, the country has restored the higher growth momentum of the decade of 1980s since the year 1993-94, and managed to reduce sharply the volatility in its GDP growth (Kelkar, 2004). Its banking system is stable and has been assessed to be in high compliance with the relevant core principles by the FSAP of the IMF. The Reserve Bank of India's (RBI's) approach to prudential regulation has always been one of gradual convergence with international standards with suitable country-specific adaptations. During the decade of 1990s, when there were too many occurrences of banking crises in emerging economies, Indian banking system displayed ample resilience to exogenous shocks (Udeshi, 2004).

In many developing countries, the "Standards and Codes" process was influenced by a crisis. But India is an exception to this. In our country, the financial sector reforms did not originate with "Standards and Codes", rather the "Standard and Codes" self-assessment process grew out of a reform process that began in the 1990s.

Indian Achievements in Implementing "Standards and Codes"

The official stance of India on implementation of "Standards and Codes" is as follows.

In a developing country like ours the Government or the Regulator of the Banking System have to shoulder the dual responsibility of both "market development" and "avoidance of market failure". In this sense, the superior information availability achieved through the implementation of international "Standards and Codes" is of paramount importance to us. Furthermore, compliance with related "Standards" would help us in developing a mechanism for compilation of early warning indicators that would facilitate a timely action at the early sign of vulnerability. Also, implementation of "Standards" would enable compilation and monitoring of information both on aggregated basis across all financial

institutions and on systemically important individual institutions. This is critically important for the systemic stability.

In order to implement international financial "Standards and Codes" in India and to guide the overall process of appropriate changes in respect to various segments of the financial system, the Reserve Bank of India in consultation with Government of India, in December 1999, constituted a 'Standing Committee on International Financial Standards and Codes' under the Chairmanship of Deputy Governor, Reserve Bank of India and Secretary, Economic Affairs, Government of India as Alternate Chairman. This Committee, in turn, had constituted 10 Advisory Groups comprising eminent experts not generally holding official positions in Government and other regulatory bodies. This process was supposed to result in an objective, independent and "external" assessments within the confines of the domestic economy.

These 10 advisory groups have set out a roadmap for implementation of International Standards by taking into account the existing level of compliance, the cross-country experience, and the legal infrastructure.

For instance, the "Group on Banking Supervision" has found the level of compliance in India of a higher order in relation to the principles of Basel Committee on banking supervision. The "Group on Bankruptcy Laws" has strongly recommended a comprehensive bankruptcy code including cross border insolvency and the repeal of SICA (Sick Industrial Companies Act). The "Group on Corporate Governance" has made recommendations relating to the rules and responsibilities of Boards and advised amendments to the Companies Act. The "Group on Data Dissemination" has observed that India compares favourably with many other countries and has proposed compilation of forward-looking indicators.

"Group The on Fiscal Transparency" has felt that India meets the IMF's Code of Good Practices on Fiscal Transparency but has recommended amplifying the scope of Fiscal Responsibility Legislation in order to include the essential elements of the Budget Law. The "Group on Insurance **Regulations**" has recommended flexible minimum capital requirements depending on the class of business. With regard to acturial and solvency issues, the Indian standards are found to be at par with international norms. The "Group on **International Accounting and Auditing** Standards" has set out an agenda for the future for convergence in auditing and accounting practices. It has recommended a "Single Standard Setting Authority" and the need for convergence of corporate and tax laws.

The "Group on Transparency in Monetary and Financial Policies" has recommended "inflation" as the single mandated objective for the Central Monetary authority and also necessary autonomy to such authority. The "Group on Payments and Settlement" has recommended legal reforms to empower the RBI to supervise the payment and settlement system, application of the Lamfalussy standards to deferred net settlement (DNS) and introduction of Real Time Gross Settlement System (RTGS has already been achieved in Indian banking system). This Group has also recommended the setting up of the Clearing Corporation and a Separate Guarantee Fund for foreign exchange clearing. The "Group on Securities Market Regulation" has emphasized the need to strengthen interregulator cooperation by comparing India with the International Organisation of Securities Commission's (IOSCO) principles.

Thus so far India has made considerable progress – (1) in the identification of international "Standards and Codes" in relevant areas of operation, (2) in undertaking expert assessment regarding their applicability, including comparator country evaluation and, (3) in building up of possible course of action for the future.

Future Steps

India has in principle accepted the international "Standards and Codes" in the interest of its own financial stability. Though it is understood that progress in implementation of "Standards and Codes" might make only a limited contribution to the "objective" of preventing financial instability, it is felt that these "Standards and Codes" have been useful for benchmarking progress towards development and reform of financial system in several countries.

After having done the basic groundwork, now there is a need to sensitise policymakers, regulators and market participants to the issues involved and to seek the wide debate on various issues to generate a broad consensus on implementation of a universally recognised set of codes and standards.

It is also necessary to impress upon the private sector to comply with these "Standards" to improve the robustness of the financial system.

It is also necessary to strongly

negotiate the interests of developing countries in every possible international forum on "Standards and Codes". For instance, the issues like "asymmetry" in the adoption of transparency rules by developed and developing countries were mention. It is felt that timely information on the "share" of a portfolio allocated by financial institutions headquartered in mature countries to a particular developing country and the time period in which this share would be reached and maintained would enable that developing country to appropriately plan the financing of its resource gaps.

There is a tendency to focus excessively on the immediate goal of attracting more foreign capital inflows at the cost of neglecting more fundamental issues that matter for financial stability. In general, the capital inflows attracted by a particular country are influenced by the "sovereign risk rating" given to that country by the international credit rating agencies. These credit rating agencies primarily look at the "Standards" on data dissemination, banking supervision, overall health of the financial sector, fiscal transparency, etc. Information on official reserves and international investment positions is also important for them. But other equally important issues like "Corporate Governance" are not attached much significance in the context of "Sovereign Risk" rating. It is, therefore, the vital responsibility of the policymakers and regulators to develop sound systems for corporate governance.

Finally, it must always be remembered that international "Standards and Codes" are just a necessary but not a sufficient condition to achieve financial stability.

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Economic Reforms and the Constitution

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Since 1991, the Government of India embarked upon a major policy shift in favour of allowing private initiative to enter spheres which till then had been exclusively owned and run by the State enterprises. These spheres were power, telecom, electronic media, insurance etc. Further it adopted the policy of privatization of such of the existing public sector enterprises which did not belong to the core areas or which incurred heavy losses. The policy during the Nehruvian period of placing the public sector at the commanding heights of the economy had been out of pragmatic rather than ideological considerations. Private capital was shy and investment was not likely to be in enterprises which required longer gestation. Further, some enterprises were expected to plow back their surpluses for development. However, the situation changed during the Eighties and a gradual change in the policy was visible. Having established the industrial base, the Indian economy looked ahead for a rapid growth that called for a new approach towards private business and industry. The control apparatus of the State had grown to heavy and had led to various adverse effects such as corruption and lack of initiative on the part of the people. The exclusive State sector model had outlived its purpose and it was felt that many enterprises could be run more efficiently under private management subject to State regulation. The State regulation had to be more professional, less

bureaucratic and more flexible. The Supreme Court observed in Secretary of Ministry of Information and Broadcasting v. Cricket Association of Bengal¹ that regulation should be by a public authority as distinguished from a government authority. A public authority as distinguished from government authority according to the Court meant an authority "whose constitution and composition must be such as to ensure its impartiality in political, economic and social matters, and in all other public issues."²

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The economic reforms therefore meant the following two things: (1) disinvestment from public enterprises which did not run in profit or which could run with greater profit if privatized; (2) allowing private initiative in areas which till then had been reserved exclusively for the public sector and (3) to weed out unnecessary controls and provide for facilitative regulatory systems which protected consumer and public interest.

How far are such economic reforms consistent with the Constitution which in its preamble declares India as a sovereign socialist secular democratic republic? This question came before the Supreme Court indirectly in some matters. The reforms were never challenged as being against socialism mentioned in the preamble. We shall examine some decided cases and also speculate as to what will happen if they were questioned with reference to socialism.

- 1 (1995) 2 SCC 161
- ² Id. p. 177

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Socialism and the Constitution

It may be contended that "socialism" was added to the preamble by the Forty Second Constitutional Amendment in 1976. However, such addition was upheld by the Supreme Court³ and it had not been objected to as being not contemplated by the original Constitution. The original intention of the Constitution makers has never been held to be binding on the interpretation of the Constitution.⁴ However, socialism was not some thing with which the makers of the Constitution were not familiar. Various directive principles of state policy [DPs] visualize social and economic changes leading to egalitarianism. Although the Constitution envisioned a welfare state when it mandated the State "to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life."5 It went beyond welfarism when it asked the State to "strive to minimize the inequalities in income and endeavor to eliminate inequalities in status, facilities and opportunities, not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations."⁶ Article 39 lists the following objectives : (a) that the citizens, men and women equally, have the right to an

adequate means of livelihood; (b) that the ownership and control of the material resources of the community are so distributed as to subserve the common good; (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment; (d) that there is equal pay for equal work for both men and women; (e) that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength; (f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment. The State had to provide for the right to work.⁷ provision for just and humane conditions of work and maternity relief,⁸ living wage for workers,⁹ participation of workers in management of industries,¹⁰ free and compulsory education for children below the age of 14 years,¹¹ promotion of educational and economic interests of the Scheduled Castes and Scheduled tribes,¹² to raise the level of nutrition and the standard of living and to improve public health,¹³ organization of agriculture and animal husbandry on modern and scientific lines,¹⁴ and protection of environment and safeguarding of forests and wild life.¹⁵ These directive principle together give meaning and content to the word "socialism" in the

⁷ Art. 41 ⁸ Art. 42 ⁸ Art. 43

¹⁰ Art. 43A ¹¹ Art. 45

- ¹² Art. 46
- ¹³ Art. 40

³ Minerva Mills v. India AIR 1980 SC 1789

⁴ See Kesavanand Bharathi v. Kerala AIR 1973 SC 1461 where it was held that Parliament's power to amend the Constitution given by article 368 did not include the power to tamper with or destroy the basic structure of the Constitution. This interpretation was against the original intention which was to give unlimited constituent power to Parliament. See S.P. Sathe, Judicial Activism in India: Transcending Borders and Enforcing Limits, chapter 3. (2002, OUP)

⁵ Art. 38 (1)

⁶ Art. 38 (2)

¹⁴ Art. 48

¹⁵ Art. 48A

preamble. Although such directive principles of state policy are not enforceable by any court, they are "nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making law."¹⁶

Fundamental Rights

The Constitution being a liberal document also guarantees certain fundamental rights [FRs] to persons. These are: right to equality [Art. 14]; right to freedom of speech and expression, right to assemble peacefully and without arms, right to form association, right to move freely within the territory of India, right to reside and settle in any part of India and right to practise any profession or to carry on any trade, business or occupation [Art. 19(1)]; right not to be tried for the same offence more than once [Art. 20(1)]; right not to be punished by a retroactive penal law [Art. 20 (2)]; right not to be compelled to give evidence against oneself [Art. 20(3)]; right not to be deprived of life and personal liberty except according to procedure established by law [Art 21]; rights of persons arrested to be given grounds of detention and to be produced before a nearest magistrate within twenty-four hours and be given access to a lawyer of their choice [Art. 22 (1) and (2)]; rights of persons arrested under the law of preventive detention [Art 22 (4) to (7)]; right against exploitation [Art. 23]; right of children not to be made to work in hazardous occupations [Art. 24]; right to freedom of religion [Art. 25]; rights of religious denominations [Art. 26]; right not to be subjected to any tax for the maintenance of any particular religion [Art. 27]; right not to be compelled to attend

DPs and FRs - Judicial Interpretation

The Supreme Court had started with a low priority for DPs when it held that when there was a conflict between FRs and DPs, the former must prevail.¹⁷ However, in later years, the Court interpreted the FRs liberally and held that both FRs and DPs were not antagonistic to each other but were complementary and had to be read as an integrated code.¹⁸ A liberal construction of the fundamental rights helped incorporate many social and economic rights within the fold of the enforceable fundamental rights. The conflict between FRs and DPs was similar to the conflict between civil and political rights and social and economic rights. At the global level, the Western countries and particularly the United States laid emphasis on civil and political rights and the socialistic countries laid emphasis on social and economic rights. Many countries of Europe, however, have now veered round to the view that there is no conflict between the two and that they had to be complementary to each other. Professor Amartya Sen¹⁹ conceptualized development as freedom which means freedom from oppression as well as from economic exploitation. The FRs in the Indian Constitution also include freedom

religious instruction in an educational institution [Art. 28]; right of every group of people to conserve their distinct language and culture [Art. 29(1)]; right not to be denied admission to any educational institution on the ground of religion, race or caste rights of religious and linguistic minorities [Art. 30] and the right to move the Supreme Court for the enforcement of fundamental rights [Art. 32].

¹⁶ Art. 37

¹⁷ Madras v. Champakam Dorairajan, AIR 1951 SC 226

¹⁸ Minerva Mills v. India AIR 1980 SC 1789
¹⁹ Amartya Sen, Development of Freedom (Seventh Impression, 2004)

from exploitation and abolition of child labour as fundamental rights.²⁰ It is not enough that the State must protect citizen's freedom of speech. It is also necessary that the Stat must not allow any body to remain without food. Freedom of speech is not of any use for a starving human being. It is not enough for the State to merely not discriminate between people on the ground of their religion or caste or sex but it is equally necessary for the State to see that people are not denied their entitlements because of their incapacity to secure them due to inequality. This requires affirmative action in favour of the less advantaged people. The human rights paradigm requires the State not to merely provide welfare but to secure to people their social and economic rights.

In fact, though "socialism" was added by the Forty-second amendment, it had been part of the Indian political ethos since the National Movement, Austin observes in his monumental treatise on the Constitution that "nearly everyone in the Assembly (Constituent Assembly) was Fabian and Lask-ite enough to believe that socialism is everyday politics for social regeneration."²¹ Socialism does not mean that all trade and business must be owned by the state. That was not the sense in which it was understood even in the heydays of socialism. A careful reading of article 19 (6) (ii) will show that it permits exclusive monopoly of a trade or business or industry by the State but does not mandate it. The word "socialist" has to be construed in the light of the directive principles of state

policy which unfold the vision of the Constitution makers. It is the duty of the State to promote the welfare of the people and to strive to bring about a social order based on justice, social, economic and political.²² The main objectives of socialism as understood in India are (i) the ownership and control of the material resources of the community are so distributed so as to subserve the common good; and (ii) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.²³ These are the aims but how they are to be achieved has been left to Parliament. Various alternatives of economic policies ranging from the right to the left would be available and socialism cannot be identified with any one policy. The Supreme Court has held that secularism is part of the basic structure of the Constitution.²⁴ It means that the Constitution cannot be robbed of secularism even by a constitutional amendment because according to an earlier decision of the Court,²⁵ Parliament's power to amend the Constitution cannot be so exercised as to tamper with the basic structure of the Constitution. We do not have a similar ruling on whether socialism is also part of the basic structure of the Constitution. But we can presume that if ever such a question arises, the Court will say that socialism as understood under the Constitution is also part of the basic structure of the Constitution. If a doctrinaire meaning is given to socialism, most of the policies which the State has adopted since 1991 would be in jeopardy. The entire history of the Constitution's evolution does

²⁰ Art. 23, 24

²¹ Granville Austin, *The Indian Constitution: Cornerstone* of a Nation, p. 41 (Oxford OIP 1999) Hereinafter cited as Austin, 1999

²² Art. 38

²³ Art. 39, clauses (b) and (c)

²⁴ S.R. Bommai v. Union of India (1994) 3 SCC 1

²⁵ Kesavanand Bharati v. State of Kerala AIR 1973 SC

not encourage us to adopt the doctrinaire notion of socialism. As our secularism does not mean strict separation of the State from the religion as understood in the United States, similarly our socialism does not mean that all economic activity must be conducted by the State. India adopted a mixed economy since her independence. The Constitution specifies the goals which are to be achieved but leaves the choice of means for achieving them to Parliament. It is in this light that I shall deal with some recent decisions of the Supreme Court.

Role of the State Under Economic Reforms

If economic reforms means the State's withdrawal from the responsibility for fulfillment of social and economic rights, it is certainly against the spirit of the Constitution. Liberalization should mean merely doing away with controls and restrictions which unnecessarily inhibit enterprise and competition. As we go towards an open economy, the State's role changes but does not diminish. The State has to institute regulatory systems which will oversee the working of the private enterprises with a view to ensuring free and fair competition and to protect public interest. While earlier, the State's permission was required to start a new enterprise under the Industries (Development and Regulation) Act, 1951, or to expand its investment under the **Monopolies and Restrictive Trade Practices** Act, now an entrepreneur is required to obtain environment clearance certificate for locating an industry from the Ministry of Environment and has to prove to the Competition Commission under the Competition Act, 2002 that its expansion is not going to disturb the level playing field

for other competitors. While Under the IDRA, the State allowed an industry according to the priorities of development drawn by it, now it ensures that the technology used does not cause pollution or its location is not hazardous to the surrounding population. Under the M.R.T.P. Act, the emphasis was on not allowing an enterprise to grow beyond a fixed limit, under the Competition Act; the aim is to make sure that the growth of an enterprise does not inhibit fair competition. In order that such regulation should be politically neutral, it is entrusted to professional regulators who are experts in that branch of knowledge.

Right to Property Under the Constitution and Constitutional Amendments

In fact, the debate on the role of the State and role of the right to property became a subject of confrontation between the Supreme Court and the Parliament during the first two decades of the Constitution. That story has been told a number of times and we need not repeat it.²⁶ The Constitution included the right to property in article 31. As Parliament passed laws for land reforms and other reforms bringing about changes in property relations, the Supreme Court frustrated them through legalistic interpretation. The Constitution had to be amended again and again for circumventing the decisions of the Court. Ultimately the right to property was deleted from the list of fundamental rights the Constitution Forty-fourth by amendment.²⁷ A new article 300-A was added by the above amendment which reproduced the first clause of article 31. It

²⁶ See S. P. Sathe, Constitutional Amendments 1950-1988-Law and Politics, chapter 1 (1989 Tripathi- now Butterworth)

says "no person shall be deprived of her property save by authority of law".

Judicial Policy Towards Legislation Controlling the Economy

Article 19 (1) (g) guarantees to a citizen the right to practise any profession, or to carry on any occupation, trade or business. This right is subject to reasonable restrictions imposed by law in the interest of the general public. It is the function of the courts to determine whether a restriction on that right is reasonable. While exercising such function, the courts have observed maximum judicial restraint. They have often held that Parliament or a state legislature understands better what is in the interest of the general public. Extensive regulation and control of the economy was upheld under this provision. The Constitution further provides that the State may make any law relating to the professional or technical qualifications necessary for practising or carrying on any occupation, trade or business.²⁸ This enables professional bodies such as the Bar Council or the Medical Council or the Institute of Chartered Accounts to lay down qualifications for carrying on legal or medical or accountancy profession. In another clause of article 19 (6) it is said that the State may by law provide for the carrying on by the State, or by a corporation owned or controlled by the State, of any trade, business, industry or

service, whether to the exclusion, complete or partial of citizens or otherwise.²⁹ This clause gives power to the State to nationalize an industry to the exclusion of any citizen. That clause came through the Constitution (First Amendment) Act, 1951, because of a judicial decision in which a law providing for nationalization of road transport was held void as being an unreasonable restriction on freedom of the citizen to carry on any trade or business.³⁰ After the above clause was added, a presumption that a law causing nationalization of a trade or business did not impose an unreasonable restriction on freedom of the citizen to carry on any trade or business was raised. But the clause was an enabling clause which gave freedom to the State to nationalize a trade or business. It did not oblige the State to do so. It would depend entirely on the discretion of the State to do or not to do so. That evidences the pragmatic approach of the Indian economic planners.

In the United States, there had been a long line of cases in which the Court had used the "due process" clause of the Fifth Amendment to prevent State intervention in economic affairs. Justice Oliver Wendell Holmes had castigated his learned brethren in one of his dissenting judgments for reading the economic theory of *laissez faire* into the Constitution.³¹ The Supreme Court of the United States invalidated various laws passed under President Roosevelt's New Deal programme. This led to a severe conflict between the Court and the President. President Roosevelt actually threatened to pack the Court. The Court,

²⁷ Article 19 (1) (f) guaranteed to citizens the right to acquire, hold and dispose off property subject to reasonable restrictions that could be imposed by law. (clause 5). This article was repealed by s. 2 (a)(ii) of the Constitution (Fourteenth Amendment Act, 1978. Article 31 (1) provided that no one shall be deprived of her property save by authority of law and Art. 31 (2) provided that private property could be acquired or taken by the State only for a public purpose and on payment of compensation. This article was repealed by S. 6 of the Forty Fourth Amendment Act. See Sathe, id. p. 173.

²⁸ Art. 19 (6) (i)

²⁹ Art. 19 (6) (ii)

³⁰ Motilal v. U.P. AIR 1951 All. 257

³¹ Lochner v. New York (1904) 198 U.S. 45

however, reverted back from such aggressive activism and adopted a policy of judicial restraint in respect of economic matters. Even after the United States Supreme Court under the leadership of Chief justice Warren became activist, it did not interfere with the decisions of the Congress or the President in respect of economic matters. Its activism was focused on protection of the rights of the unpopular minorities such as the American Africans against racial segregation, the accused criminal and the political dissenters such as the communists. Chief Justice Stone's preferred freedom theory enunciated in a footnote in Carolene Products Case had already anticipated such an approach of the Court.³²

The policy of the Supreme Court of India has also been of maximum deference to the will of the legislature in matters of regulation and control of the economy and strict scrutiny of State actions that impinge on other fundamental rights.

Post Reform Judicial Response

The leading case in which the new economic policy of disinvestments or privatization of the existing public sector concern was challenged was *Balco Employees' Union (Regd) v. Union of India.*³³ In this case the government's decision to sell its majority shares of a public sector organization called Balco to a private company registered under the Companies Act called Sterlite Industries was challenged on the following grounds :,

(1) that the workmen of Balco had been adversely affected by the decision of

the Government to disinvest 51% of the shares in Balco in favour of a private party. It was contended that since Balco was "State" within the meaning of article 12 of the Constitution,³⁴ its workers were entitled to fundamental rights such as right to equality guaranteed by article 14 and 16 of the Constitution. Due to its privatization, the workers would be denied the protection of those fundamental rights. As employees of the State, the workers could approach the High Court under article 226 or the Supreme Court under article 32 in the event of violation of any of their rights. The workers would lose all such benefits which they enjoyed by virtue of being employees of the "State" when the organization was privatized.

(2) The workers had not been heard while taking the decision of privatization. It was contended that as per the decision of the Supreme Court in National Textile Workers Union v. P. R. Ramakrishnan,³⁵ the workers had a right to be heard in such a situation. It was submitted that the workers should have been heard at different stages during the process of investment.

> It was argued on behalf of the State of Chattisgarh that the implementation of the policy of disinvestments had failed to evolve a comprehensive package of

³² United States v. Carolene Products Co. 304 U.S. 144, 152, footnote 4 (1937)

³³ (2002) 2 SCC 333: AIR 2002 SC 350

 ³⁴ Article 12 of the Constitution defines the word "State" for the purpose of Part III of the Constitution which contains fundamental rights. It means Parliament and Government of India, legislatures and governments of all states, all local authorities and other authorities. The Supreme Court has held that the words "other authorities include all authorities set up under statutes or those which function as instrumentalities or agencies of the Union or state governments. See Ajay Hasia v. Khalid Mujib AIR 1981 SC 487.
 ³⁵ (1983) 1 SCC 228

socio-economic and political reform and to structure the decision making process so as to achieve in a just, fair and reasonable manner, the ultimate goal of the policy and that the interest of the workers and employees as a class could not be undermined and therefore any decision likely to affect them adversely could not be taken without hearing them.

- (3) It was contended that the Disinvestment Commission had recommended that some percentage of equity share should be offered to the workers. From the material on record it was not clear whether that aspect had been considered and that made the decision arbitrary.
- (4) It was further contended that the impugned decision defeated the provisions of the M.P. Land Revenue Code and went against the fundamental basis on which the land had been acquired and allotted to the company.

On behalf of the Union of India it was pointed out that despite every effort the rate of returns of government enterprises had been woefully low. The rate of return on central enterprises came to minus 4% while the cost at which Government borrowed money was at the rate of 10 to 11%. Out of 946 enterprises of the State, about 241 did not work at all; about 551 incurred loss and 100 did not submit any returns at all. Neither the Center nor the states had the resources to sustain enterprises that could not stand on their own in the new environment of intense competition. We will now see how the Court responded to these arguments.

Limits of Judicial Review vis-a-vis

Economic Policy

It was contended by the Union Government that the challenge to the policy of disinvestments on the ground that it impairs public interest was untenable. Can a court sit in judgment over the policy of the Parliament? It can reject a policy if it violates any of the fundamental rights. If it is not violative of any of the fundamental rights, can a court decide whether an economic policy is in the interest of the people?

Even in R.C. Cooper v. Union of India, which is popularly known as the Bank Nationalization case, the Court had said that it could not "sit in appeal over the policy of Parliament in enacting a law."³⁶ The Court in that case had struck down the Bank Nationalization Ordinance on the ground that it did not offer compensation to the banking companies whose assets and business had been acquired. The Court had gone into the adequacy of compensation despite a clear provision in the Constitution barring such judicial review. That decision was severely criticized because under the guise of legality, the Court had in fact struck down the law of nationalization of banks because it was opposed to it as a policy. Do we want the Court to undertake examination of economic policy of Parliament on the ground of its desirability? If the Court were to do so, it would have doubtless crossed the limits of judicial review. Even before the advent of the new economic policy, the Supreme Court had laid emphasis on judicial restraint in respect of economic policy. In Fertilizer Corporation Kamgar Union (Regd) v. Union of India while

³⁶ (1970) 1 SCC 248, 294

conceding the *locus standi*³⁷ to the workers to challenge the sale of certain plants by the public sector corporation, the Court upheld the sale because according to it its function was "limited to testing whether the administrative action has been fair and free from the taint of unreasonableness and has substantially complied with the norms of procedure set for it by rules of public administration."³⁸ This was a pre new economic policy decision and is considered to be one of the early decisions in which the Court extended the locus standi to workers of a public sector company to challenge the sale of its plants at a rather low price thereby causing injury to public interest. While the Court was liberal in conceding the locus standi to the workers, it did not agree with their contention that the power to sell the plants had been exercised mala fide or without the application of mind.

In State of M.P. v. Nandlal Jaisawal,³⁹ the court had said while referring to an earlier decision in R.K. Garg v. Union of India⁴⁰ that "laws relating to economic activities should be viewed with greater latitude than laws touching civil rights such as freedom of speech, religion etc." ⁴¹ Referring to a long line of cases in which the Court had refrained from undertaking any re-evaluation of economic

³⁷ Locus standi means legal competence to raise an issue before a court. In adversarial paradigm, such locus standi could be had only by a person whose right had been infringed or who had sustained an injury. However, the Supreme Court has liberalized the rule of locus standi and has now allowed a petitions any persons who have no personal stakes on behalf of those persons who due to lack of resources cannot come to court. A person can also petition the court in public interest. This has come to be known as public interest litigation. See S.P. Sathe, Judicial Activism in India chapter 5 (2002) policy of the State, the Court said:⁴²

It is evident from the above that it is neither within the domain of the courts nor the scope of the judicial review to embark upon an enquiry as to whether a particular public policy is wise or whether better public policy can be evolved. Nor are our courts inclined to strike down a policy at the behest of a petitioner merely because it has been urged that a different policy would have been fairer or wiser or more scientific or more logical.

While considering the legality of social control envisaged under Cl. (6) of article 19, the Court has consistently followed the policy of non-interference with the policy choices of the Parliament. When Parliament went in for nationalization of industries, the Court did not object because Cl. (6) (ii) of article 19 clearly gave that freedom to Parliament.. In Balco, the Court has endorsed the same judicial policy. If it did not take objection to nationalization of an enterprise, it equally would not object to de-nationalization of an enterprise. To nationalize or to de-nationalize was essentially a policy decision which Parliament/ Government⁴³ alone had the privilege to take. Such judicial policy is indeed desirable and helps the Court to remain within the precincts of its power earmarked by the doctrine of separation of powers. Chief Justice Kirpal, in his judgment allowed the State the right to trial and error as long as both trial and error are

⁴⁰ (1981) 4 SCC 675

³⁸ (1981) 1 SCC 568 at 584

³⁹ (1986) 4 SCC 566

⁴¹ (1986) 4 SCC 566, 605-06

⁴² (2002) 2 SCC 333, 362

⁴³ Legislation was not always required for the establishment of a public enterprise. While statutory corporations such as the Life Insurance Corporation were created by legislation, there were others such as the Balco which had been created by executive action. See S. P. Sathe, *Administrative Law*, chapter 11 (7th ed. 2004)

bona fide and within the limits of the law. The State may nationalize or de-nationalize depending upon the exigencies of the economic situation. Could the Court have undertaken an examination of the disinvestments decision on the ground that it was inconsistent with socialism? Since socialism is not understood as synonymous with State ownership of all enterprises, such an objection could not have been upheld. Where a public enterprise had been created by a statute, it could not be privatized unless such a statue was either repealed or amended. by the legislature.⁴⁴

(1) Did the Employees Have the Right to be Employees of the "State"?

Privatization of a public sector enterprise would automatically mean that the employees of such an organization would not enjoy the rights which they enjoyed by virtue of their organization having been "State" within the meaning of article 12. Such employees held office under the State and were therefore entitled to the rights given by article 16 of the Constitution.⁴⁵

All other rights called the fundamental rights will continue to be enjoyed by them, though not as employees but as persons or citizens. Any discrimination in recruitment or service conditions by the rules of any company registered under the Companies act or any other such statute might be forbidden by the standing orders issued under the Industrial Disputes Act, 1947. So far as other conditions of service are concerned, even employees of private organizations are protected by various labour laws. Wages are fixed according to certain principles. No worker can be dismissed or removed from service except after she has been given a reasonable opportunity to say why she should not be dismissed.⁴⁶ Industrial jurisprudence gives enough protection to workers against arbitrary actions of the employers. Their right to go on strike has been protected under the Industrial Disputes Act and their right to make demonstrations and protests is protected as rights to freedom of speech and freedom of assembly. Their trade unions are protected by the right to freedom of association. The Court conceded that "the issue of guaranteeing the social security to the Balco employees at par with the employees of the Government establishments may not be possible any time before or after the disinvestments."47 Does this not amount to depriving the workers of the rights which they possessed? Can people be divested of their fundamental rights by a change of policy? Is it fair to say that employees of Balco can never be entitled to social security on a par with employees of government establishments? Social security is a bundle of human rights which have been included by the Supreme Court in article 21 of the Constitution. They have been included in the International Convention on Civil and Political Rights as well as in the International Covenant on Social, Economic and Cultural Rights to

⁴⁴ Centre For Public Interest Litigation v. India AIR 2003 SC 3277

⁴⁵ Article 16 (1) assures equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State. Clause (2) of article 16 forbids discrimination on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them in respect of, any employment or office under the State. The word "State" has been defined in article 12. See *supra* n. 33.

 ⁴⁶ Laksmi Precision Screws Ltd. V. Ram Bahagat (2002)
 6 SCC 552: Syndicate Bank v. General Secretary, Syndicate Bank Staff Association (2001) 5 SCC 65
 ⁴⁷ Id. p. 367

which India is a signatory. Instead of saying that employees of Balco can never expect parity with government employees in respect of social security, it should be said that every employee or every citizen must enjoy social security. Why should government employees be in a privileged position? The package of disinvestments should ensure that the workers are not put loss. Provisions against to any discrimination on grounds such as religion, caste, race or sex should be included in our industrial law and workers should be given some shares in the company so as to compensate for what they lose when their status as employees of the State comes to an end. The Court could have given some directions to the Government for achieving such parity.

(2) Did Workers Have A Right to be Heard?

Over the years, the Court has expanded the right to be heard to various situations. It is no longer confined to what are technically known as quasi-judicial actions but is now applicable even to policy decisions where a large number of people are likely to be adversely affected. This is not to be seen as part of the adversarial process but as part of the participatory process. Such hearings are provided under the Environmental Protection Act. The question is how far workers in an enterprise which is "State" within the meaning of article 12 entitled to be heard before such an enterprise is privatized? Participatory process is made applicable to micro cases of legislation such as extending the limits of a municipal corporation.48 But can a nationwide law be made applicable only after hearing the people? Hearing for knowing peoples' views must be distinguished from hearing for giving an opportunity to the persons who are likely to be adversely affected by a decision. Hearing for facilitating participation of people in policy making can be done and is often done by circulating a proposal for eliciting public opinion. Were Balco employees adversely affected? We have seen above that such adverse effect could be avoided by proving social security even in private employment. We, however, submit that Chief Justice Kirpal takes too formalistic a position when he says:⁴⁹

Even though the workers may have interest in the manner in which the Company is conducting its business, inasmuch as its policy decision may have an impact on the workers rights, nevertheless it is an incidence of service for an employee to accept a decision of the employer which has been honestly taken and which is not contrary to law. Even a government servant, having the protection of not only Articles 14 and 16 of the Constitution but also article 311, has no absolute right to remain in service. For example, apart from cases of disciplinary action, the services can be terminated if posts are abolished.

It is submitted that an employee has legitimate expectation arising from the terms of service offered when she enters the service. True, such terms can be changed but can they be changed to the detriment of the employees without hearing them? They may be changed for the subsequent recruits but should they be changed for the employees who have entered the service on the basis of certain assurances implicit in

 ⁴⁸ S.P. Sathe, *Administrative Law*, chapter 4, p. 115-118 (6th ed. Butterworth-India 1998)
 ⁴⁹ (2002) 2 SCC 333, 362

the terms of the service? If the State claims such right of sovereignty, it would not be just and fair. The doctrine of legitimate expectation would require that such employees be heard about the proposed change before that decision is taken. But it was pointed out on behalf of the respondents that the workers "had been fully informed about the process of disinvestments through an ongoing dialogue".⁵⁰ The workers had filed a writ petition in the Delhi High Court and in that petition it was clearly stated that they did not intend to challenge the policy of disinvestments. While disposing of that petition, the High Court had recorded that the Union of India had agreed to give two months prior notice to the employees. Thereafter the workers were apprised of the terms of the agreement to sell the shares. The Court held that the decision was valid as having been arrived at after following proper procedures. The doctrine of legitimate expectation, however, does not oblige the government to drop a policy change. Chief Justice Kirpal observed:51

The policies of the Government ought not to remain static. With the change in economic climate, the wisdom and the manner for the Government to run commercial ventures may require reconsideration. What may have been in the public interest at a point of time may no longer be so. The Government has taken a policy decision that it is in public interest to disinvest in Balco. An elaborate process has been undergone and majority shares sold. It cannot be said that public funds have been frittered away. In this process, the change in the character of the company cannot be validly impugned. While it was a policy decision to start Balco as a company owned by the Government, it is as a change of policy that disinvestments have now taken place.

It is the sovereign right of the State to change its policy from time to time if it is necessary in the interest of the people. Neither promissory estoppel nor legitimate expectation can be pleaded to forestall the exercise of such sovereign right of the State. But where due to change of policy, promises cannot be fulfilled or legitimate expectations cannot be sustained, usually courts give compensation. In situations like this, can the State not offer an option to the employees to be relieved of the employment on payment of some compensation?

(3) Lack of Transparency

An objection was taken that the entire process of disinvestments lacked transparency. The learned judge rejected that contention and observed that transparency did not mean "the conducting of the government business while sitting on the crossroads in public".⁵² He further elaborated:⁵³

Transparency would require that the manner in which decision is taken is made known. Persons who are to decide are not arbitrarily selected or appointed. Here we have the selection of the Global Advisor and the strategic partner through the process of issuance of global advertisement. It is the Global Advisor who selected the valuer who was already on the list of valuers maintained by the Government. Whatever material was received was examined by High power committee known as the IMG and the ultimate decision was taken by the Cabinet

^{so} Id. 365

⁵¹ Id. p. 365

⁵² Id. p. 373 ⁵³ *Ibid*

Committee on Disinvestment. To say that there has been lack of transparency, under these circumstances, is uncharitable and without any basis

Administrative process has always been transparent on the face with several latent aspects evading the transparency. Unfortunately the judicial process has proved to be inadequate for catching such intransparent aspects of the administrative process. This is evident from cases such as Enron.⁵⁴ Judicial complacency in drawing inferences from the records put forward by the Governments also helps evade such transparency. A more investigative probe in such matters is necessary, which was clearly revealed from the uncritical acceptance by the Supreme Court of the affidavits filed by the Government in Narmada Bachao Andolan v. Union of India. 55

The petitioners were trying to raise in court an issue on which they had lost politically. They wanted the Court to strike down the disinvestments package under the guise of protecting the fundamental rights of the workers. In other words they wanted their political dissent to be buttressed through judicial process. The Court observed:⁵⁶

In a democracy, it is the prerogative of each elected Government to follow its own policy. Often a change in Government may result in the shift in focus or change in economic policies. Any such change may result in adversely affecting some vested interests. Unless any illegality is committed in the execution of the policy or the same is contrary to law or mala fide, a decision bringing about change cannot per se be interfered with by the Court.

It is submitted that those who are opposed to the new economic policy will have to fight it out in Parliament through political process. A court of law can interfere with such policy only when it is contrary to any provision of the Constitution. While interpreting the Constitution and particularly its bill of rights, the Court must see that it protects those minorities which are politically vulnerable. It is only where basic freedoms are threatened that courts ought to become activist and act against majoritarian democracy. But in all other matters and particularly in matters of economic policy, which can be fought out politically, the Court must defer in favour of the Government.

⁵⁴ Report of the Energy Review Committee, Govt. of Maharashtra (April 2001)

⁵⁵ (1998) 5 SCC 586. Although no rehabilitation of the ousted people had taken place, the government showed that it had been done.

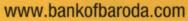
⁵⁶ Id. p. 381

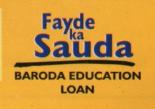
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The Links between Education, Employment, and Demographic Change -The Paradox of the Kerala Model, Characterized by High Human Development with Low Growth Syndrome K. N. Prasad & Rema Hariprasad

The exemplary Kerala Model of development is characterized by "the paradox of high human development with low growth syndrome." The paaper discusses how that is due to the simultaneous co-existence of various growth propelling factors and their concomitant and overpowering retarding features. Even the policy reversals in the nineties did not positively impact the dismal features of the growth aspects of the economy. All this has raised doubts about the sustainability of Kerala's high human development. The study draws suitable lessons for developing economies and emphasizes the need for feasible "policy packages", that lead to the simultaneous and sustainable enhancement of "development together with growth" rather than "development without growth" or "growth without development".

The Indian state of Kerala exemplifies development that is characterized by High Human Resource Development (HRD) within the context of elevated education attainment, strong health infrastructure, and unique demographic profile. Kerala has attracted worldwide attention because of the "Growth Propelling" features that co-exist with low economic growth and high unemployment along with concomitant "Growth Retarding" conditions. Kerala's development has been praised not only by reputed economist around the world such as Nobel laureate A. K. Sen, Mahbub-ul-Haq, and the United Nation Development Program, but by anthropologists and scholars of other disciplines, as well.

The state is characterized by a highlevael physical quality of life index, high male-female literacy, high life expectancy at birth of both males and females, an appreciable decline in birth and death rates, low infant mortality and maternal mortality rates, and high female-male sex ratio. All of these features reveal the characteristics of a well-advanced economy. A unique feature of HRD in Kerala is that it is not a new phenomenon; rather it has been in existence for centuries.

Even the Kerala model of demographic transition (with the lowest fertility rate in the country, as well as being the first to reach the national goal of Net Reproduction Rate = 1 with infant mortality rate = 13), has its own unique features. This is a result of socio-economic changes, especially the state's historic achievements in the fields of education and health, and the various national level programs initiated in the state after Independence. These aspects of Kerala society adhere more closely to the "diffusion theory" of fertility

^{*}Retd. Professor, Department of Economics, University of Mumbai, Mumbai. Social Development Issues 23(3) 2001, pp.60-73, © Inter-University Consortium for International Social Development (IUCISD).

transition. However, they represent only one side of the picture.

The other side is represented by a high level of general, as well as educated unemployed (even amongst scientists and technical personnel) of both males and females in the urban and rural arreas, high suicide rate, low per capita income, low growth of commodity producing sectors, and a dearth of technical and managerial manpower of the requisite skills due to the neglect of technical and managerial education. Such disquieting conditions have made the sustainability of "The Kerala Model" doubtful.

Approach of the Study

This study attempts to analyze the various aspects of HRD. It reflects the special emphasis on education, demographic change, as well as unemployment, combined with simultaneous existence of both "Growth Propelling" and "Growth Retarding" factors. These important concurrent elements of development seem to have not been considered by such scholars as A. K. Sen, Mahbub-ul-Haq, and others.

The analysis reveals that the operation of "Growth Retarding" features have so overpowered "Growth Propelling" features that they have led to a dichotomy between development and growth (in terms of dismal performance of commodity producing features in industry, as well as agriculture, and acute unemployment of both general and technical personnel, i.e. both males and females in both urban and rural areas) rather than their simultaneous occurrence.

The study also analyses various policy packages and their implementation, including the current "World Bank's Policy-Packages of Structural Reforms" and the state's experiments in Decentralized Planning in terms of the "People Plan." Although these experiments are at an early stage of implementation, they do not seem to have taken into account the "People's Preference," especially on the employment front. Nor do they seem to have mitigated either Development without Growth or High HRD with High Unemployment" syndromes of the state, which have remained its characteristic features until recent times.

As shown in Chart I, Kerala is not only rich in national resources and hydroelectric power, and the beneficiary of vigorously implemted land reforms characterized by the "People's Awareness" and "Scientific Outlook," but it also is rich in financial resources due to gulf oil remittances and praise worthy domestic tax efforts. In short, it has all the pre-requisites for high growth. Its existing "Low Credit Deposit Ratio" besides "High HRD with High unemployment and Low Growth Syndrome" raise serious doubts about the sustainability of the existing highly eulogized features of The Kerala Model.

The Growth Propelling and Retarding Factors of Kerala Model

1 – Education

Sr. Positive Aspects No.

- 1. High emphasis on primary education leads to overall progress of literacy.
- 2. High literacy of both male and female.
- 3. More primary schools in rural and urban areas.
- 4. Negligible drop-out-rate. Introduc-tion of mid-day meal programme right from 40's.
- 5. High role of private sector in education leads to the establishment of many schools and colleges.

Negative Aspects

- 1. Closing of primary schools and secondary schools especially of government.
- 2. High educated unemployment due to the lack of technical education. Allocation is more in primary rather than in higher and technical education. This leads to more frustration among youths leading to suicides.
- 3. Lack of highly technical and managerial manpower.
- 4. Lack of entrepreneurship.
- 5. Poor quality of education.
- 6. Lack of opportunity leads to migration to foreign countries. Since many of the migrants are from low-income group they are utilizing remittances for consumption rather than investment. Even big buildings are constructed with their remittances and with imported materials without contributing anything to productive aspects.

2-HEALTH INFRASTRUCTURE

Sr. Positive Aspects No.

- 1. Highly developed health infrastruc-ture in rural and urban areas provides more medical facilities, Maternal and child health care is remarkable. Anti-natal and post -natal care of pregnant women & immunization of children are other notable features.
- 2. High male-female life expectancy due to developed health-care system.
- 3. Low infant mortality and low maternal mortality rates.
- 4. The remarkable branch of medical science, Ayurveda, cures many diseases.

Negative Aspects

1. High morbidity rate.

- 2. High dependency ratio of all people leading to more consumption and less production.
- 3. Large number of unhealthy population who cannot do the work.
- 4. High investment in health and social sectors like education, public distribution, subsidies, etc. led to a decline in the Investment in other sectors like industry, agriculture etc.

3 – DEMOGRAPHIC TRANSITION

- Sr. Positive Aspects No.
- 1. Low birth rate
- 2. Low death rate
- 3. Low fertility rate
- 4. High female sex ratio-less son reference
- 5. Net Reproduction Rate = 1

Negative Aspects

- 1. Closure of schools due to low birth rate and low fertility rate.
- 2. Low death rate leads to more graying/ old/aged population.
- 3. High female sex ratio has led to more female population in labour market in both rural and urban areas.
- 4. High female unemployment in both rural and urban areas.

4- EMPLOYMENT/EMPLOYMENT

Sr. Positive Aspects No.

- 1. More educated females in labour market.
- 2. High mobility of labour force within, as well as outside the country.
- 3. Better living standard leads to low fertility rate.

Negative Aspects

- 1. Low work participation rate.
- 2. High preference for white collar jobs rather than self-employment, i.e. aversion for self-employment.
- 3. Preference among females regarding place, nature of occupation, etc.

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- 4. More waiting period for people having preference for specific of job and/or place compared to those who have no such preference for specific job/place.
- 5. Cascade effect Highly qualified persons are appointed for jobs which require less qualified persons.

5 – PEOPLE'S AWARENESS OF RIGHTS AND DUTIES

Sr. Positive Aspects

No.

- 1. Even the children of Labour class started going to schools due to the awareness of rights and duties
- 2. Development of reading habits among Labourers.
- 3. Abolition of feudalism, reduction in the number of landless labourers, temple entry and schooling facilities for low caste people.
- 4. Sharing of benefits equally by the rich and the poor.
- 5. Negligible child labour.

Negative Aspects

- 1. Class conflicts between the rich and the poor.
- 2. Emergence of labour militancy due to unionism, strikes, lockouts etc.
- 3. Preference is given to rights rather than duties Resulted in less productivity.
- 4. Deterrent to the capital flow for investment purpose.
- 5. Deterrent to the entry of private entrepreneurship in the state.
- 6. Lack of co-operatives for workers and stagnation of different sectors resulting in less economic growth.

6 – PEOPLE'S SCIENCE MOVEMENT (KSSP)

Sr. Positive Aspects

No.

1. Inculcation of scientific attitude among people through idealistic Method.

- 2. Provides more information to the people through publication of articles, periodicals, etc. with the help of informative method.
- 3. Imparts knowledge regarding Health Education, Environment etc. through provocative method.
- 4. Helps to achieve high literacy in the state by introducing literacy campaign, Kalajatha etc.
- 5. Aims social transformation like sensitizing the people as well as environment protection.

Negative Aspects

- 1. Many units of Kerala Shastra Sahitya Parishad (KSSP) are inactive.
- 2. Less participation resulted in the failure of objective and achievement.
- 3. Unsuccessful in social transformation e.g. dowry deaths are still prevailing.
- 4. Failure to remove the superstitions of the people.
- 5. Lacks encouragement in the development of people's participation for social change.
- 6. It becomes a Marxist movement rather than a social movement.
- 7. Fails to motivate people towards a progressive outlook.

7 – NATURAL RESOURCES

Sr. Positive Aspects

No.

- 1. High value marine resources help in the export promotion of marine products. The state's water resources help to achieve power development. The wide coastline helps to develop fishing.
- 2. The deposit of titanium helped in the development of titanium factory at Chavara in Quilon, Ilmenite, Monozite, Zilcon, Pottery, China clay are other resources. Availability of more cultivable land rather than dry-land even in hilly areas.

- 3. The forest resources helped in the growth of plywood industries.
- 4. Development of paper mill also is noteworthy.
- 5. Development of Tourist Centres.

Negative Aspects

- 1. Lacks main natural resources like coal, iron, etc. which are essential for the development of industries.
- 2. The Irregular rainfall leads to the shortage of hydro-power especially in drought conditions due to the dependency on hydro-power.
- 3. More subdivision and fragmentation of land even though cultivable land is available.
- 4. Salinity of water affects cultivation as well as supply of drinking water.

8 – LAND REFORMS

Sr. Positive Aspects No.

- 1. End of feudalism and less landless agricultural labourers.
- 2. Redistribution of land under rice resulted in more equitable distribution.
- 3. More rights and facilities to peasants like agricultural pension (1982), fixing ceiling upon land.

Negative Aspects

- 1. More subdivision and fragmentation leading to less mechanization even though more cultivable land is available.
- 2. More cash crops resulted in food shortage and import dependency.
- 3. Lack of introduction of Green Revolution Technology.
- 4. Class conflicts between rich and the poor.
- 5. Lack of co-operation between workers and landlords.

9 – PUBLIC DISTRIBUTION

Sr. Positive Aspects

No.

- 1. Helped poor people to obtain essential commodities at a fair price.
- 2. Equally accessible to both rural and urban areas which resulted in wide public distribution.
- 3. Less hoarding and black marketing of food since the number of shops is increasing.
- 4. Non-exploitative prices of commodities.

Negative Aspects

- 1. Food grains are imported for distribution purposes and are not state's own production.
- 2. High subsidies have an adverse effect.
- 3. Wide public distribution increases the import dependency, day by day.

10 – SUBSIDES

Sr. Positive Aspects

No.

- 1. Subsidy to rice distribution.
- 2. Subsidies to agricultural inputs like fertilizers, pesticides, etc.
- 3. Subsidy to agricultural farmers.
- 4. Pension and other benefits. Negative Aspects
- 1. More imports of food even after giving subsidy.
- 2. Increase in the non-plan expenditure.
- 3. Increase in the burden of the state.
- 4. More expenditure on social side.

11 – EXPORT OF PRIMARY PRODUCTS

Sr. Positive Aspects

No.

1. Cardamom, Ginger, Pepper, Cashew nuts, Cinnamon, Marine products and fish, Coir products are major Items. 2. Turmeric, Clove, Coffee are also exported, Kerala constitutes 97 percent of Country's export of pepper which is really remarkable.

Negative Aspects

- 1. More primary products having less value are exported and items having high value like Cement, Grain, Pulses are imported.
- 2. Unfavorable balance of trade.
- 3. Coir-and Cashew export is done at the expense of workers health who have to work under unhygienic conditions.
- 4. No large scale export to attract more foreign currency.

12 – REVENUE RECEIPTS

Sr. Positive Aspects

No.

- 1. High ratio of tax revenue to SDP.
- 2. The elasticity of tax effort of Kerala is very high.
- 3. The rates of sales tax and excise duty in Kerala are high.

Negative Aspects

- 1. The resource base is too small due to the low level of per capita SDP.
- 2. High non-plan expenditure leads to high dependency on the Centre, Easy access to government and other support at the time of natural and man made calamities.
- 3. Insufficient funds to meet the objectives due to lack of mobilization.
- 4. Current Account deficit of funds leads to more financial constraints in the state.

13 – REMITTANCES

Sr. Positive Aspects

- No.
- 1. Flow of foreign currency in the state.
- 2. Increasing the standard of living.
- 3. Improves the economic condition. Negative Aspects
- 1. More consumption and less savings.
- 2. More income is used for consump-

tion rather than production resulting in the leakage of income.

3. Less investment in productive sectors leading to low commodity production.

14 – INFRASTRUCTURE – ROADS AND RAILWAYS

Sr. Positive Aspects

No.

- 1. Highly developed road transport system.
- 2. Wide network of road leads to highest road density.
- 3. Reduces rural urban differences.
- 4. Facilitates people's movement, literacy programs, i.e. welfare of the people.

Negative Aspects

- 1. Railways not developed much.
- 2. Huge investment in transport at the expense of other sectors.
- 3. Less urbanization due to less industrial development.

These are self-explanatory. They are separately explained in detail in another paper (Prasad and Ratna, 1996)

The Growth Propelling and

Retarding Factors

In addition to education, health, and demographic transitions, there are other "Growth Propelling" and their concomitant retarding factors. These include: (1) education, (2) health infrastructure, (3) demographic transition, (4) employment/ unemployment, (5) people's awareness of their rights and duties, (6) people's science move-ment, (7) natural resources, (8) land reforms, (9) public distribution system, (10) subsidies, (11) export of primary products, (12) revenue receipts, (13)remittances, and (14) infrastructure roads & railways. They are shown as positive and negative aspects of these factors in Chart II below.

CHART – II : Varied Tenets of Educational Development in Kerala During Different Periods Right from 2nd Century B. C. to 1993

Sr. No.	Period	Education for whom	Stages of Education	Curriculum	Medium	Script
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Pre-Sangam (2 nd Century B. C. to 1 st Century A. D.)	Males	N.A.	Literature, Music, Philosophy, Mathematics, Art and Architecture	Prakrit and Pali	Brahmi
2	Sangam 1 st Stage (1 st Century A. D. to 2 ^{sd} Century A. D.)	Male, Female, Education for all (Religion is excluded)	N.A.	Literature, Music, Philosophy, Mathematics, Art and Architecture	Prakrit and Pali, Sanskrit & Vernacular (Tamil)	Brahmi & Devnagari
3	Sangam Later Stage (2 nd Century A. D. to 3 rd Century A. D.	Male, Female, Brahmins, Kshatriyas, Brahmin Monopoly in Education & no Education for Sudras	N.A.	Literature, Music, Vedic Sculpture, Philosophy, Mathematics, Art and architecture	Prakrit and pali, Vernacular (Tamil)	Brahim & Devnagari
4	Post Sangam 6 th Century A. D. till the British Rule (1792)	Male, Female, Education for Brahmins, Kshatriyas and Sudras	Village Schools, Salais and (Vedic) College	Ayurveda, Literature, Music, Vedic Sculpture, Physical Education, Astronomy, Astrology, Meteorological Science, Philosophy, Logic, Mathematics, (Sanskrit) Grammar, Exegesis, Paurohitya, Law, Art & Architecture	Vernacular (Tamil and Malayalam) Sanskrit	Devnagari & Vattezhuthu
5	British Rule (1792 – 1947)	Education for all Religion, Caste, Bonded Labour and also for all	Pre-Primary, Primary, Village Schools, Secondary Schools, Colleges and Technical Schools	Ayurveda, Homeopathy, Unani, Allopathy, Music, Vedic Sculpture, Philosophy, Logic, Mathematics, Grammar, Exegesis, Paurohitya, Law, library Science, Art & Architecture and Technical Education	Sanskrit Vernacular (Tamil and Malayalam) & English	Devnagari and Kolezhuthu
6	Post Independence (1947-1993)	For all	Pre-Primary, Primary, Village Schools, Secondary Schools, Higher Secondary Schools, Colleges and Technical Schools	Ayurveda, Homeopathy, Unani, Allopathy, Music, Vedic, Sculpture, Philosophy, Logic, Mathematics, Grammar, Exegesis, Paurohitya, Law, Library Science, Art & Architecture and Technical Education	Sanskrit Vernacular (Tamil and Malayalam) & English	Devnagari and Kolezhuthu

Note :- N. A. – Not Available

Sources :

- 1. Shastri Nilkanta K. A. The Pandya Kingdom, 1972, p.5, Swati Publication
- 2. Menon Shreedhara A., The Cultural Heritage of Kerala An Introduction, 1979m p.12. East West Publication, Cochin.
- 3. Mahajan V. D., The Ancient India, 1985, p. 705.
- 4. Publication Corporation, Social Life in Ancient India, 800 B. C. to 183 B. C.
- 5. Urtankita Sanskrit Vidya Manya Epigraphs, Vol. II, 1989, Prakrit and Sanskrit Epigraphs, India after Independence.

Database and Methodology Data Base

The study is primarily based on the analysis of official data collected from the State Planning Board, as well as the Directorte of Economics and Statistics, Thiruvananthapuram, Kerala. The study refers to various "Approach Papers" of the Five Year plans of the Indian Planning Commission, as well as the State Planning Board. It also refers to various reports and reviews from the State Planning Board in Kerala. In addition, the study analyses the observations of various studies related to Kerala's economic growth and development, which are often based on primary data, collected from their surveys.

Methodology

An empirical presentation of the data is provided with the help of two charts and five tables. In addition, a brief analysis of only the salient features of the various aspects of the study, enumerated in a section on approach of the study, is made.

The concluding observation of the study suggests that there are certain striking lessons for developing countries in general and Indian, as well as Kerala in particular. The study also presents limitations of the study and highlights of directions for future research.

The first two tables depict trend of literacy from 1901 to 1991 in Kerala and India, and expenditures on education in Kerala from the First to the Eighth five-year plans, as well as expenditure on education in primary, secondary, university and higher education, adult education, language development and technical education from 1985-86 to 1992-93, respectively.

It is equally important to note that the State gives high emphasis to general rather than Technical and Scientific Education. See Table II below for expenditures on different stages of education from 1985-1986 to 1992-1993. Besides, it is also worth noting that the state's allocation to education has been invariably more than six percent from the second up to the sixth Annual Plan (except for the Annual Plans for 1978-1979 and 1979-80), as shown in Table III, which has been a dream for the Indian economy. However, expenditures on science and technology have been meager from the First Plan to the Eighth-Plan (Government of Kerala, 1972; 1991).

Year		India			Kerala	
	Literacy Rate	Male	Fe- male	Literacy Rate	Male	Fe- male
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1901	5.35	9.83	0.6	11.14	19.15	3.15
1911	5.92	10.56	1.05	13.31	22.25	4.43
1921	7.16	12.21	1.81	19.02	27.88	10.26
1931	9.5	15.59	2.93	21.43	30.89	11.99
1941	16.1	24.9	7.3	-	-	-
1951	16.67	24.95	7.93	40.47	49.79	31.41
1961	24.02	34.44	12.95	56.85	54.97	38.9
1971	29.45	39.45	18.68	60.42	66.62	54.31
1981	36.03	46.62	24.73	70.42	87.74	75.65
1991	52.21	64.13	39.29	89.81	93.62	86.17

Table 1: Trend of Literacy – India and Kerala, 1901-1991

Source : Government of Kerala, Economic Review, State Planning Board, Thiruvananthapuram, 1993, P. 113.

Table 1: Expenditure on Education, 1985-86 to 1992-93

(In percent)

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Sr.	Stage	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93
No.	(A/c)	(A/c)	(A/c)	(A/c)	(A/c)	(A/c)	(A/c)	(A/c)	(A/c)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Primary Education	50.81	51.02	50.56	50.64	50.55	51.12	50.17	48.02
2	Secondary Education	30.18	29.80	30.31	30.18	30.19	30.54	29.68	30.93
3	University & Other Higher Education	13.15	13.23	14.12	14.22	13.78	12.66	14.97	16.25
4	Adult Education	0.32	0.26	0.30	0.24	0.38	0.12	0.04	0.07
5	Language Development	0.59	0.55	0.44	0.49	0.52	0.50	0.48	0.46
6	Technical Education	4.96	5.15	4.27	4.23	4.58	5.07	4.66	4.26
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table III : Five Year Plan Expenditure on Education in Kerala,First up to the Eight Five Year Plan

Sr. No.	Five Year Plans	Percentage
(1)	(2)	(3)
1	First Plan (1951-52 to 1956-56)	0.83
2	Second Plan (1956-57 to 1960-61)	14.57
3	Third Plan (1961-62 to 1965-66)	11.88
4	Annual Plan (1966-67 to 1968-69)	10.26
5	Fourth Plan (1969-70 to 1973-74)	9.17
6	Fifth Plan (1974-75 to 1977-78)	6.23
7	Annual Plan (1978-79 to 1979-80)	2.92
8	Sixth Plan (1980-81 to 1984-85)	6.60
9	Seventh Plan (1985-86 to 1989-90)	3.54
10	Eighth Plan (1992-93 to 1996-97)	3.70

Note : Percentage Outlay

Sources:

- 'Kerala Economy' Four Decades of Development, P. P. Pillai, (1993): John Mathai Research Foundation, 1994, p.152 (up to 7th Plan), Trissur.
- 2. Governement of Kerala, State Planning Board, Eighth Five Year Plan Document 1992-97, p.68.

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Health Infrastructure

Kerala has had major accomplishments in public health and scientific programs to prevent illness. The state of Travancore (a part of Kerala since its formation in 1956) was very much engaged in emphasizing health, including preventive immunization and vaccination. The introduction of small pox vaccination in 1979 is a testimony of the government's concern regarding the health condition of the people (Richard & Barbara, 1994).

The highly developed health infrastructure of the state, i.e. high life

expectancy at birth, low infant mortality rate (IMR), and high percentage of total plan expenditure right from the First Plan to Annual Plans for 1978-79 and 1979-80, as shown in Table IV below, are also note worthy features of the state's health profile.

Table IV depicts life expectancy at birth both for Kerala and India from 1911-20 to 1971-81, as well as 1976-80, 1981-85, 1986-88, and 1990-92, infant mortality rates of Kerala and India (per 1000 live births) from 1911-1920 to 1981-1990 and then for 1991, 1994 and 1996 (Table V). The percentage of total

Sr. No.	Year	Kerala	India	Kerala	India
		Ma	les	Fem	ales
. (1)	(2)	(3)	(4)	(5)	(6)
1	1911-20	25.5	22.6	27.4	23.3
2	1921-30	29.5	26.9	32.7	26.6
3	1951-61	44.3	35.5	45.3	35.7
4	1961-71	54.1	43.2	57.4	43.5
5	1971-81	60.6	49.8	62.6	49.3
6	1971-75	60.5	49.7	63.0	48.3
7	· 1976-80	63.5	51.7	67.4	51.8
8	1981-85	65.2	54.5	71.5	54.9
9	1986-88	67.5	56.0	73.0	56.5
10	1990-92	68.8	59.0	74.4	59.4

Source : Jean Dreze & Amartya Sen, Indian Development – Selected Regional Perspectives, 1997, p. 226.

TADIE V. IIITAIII MULAIIIV KAIGS OF KETATA AND IIUTA (PET 1000 IIVE DITAIS	Table V : Infant Mortalit	Rates of Kerala and India	(per 1000 live Births)
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Sr. No.	Year	Kerala	India
(1)	(2)	(3)	(4)
1	1911-20	242	278
2	1921-30	210	228
3	1931-40	173	207
4	1941-50	153	192
5	1951-60	120	140
6	1961-70	66	114
7	1971-80	58	129 ·
8	1981-90	37	110
9	1991	17	80
10	1994	13	73
11	1996	13	73

Source : Government of Kerala, various issues of Economic Review, Kerala State Planning Board, Thiruvananthapuram.

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Sr.	Five Year Plans and Annual Plans	Percentage Expenditure
No.		on Health
(1)	(2)	(3)
1	First Plan (1951-52 to 1955-56)	8.97
2	Second Plan (1956-57 to 1960-61)	6.52
3	Third Plan (1961-62 to 1965-66)	8.61
4	Annual Plan (1966-67 to 1968-69)	6.70
5	Fourth Plan (1969-70 to 1973-74)	11.40
6	Fifth Plan (1974-75 to 1977-78)	8.57
7	Annual Plan (1978-79 to 1979-80)	7.10
8	Sixth Plan (1980-81 to 1984-85)	2.94
9	Seventh Plan (1985-86 to 1989-90)	2.86
10	Eighth Plan (1992-93 to 1996-97)	2.20

Table VI: Percentage of Total Expenditure on Health in Kerala, 1951-52 to 1996-97

Sources :

- 1. Government of Kerala, Report of the High Level Committee on Social Infrastructure & Service, State Planning Board, Thiruvananthapuram, June, 1984, p.59.
- 2. Government of Kerala, The English Five Year Plan of Kerala, State Planning Board, 1992-97, p.9.

expenditure on health in Kerala during the First to the Eighth Five-Year and Annual Plans are also shown in Table VI.

Life expectancy at birth is shown for both males and females for Kerala and India but the IMR is only for Kerala and India from 191-20 to 1990-92 and 1911-20 to 1996, respectively. Tables IV and V distinctly reveal Kerala's remarkable achievements in these aspects as compared to all India for each of the given years, As female life expectancy is likely to be more, it is revealing to note that for each of these years Kerala's life expecting for male is considerably higher as compared to both males and females for all India. Likewise, whereas Kerala' IMR dropped to 13 in 1994, for all India it was 73 in both 1994 and 1996.

Availability and effective utilization of the health centres in rural as well as urban areas, medical facilities, maternal and children's health care, antinatal and postnatal care of pregnant women, immunization for all irrespective of males and females are other noteworthy achievements in the field. The Ayurvedic system of medical science in Kerala has a significant role in achieving high life expectancy (Retna, October 2001). A high level of plan expenditure, i.e. more than six percent of SDP right from First Plan to the 1978-79 and 1979-80 Annual Plans, can be seen in Table VI.

Table VII: Annual Rate of Growth of Population of Kerala and All India, 1961-1991 (in percent)

Year	Kerala	All India
(1)	(2)	(3)
1961-71	2.4	2.2
1971-81	1.8	2.2
1981-91	1.3	2.1

Source : Centre for Monitoring Indian Economy (CMIE) Basic Statistics for the States, 1994.

Demographic Features of Kerala

Kerala has all the characteristics of the third stage of demographic transition with fewer birth rates and death rates, as well as a population growth of 1.3 percent by 1981-91 as can be seen in Table VII.

Many factors have contributed to these demographic features. High literacy of both male and females, higher ages at marriage, improvement in family welfare programs are among the most notable features. Kerala has attained the lowest level of fertility, i.e. 1.8 percent against the All India average of 3.6 percent (Table IV B). It is also the first to reach the National goal of net reproduction rate = 1 with infant mortality rate being 1.3 percent (a rate that is comparable to the best in the world). Another feature of the state demography is high female sex ratio. These features reveal Kerala's closeness to the "Diffusion Theory", which gives importance to various policies and programmes (as are shown in "Growth Propelling" features) as the determinates of demographic transition in Kerala (Zachariah, 1998). Another hypothesis of the fertility decline is with respect to the advanced land reforms of the state that have been put forward by Ratcliffe (1978). He opines that fertility is declining due to the rising level of standard of living among the agricultural labourers due to land reforms, i.e. a positive feature of land reforms.

Table VIII: Table Fertility Rate per WomanBetween 15 and 49 Years, Kerala and All India

Year	Birth Rate	Death Rate
1961	43.9	19.7
1971	37.1	12.2
1981 [.]	28.1	8.6
1991	22.6	6.2

Source : Centre for Monitoring Indian Economy (CMIE), Basic Statistics, 1993.

Table IX depicts birth and death rates in Kerala, 61-91 as well as annual rate of growth of population in Kerala and India from 1961-71 to 1981-91 and total fertility rate per woman of between 15 and 49 years if age for both Kerala and India from 1971 (with a gap of every five years) up to 1991.

Table IX:	Birth and Dealth Rates in Kerala,
	Death 1961-1991

Year	Kerala	All India
(1)	(2)	(3)
1971	4.1	5.2
1976	3.4	4.7
1981	2.8	4.5
1986	2.3	4.2
1991	1.8	3.6

Source : Zachariah, Models of Develop ment and Demographic Change. A Case Study of Kerala. Table 2

Table X is related to unemployment problem in general as well as for technical and professional job seekers belonging to different educational streams. For example, whereas on the one hand Table X presents the level of general unemployment from 1958-59 to 1987-88 based on different rounds of National Sample Survey (NSS). on the other hand, Table XI and XII depict percentage distribution of professional & technical work seekers in Kerala by educational level of each person looking for work from 1970 (with a five years gap) to 1991, as well as percentage distribution of each educational level. The salient feature of the latter table is that it gives the above mentioned percentage distribution in Kerala continuously for each of the years from 1990 to 1998, i.e. just before and after the introduction of Structural Reforms" both in the country and in the state.

Year	Percentage of Unemployed to Total Population of Age 5 Years and Above				
	Ru	ıral	Urban		
(1)	(2)	(3)	(4)	(5)	
1958-59 (14 th Round)	4.2	3.0	3.0	1.4	
1960-61 (16 th Round)	3.2	. 3.3	3.5	1.4	
1972-73 (27 th Round)	3.1	1.3	5.9	3.6	
1977-78 (32 Round)	2.8	3.4	5.2	6.4	
1983 (38 th Round)	· 4.6	2.8	6.0	4.7	
1987-88 (43th Round)	12.5	25.0	14.1	33.8	

Table X : Rate of Unemployment in Kerala as per the NSS Data (in Percent)

Source : P.P. Pillai, Kerala Economy : Four Decades of Development, (1193), pp. 172, 173, John Mathai Research Foundation, Trissur.

Table XI : Percentage Distribution of Professional and Technical Work Seekers in Kerala byEducational Level of each Category of Seeker, 1970-1991

Years as on 31 st December	Medical Graduates	Engineering Graduates	Diploma Holders- Engineering Technical	ITI Certificate Holders	Agricultural Grauduates	Veterinary Graduates	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1970	4.24	8.76	5.49	3.22	12.44	21.60	4.03
1975	12.22	8.75	6.18	7.72	2.99	36.11	7.60
1980	13.15	7.12	10.58	11.09	9.92	5.25	10.79
1985	17.26	13.79	17.43	20.44	13.94	7.72	19.40
1990	23.54	28.81	29.52	30.03	29.75	3.09	29.72
1991	29.58	32.78	30.81	27.51	30.96	26.23	28.47
Total	100.00	100.00	100.00	100.0	100.00	100.00	100.00

Source : Government of Kerala, Economic Review, various Issues, Thirruvananthanpuram

 Table XII: Percentage Distribution of Professional and Technical Work Seekers to

 Total of Each Job Seeker

Year at the end of decade	Medical Graduates	Engineering Graduates	Diploma Holders- Engineering Technical	ITI Certificate Holders	Agricultural Grauduates	Veterinary Graduates	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1990	8.04	8.97	7.96	11.01	3.46	15.27	10.09
1991	11.52	10.70	8.85	9.60	3.41	1.55	9.48
1992	13.90	12.81	10.20	11.33	2.06	9.90	11.14
1993	14.77	13.17	13.70	· 11.13	4.24	13.13	11.83
1994	15.55	14.37	12.14	10.21	37.63	25.54	11.27
1995	8.79	10.42	10.43	10.37	12.27	17.66	10.38
1996	8.80	10.03	11.29	11.36	11.90	3.82	11.21
1997	9.61	9.74	12.56	12.17	12.48	2.98	12.05
1998	9.03	9.79	12.86	12.80	12.55	10.14	12.55
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Directorate of Employment & Training, Economics Survey, 1998 As of 31-10-1998.

The Exemplary Human Resource Development – Education

It has already been mentioned that the high HRD in the state exists from ancient times. It can be seen from Chart II above, which gives varied tenets of educational development in Kerala like educational for whom, stages of education, curriculum, medium of instruction and script in terms of varied periods like Pre-Sangam, Sangam first Stage, Later stage, Post-Sangam till British Rule (these periods are divided in the above mentioned forms as the main source of educational history is Sangam literature, whose influence is discernable over the period from the 2nd Century B. C.) to the Post Independence period, i.e. up to 1993.

These details are self-explanatory. They are not given here as they are discussed in detail in another paper (Prasad & Ratna, 1996). This trend of high literacy is continued even today. The overwhelmingly leading parentage of state for literacy of both male and females as compared to all India as given below in table-I, which again is self-explanatory, i.e. from 1901 onwards continuously up to 1991 (the year for which data are available). Even female literacy in Kerala is substantially more than male literacy in All India.

Economic Planning

As the state came into being as such with State's Organization in 1956, planning was formulated for different parts of the state (i.e. Travancore-Cochin state and malabar region of Tamilnadu) with the commencement of the National Planning for the whole economy, and for the Whole State from the Second Five Year onwards. However, while in the Second plan, the country adopted the "Nehru-Mahalnobis (Heavy Industry) Model" of planning, Kerala seems to have adopted the alternative "Wage-Goods Model", advocated by Vakil and Brahmanand from the First Five-Year Plan itself (Prasad & Retna, 1999). It is shown in the paper that Kerala is still following the "Wage Goods Model of Planning." That the state does not suffer from Resource-Crunch is due to high Gulfremittances and high domestic tax efforts though not very favourable Central-Assistance. However, they have been used for consumption and whatever investment is done outside the state rather than in domestic industries. Thus, it has led to leakage rather than linkage effects. Low Credit-Deposit ratio should really be the resultant of lack of proper vision of the state planners in inducing domestic investment in linkage sectors. Therefore, the seeming adoption of the "Wage Goods Model" has not led to "Consumption-Multiplier Effect" that has been the visualized consequence of the model by its proponents.

Thus, it is significant to note that neither the "Heavy Industry Model" followed by the country nor the "Wage Goods Model" followed by Kerala has been able to solve its economic problems. They reveal that it is not the model, although the model that is adopted is significant, rather it is the implementation of the policy package if the planning of whatever variety is to successfully achieve the economic prospects of the country or the state (Prasad & Retna, 1999).

People's Plan

As the new concept of decentralized planning, widely known as the "People's Plan" was launched only in August 1996, it is too early to assess its effectiveness. However, this approach does not seem to have been able to make a dent in any of the seemingly insurmountable problems like industrial backwardness, agricultural stagnation and either general or educated unemployment. Rather, it seems to have been unconcerned about educated unemployment (Surendran, 1999).

Structural Reforms

Recently, Kerala, too, has adopted some facets of structural reforms like new industrial and agricultural policies, with the major objective of providing massive employment opportunities by the creation of work atmosphere conducive to private investment and for promotion of selfemployment. However, its lack of concern for "People preference" for white-collar regular/ salaried employ-ment seems to be the basic reason due to which "even during the early phase of economic reforms, which gave a boost to the economy, during the first half of the nineties" (Prakash, 1999), "there has been an increase in the various categories of educated job seekers" (Government of Kerala, 1998).

Unemployment in Kerala

Considering the problems of the economy with respect to the commodity producing sectors, including low domestic investment, consumption oriented economy, psychic wage-cost syndrome, it worthwhile to examine is the unemployment problem of the state. The rate of unemployment in Kerala as indicated by various issues of the National sample survey (NSS) data from 1958-59 to 1987-88 shows the degree of both male and female unemployment in rural as well as in urban areas. This is shown in Table X above.

The male unemployment rate in rural area was 4.2 percent in 1958-59, rising to 12.5 percent by 1987-88 according to the 43rd round of NSS. In urban areas it rose

from 3 percent (lower than rural in the same period) to 14.1 percent during the same period. The situation for female unemployment is similar. Whereas it was 3.0 percent in 1958-59 in rural areas, it rose to as much as 25.0 percent in 1987-88, which is double the male unemployment in the same period. That the condition of females is worse in urban areas can be seen from the figure, which has gone up to 33.8 percent in 1987-88. This is higher than the rates for both males in rural and urban areas and females in rural areas. It is worth noting that the rate has grown as much as 2 to 3 times as compared to male and around 1 and 1/3 times in 1987-88 as compared to females in rural areas. This reveals the paradox of high human development especially with regard to female literacy. However, acute unemployment has also been described by Menchen (1980) as the causative factor for low fertility growth. Thus, in a way revealing positive aspect a of unemployment and direct link amongst literacy unemployment and demographic transition in terms of low fertility rate.

Industries

Regarding Industrial the Development of the state, the Pre-Independence period is known as the Golden era of Kerala's Industrialization, while the Post-Independence period can be termed as a Decadent era. It is so, because the period is not only marked by low investment in the manufacturing sector, but also that even out of such investment a major share is allocated to small scale, village and Khadi Industries. An important hypothesis in this regard, developed by Thampy (1994), is that of "Psychic-Cost Hypothesis," which clearly reveals the intensity of unionism and organizational consciousness of the working class of the state and its relationship with the

psychological attitude of the entrepreneurs regarding the decision making about investment, especially in small scale industries. This seems to be the major factor preventing the investment of funds and remittances for industries in the state, because they prefer to invest out side the state, rather than within the state.

Thus, the state is characterized by the traditional industries, which are mainly primary processing and have old and stagnant production technology. These industries are faced with major problems such as low linkages, shortage of raw materials, and seasonal employment. The pioneering study of Subramaniam and Pillai (1985) offers an alternative hypothesis. They present certain major problems including relatively small sized units, investment in low-linkage sectors, low capacity utilization, low factor productivity, and unfavourable wage productivity relationship, which they term as structural rather than regional features. Another note worthy feature is that of the negative attitude of planners towards plan-expenditure with respect to large-scale industries. But, it is interesting to note, as stated above, that small-scale industries are highly emphasized in the state (Government of Kerala, 1972; 1991).

Agriculture

Unlike industries, the state's agriculture received priority in all the Five-Year plans. But the tragic situation is the stagnant agricultural sector of the state. Though the Five-Year Plans emphasized agriculture, they could not achieve any considerable progress despite advanced land reforms and high rainfall, as well as abundant hydroelectric power during normal/above normal rainfall years. Among the prominent reasons for low productivity is the subdivision and fragmentation of land holdings due to land reforms and undue dependence on hydroelectric power leading to shortage of power in drought years are their "Growth Retarding" features. Moreover, one of the study (Kennan & Pushpangadan, 1990) has pointed out that institutional factors like absentee landlordism are equally responsible.

The stagnant commodity producing sectors of the state provides less per capita income. Where as in 1971-72 (at current prices) the per capita income was Rs.579, though in 1991 it has come up to Rs.3843, keeping in view the price rise over these years, it shows less satisfactory effect (Prasad & Retna, 1999). All these have led to low level of economic growth combined with high general and technical unemployment, as the seemingly alternative "Wage Goods Model" of Planning, adopted in Kerala has been equally ineffective as it can be observed from the next section.

Table XI gives the percentage distribution of professional and technical work seekers in Kerala by educational level to total for each category of job seekers during 1970-91. This table shows that while in 1970, medical graduates were 4.24 percent, engineering graduates 8.76 percent, diploma holders in engineering and technical 5.49 percent, IIT certificate holders 3.22 percent, agricultural graduates 12.44 percent, and veterinary graduates 21.60 percent. They have, respectively, risen to 29.58 percent 32.78 percent, 30.81 percent, 27.51 percent, 30.96 percent, and 26.23 percent in 1991. Hence, we observe an increasing trend in all the categories, except engineering and veterinary graduates, where there are some fluctuations, say, for example in Engineering with a minor change in 1980 and in veterinary with volatile years during both 1980 and 1991.

Another noteworthy feature is that over these two decades, whereas the overall increase in veterinary job seekers has been only by 20 percent and agricultural graduates about two and a half times, about four times among engineers, five and a half times amongst diploma holders in engineering and technical, and about seven times among medical graduates. The highest has been to the extent of eight and a half times amongst ITI certificate holders. Whereas such huge rise in job seekers amongst Engineers, Diploma Holders, and ITI graduates reveal lack of job opportunities to lack of investment in linkage sectors, such as considerable rise in medical job seekers is largely due to their preference for secure/government jobs together with which they can do private practice. Preference is less for private sector where there is neither job security nor the possibility of doing private practice. Thus, it is indicative of the fact that more technically qualified personnel prefer to wait for suitable jobs rather than accept anything which is available (Mathew, 1997).

Even after 1991, though Kerala too had adopted some facets of structural reforms, as shown in section 7.2, an ECG study based on Employment Exchange Data presented by (Government of Kerala, 1998) Table XII, reveals that "there has been an increase in various categories of educated job seekers," which seems to "reveal people's willingness for white collar jobs." Another study concludes "the early phase of economic reforms gave a boost to the economic reforms, during the first half of the nineties" (Prakash, 1999). It is reflected from the fact, as shown by the figures in Table XII that there is a continuous rise in unemployment in each of such educational levels from 1990 to 1994, except for Diploma Holders in Engineering and ITI

certificate holders, for which there is such an increase only up to 1993.

Even, the introduction of "People's Plan" does not seem to have been able to make any dent in any of the seemingly insurmountable problems, especially educated unemployment rates as shown by . the data in Table X above.

The Educated Unemployed in Kerala

The state of Kerala is threatened with an ever-increasing rate of educated unemployment. Various studies such as the one on poverty, unemployment, and development policy undertaken by the United Nations (1975), the working paper of Centre for Development Studies by Prakash on Unemployment in Kerala (1988), and Chandan Mukherjee and Issac Thomas's Nine observations on educated unemployment in Kerala (1994) provide a vivid picture of the state's ever increasing level of educated unemployment. Mathew (1997) undertook a pioneering analysis of unemployment and employment in Kerala, where he explains the "Cascade effects" which means that better qualified people are appointed where the requirement is of lesser qualified persons. This combined with the "Preference Hypothesis" of the people for white-collar jobs, especially the secured/ government jobs, has made the condition of the unemployment situation worse in the state. Mathew, showing direct link among education, demography; and unemployment opines that with higher education, low percentage of birth and death, as well as low IMR and MMR "with women entering the labour force," the extent of female unemployment is bound to become more acute particularly because, unlike men, female work seekers have a strong preference regarding the place of employment. All these factors have led to a high level of professional and technical

work seekers in Kerala in addition to general educated unemployment, Conclusion and Direction of Future Research.

Conclusion

The uniqueness of our study lies in the fact that perhaps for the first time, it has simultaneously identified the effects of both economic growth stimulants and retardant. The growth propelling factors have not only led to ever increasing "Human Development Syndrome," but also demographic transition for the first time in a country in agreement with "Diffusion Theory" according to which the effective. implementation of policies and programmes (as identified as growth propelling) is the major determinant of transition. Though many of these programmes, such as family planning, maternal and child health care, and universal immunization, has also been formulated at the national level but were implemented ineffectively. The distinctiveness of Kerala lies in the background of historically continuing emphasis on human development, which has been largely helpful in the efficient implementation of these programmes. However, the high influence of concomitant growth retarding factors have so thwarted economic growth of the state, that the state is not only characterized as having "High Social Development, Low Economic Growth Syndrome," but also more importantly the sustainability of "High Human Development" has become suspect. Therefore, the study underscores the urgent need of controlling the negative forces in order to achieve equitable growth and development by unmasking the hollowness of the perennial debate on growth versus social justice" circulating around the development world in general and India in particular. It also emphasizes the fact that development and growth should be complementary rather than competitive, in that they are like the upper and lower blades of a scissor.

Limitations of the study and Directions for Future Research

The study has its limitations. Though, the study has presented the historical aspects of HRD from the 2^{nd} century, B. C., it has taken into consideration only the qualitative aspects of education system as we could not locate any quantitative data for the earlier period.

In the case of commodity producing sectors, we have not given any details in order to keep the size of the paper presentable. Likewise, various growth propelling and the concomitant growth retarding features have only been stated rather than discussed.

The sustainability of the "Kerala Model" in the light of the need for state oriented policy package to induce investment in linkage sectors, domestic/ private investment in the state rather than leakages in terms of both consumption and concomitant investment out side the state, as well as increase in credit-deposit ratio, needs further investigation.

Likewise, as high "Human Development Syndrome" does not seem to have benefited Dalits (the down-trodden), Fishermen, among others (AKG Centre, 1994), the reasons for this also needs further research. In addition, the reason for the existence of social rigidities including Dowry deaths and male dominance in Kerala (AHG Centre, 1994), though in lesser dimensions, in the light of high HDR and other "Growth Propelling" factors such as people's awareness of their rights and duties as well as People's Science Movement, equally deserve further study.

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I Introduction

There have been continuous changes in the concept and focus of adult literacy programmes all over the world. Literacy is now seen as a strategy for liberation. The aim is to teach not only how to read the word but also how to read the world. The Declaration of Persepolis¹ affirmed that literacy is not just the process of learning the skills of reading, writing and arithmetic but a contribution to the liberation of man and to his full development. Thus conceived, literacy creates the conditions for the acquisition of a critical consciousness of the contradictions of the society in which man lives and of its aims; it also helps in defining the aims and objectives of an authentic human development.

Even then a question: "Why literacy?" is often asked and it is necessary to discuss it right at the outset. A simple answer to the question "Why literacy?" would be : Literacy for development. Literacy can be defined in simple terms as the ability to read and write in the mother tongue or in a national language. Numeracy, the ability to deal with numbers at primary level, is typically considered part of literacy.

Definitions of development have to include values both about means and ends. For instance, development must, almost always, mean more production; but improved production must be accompanied by just distribution. The health of the state must be balanced by a concern for the health of its people. Citizens must be taught critical consciousness so that they can engage in the creation and renewal of social and political structures through genuine participation. Illiteracy need not, of course, be equated with ignorance. Yet, it may be said that it is an unsatisfactory condition. The question is : Will literacy create or facilitate emergence of the desired effects in adult men and women who will then take part in the development process?

The answer to this question could be given through historical analysis or empirical research findings so also from theory and ideology. Before that let us have a look at the literacy scenario at the national level.

Literacy Scenario in India

At the time of independence, the country had literacy rate of around 15% and by 1991 we have reached only 52.21%. Our performance in improving literacy rate has been poorer if compared to many other countries. The following table shows the growth of literacy rates since 1951 to 2001.

Literacy Rate - India: 1951-2001

Year	Persons	Male	Female
1951	18.33	27.16	8.86
1961	28.30	40.39	15.33
1971	34.45	45.95	21.97

^{*} Director, Education and Development Research Centre, Pune.

Year	Persons	Male	Female
1981	43.57	56.38	29.76
	(41.43)	(53.46)	(28.47)
1991	52.21	64.13	39.23
2001	65.38	75.85	54.16

Note: Literacy rates for 1951, 1961 and 1971 relate to population aged five years and above. The rates for the years 1981, 1991 and 2001 relate to the population aged seven years and above. The literacy rates for the population aged five years and above in 1981 have been shown in brackets.

II Brief History of Adult Education

Before we go into the discussion of present programmes of adult literacy, let us look into the history of adult education briefly. Most of us think of postindependence period but there have been efforts towards adult literacy even before independence. The oldest effort was by Shri M. Visveswarya, the Diwan of Mysore² who launched a significant adult literacy programme. Six to seven thousand literacy classes came up. Dr. Walker gave instruction to about 2,000 prisoners in Agra jail. This was around 1837. In Punjab, in 1925-26 there were over 3,000 adult literacy classes. The Central Advisory Board of Education in 1938 identified adult literacy as the chief plank of the adult education movement. There was an important voluntary effort in Mumbai in 1939. The literacy campaign was carried out by the Social Service League, Mumbai in cooperation with the Bombay Adult Education Committee of the provincial Board of Adult Education. Well known personalities such as Diwan Bahadur K.M. Jhaveri, Lady Cowasji Jahangir, Mr. Bhulabhai Desai, Shri Vaikunth Lal Mehta of Servants of India Society (SIS), Shri Dinkar Desai (SIS), Smt. Godavari Parulekar (SIS) were involved in this work. The work was mainly

shouldered by Smt. Godavari Parulekar. It was called 'Literacy Campaign', large public meetings were held in different wards, chawls and street corners; leaflets, handbills, picture posters and slogan posters were used, several processions and lorry drives with loud speakers were organized. Syllabus was prepared, different languages were covered, volunteer teachers were trained. There is similarity in the present campaign and the one carried out 60 years ago. Before we come to the present literacy programmes, let us recall the experiments carried out after independence. A number of significant programmes were taken up since independence, the important among them are briefly described below :

(i) Social Education

The main elements were literacy, extension, general education, leadership training and social consciousness. The programme was implemented in the First Five -Year Plan (1951-56).

(ii) Gram Shikshan Mohim

Movement for literacy in the rural areas was started in 1959 in Satara district of Maharashtra, and was later extended to other parts of the state. The programme aimed at imparting basic literacy skills within a period of about fcur months and by 1963, it spread to all the districts of the state. The programme, however, suffered from a lack of systematic follow-up and consequently, relapse to illiteracy was massive.

(iii) Farmers' Functional Literacy Project

Started in 1967-68 as an interministerial project for farmers' training and functional literacy, the project aimed at popularising of high-yielding varieties of seeds through the process of adult education. The prqgramme was confined to 144 districts of the country, where nearly 8,640 classes were organised for about 2.6 lakh adults.

(iv) Non-formal Education

In the beginning of the Fifth Plan, a programme of non-formal education for 15-25 years age-group was launched. Although the scope, content and objective of the nonformal project was clearly spelt out, its understanding in the field was very limited and the programmes actually organised were indistinguishable from the conventional literacy programmes.

(v) Polyvalent Adult Education Centres

Workers' Social Education Institutes and Polyvalent Adult Education Centres were reviewed by a group in 1977, which recommended adoption of Polyvalent Adult Education Centres in the adult education programme for workers in urban areas. In pursuance of this decision, Shramik Vidyapeeths were set up in the states.

(vi) Functional Literacy for Adult Women (FLAW)

The scheme of Functional Literacy for Adult Women (FLAW) was started in 1975-76 in the experimental ICDS project areas. It was gradually expanded along with the expansion of ICDS upto the year 1981-82.

Till then, 300 ICDS projects were approved. Sanctions were also given for FLAW scheme in these project areas. However, the Planning Commission decided to stop the expansion of FLAW scheme in LCDS project areas, mainly due to a constraint of resources.

The aim of the FLAW scheme was to enable illiterate adult women to acquire functional skills along with literacy, to promote better awareness of health, hygiene, child-care practices and to bring about attitudinal changes. The target age group was 15-45, with greater attention to those in the 15-35 age group.

(vii) National Adult Education Programme (NAEP)

The first nation-wide attempt at eradication of illiteracy was made through the National Adult Education programme launched on October 2, 1978. It was a massive programme which aimed at educating 100 million non-literate adults in the age group of 15-35 years within a time frame of five years.

The objectives of the national Adult Education Programmes were not merely to impart literacy in the conventional sense, but also to provide learners with functional awareness which were conceived as the integral components of the skills of reading, writing and arithmetic. Functionality implied the ability to utilise and apply the skills acquired with a view to promoting efficiency of the neo-literate. The social awareness component aimed at knowing, understanding and taking action on issues which affect the individual, community and society.

(viii) Rural Functional Literacy Project (RFLP)

This was a major centrally sponsored scheme started in 1978 for rural areas. The erstwhile 144 Farmers' Functional Literacy projects and 60 non-formal Educational Projects were merged into it. Further projects were added and the number of projects throughout the country in 1987 were 513, each having upto a maximum number of 300 adult education centres and each centre having 25-30 learners.

(ix) State Adult Education Programme (SAEP)

The states also similarly took up centre based projects under the state plan funds on the lines of RFLPs.

(x) Adult Education through Voluntary Agencies

To ensure greater participation of voluntary agencies, the Central Scheme of Assistance to Voluntary Agencies was revived in April 1982. Under this scheme, registered societies were sanctioned centrebased projects for functional literacy and post-literacy, where they were allowed to run projects in a compact area.

Review of the national Adult Education programme

Intended to be a mass programme, the National Adult Education Programme (NAEP), however, remained a traditional centre-based programme, which was also honorarium based, hierarchical and government-funded and governmentcontrolled. The strengths and weaknesses of the NAEP were thoroughly studied and need for new approach was recognized.

It was observed that motivating an adult illiterate was very difficult and proper efforts are necessary to overcome this. Therefore, the Government of India appointed Motivation Committee under the chairmanship of Prof. Ramlal Parikh with Prof. A. K. Jalaluddin as Member-Secretary in 1985. The committee came out with a very good set of suggestions including the one that there has to be support and participation of all sections of the community.

III Formation Of National Literacy Mission (NLM)

Literacy came on national agenda when the National Literacy Mission was formed by the Government of India along with other technical missions. This was on 8th May 1988. The National Literacy Mission adopted new methods, earlier studies were considered, the Motivation Committee report was taken into consideration for implementing the literacy programmes. In the year 1989, Kottayam town became the first 100 per cent literate town in the country. The method used in Kottayam was extended to Ernakulam district where Kerala Sahitya Shiksha Parishad was actively involved in the literacy programme which was called Literacy Campaign.

The literacy project was a combined endeavour of the universities, the municipality and the administration. Learner's houses were visited frequently by municipal councilors and NSS volunteers. A large number of women volunteers came out to take part in the campaign.

Drama, folk arts and music were used to drive home the message of literacy to the people. A team of singers and folk artists visited every ward to give their performance. A painting workshop was held with theme of literacy. Wall posters and stickers were extensively used. Tremendous support was provided by the media.

Rigorous and regular monitoring was done at the level of the Collector. After initial literacy was achieved, emphasis was laid upon consolidation. The NSS volunteers stayed on in the wards for six more months bringing up the level of the teachers.

Ernakulam became the first totally literate district in the country in 1990. This model of Kottayam and Ernakulam was adopted at the national level by the NLM and the so called Total Literacy Campaigns was based on this model.

Specialities of the Total Literacy Campaigns

The TLC model is now accepted as a dominant strategy of eradication of adult illiteracy by almost all States/UTs. This strategy has been reviewed and endorsed by the National Development Council and also by the conference of chief ministers of states inaugurated by the Prime Minister on February 15, 1994. TLCs have certain features which make them unique and distinguish them from other government programmes.

- i) These campaigns are area-specific, time-bound, volunteer-based, costeffective and outcome oriented. The thrust in TLCs is on attainment of predetermined norms of literacy and numeracy. The learner is the focal point in the entire process and measurement of learning outcome is continuous, informal, participative and non-threatening.
- The campaigns are implemented ii) through district level literacy committees which are registered under the Societies Registration Act as independent and autonomous bodies to provide a unified umbrella under which a number of individuals and organisations work together. The leadership to this body is provided by the district collector/ chief secretary and Zilla Parishad (District Council). All sections of society are given due representation in the planning and implementation of the programme. On the basis of the Ernakulam experience, an organisational structure for a district TLC has been evolved. The structure rests on 3 pillars of participatory people's (1) full-time committees: (2)

functionaries and area coordinators; and (3) a support system provided by government officials. In itself, this may not seem significant, but it exemplifies an interactive and a communicative process of management and implementation.

- iii) The campaign approach to total literacy is characterized by large scale mobilization through a multifaceted communication strategy. The success of the campaign rests substantially on effectiveness with which all sections of society are mobilized.
- iv) No targets are fixed from the top. The targets emanate from the grassroot level on the basis of a detailed door-to-door survey conducted by the volunteers. This survey is not only a head-counting exercise, but also a tool of planning, mobilization and environment building.
- v) The campaign is delivered through volunteers without any expectation of reward or incentive.
- vi) The management information system in a campaign is based on the twin principles of participation and correction. It has to be accountable, credible and instead of being enrolment oriented, it has to be outcome oriented.
- vii) To enable every learner to achieve measurable levels of literacy, the new pedagogy known as "Improved Pace and Content of Learning (IPCL)" has been translated in the shape of a set of multigraded and integrated teaching-learning materials and training. The learner

is placed at the focal point in the entire process which, through compact duration and continuous ongoing evaluation, helps to heighten the learner's motivation and improve the pace of learning.

- viii) Training of all functionaries involved in the campaign is crucial to the success of the campaign. Training has to be primer-specific, participative, communicative and a tool of continuous correction, upgradation and human resource development.
- ix) Though the TLC is meant to impart functional literacy, it also disseminates a 'basket' of other socially relevant messages such as enrolment and retention of children in schools, immunization, propagation of small family norms, promotion of maternity and child care; women's equality and empowerment, peace and communal harmony, etc.

Post Literacy Programmes (PLP)

Literacy levels acquired by neoliterates during the short span of the literacy campaign is at best fragile. There is a genuine danger that neo-literates may regress into partial or total illiteracy unless timely action is undertaken to consolidate their learning skills and make them permanent. This is the rationale for postliteracy.

The National Literacy Mission has visualized the post-literacy programme as an extension of the Total Literacy Camjpgns, in the continuum of life-long education. Each Total Literacy Campaign is followed by the post-literacy programme, now, of one-year duration.

The Post literacy programme also undertakes a mopping up operation to enable those who had dropped out of the campaign or were unable to achieve the NLM norms, to attain them through remediation.

The post-literacy programmes are aimed at covering the following :

- 1. Remediation, which should take into account the uneven level of achievement of a TLC and reinforce the literacy skills already, gained along with correction of deficiencies and shortcomings in the case of some learners.
- 2. **Continuation:** This implies upgradation of literacy skills to enable the neo-literate to move towards selflearning. Not merely literacy skills but continuation implies further enhancement of awareness.
- 3. Application: Acquisition of literacy skills should lead to their application in everyday life. This does not come by itself. It has to be guided by positive measures. Once application starts, people become aware and begin to participate in the process of their own development.

To assess the achievements of the district in fulfilling the goals of post literacy, a system of external evaluation has been envisaged. Post- literacy evaluation concentrates not merely on evaluating learning skills but also other themes of post literacy including - convergence with other development programmes, skill upgradation etc. In keeping with NLM's thrust on transparency and objectivity, the agencies assigned to undertake the evaluation are external to the state.

Continuing Education

In the face of persistent social and economic problems, application and utilization of literacy skills acquired by the neo-literates often remains a difficult proposition. The literacy processes have, therefore, to be so continued as to result in release of creative energies of the people, which must be sustained to enable the people to realize their potential, to help themselves and achieve self-reliance. Hence the crucial importance of creating satisfactory arrangements for continuing education of all learners.

Continuing education is also an indispensable aspect of the strategy of human resource development and of the goal of creation of a learning society. Many of the third world countries and the developing countries are now recognizing that socio-economic planning alone is not enough and that the human resource development is a key factor in development. All these countries are aware that education and human resource development will play a key role in the 21st century. What is more significant is the realisation that expansion of formal education alone, which is only a small component of lifelong learning, cannot lead to human resource development. Formal education as an instrument of human resource development is not really effective in remedying the structural inequalities in the society. Continuing education, which provides a second chance to those who missed formal education and is responsive to learners' needs, directly addresses itself to structural

inequalities. Only continuing education can bring about full development of human resources. Since continuing education is the opportunity to engage in lifelong learning, continuing education is now emerging as the main component of the broader view of education as a whole.

Continuing education includes postliteracy for neo-literates and school dropouts for retention of literacy skills, continuation of learning beyond elementary literacy and application of this learning for improving their living conditions. But continuing education goes beyond postliteracy. Continuing education includes all of the learning opportunities all people want or need outside of basic literacy education and primary education. In continuing education, human resource development becomes the focus of attention. Thus, continuing education is also an essential extension of literacy to promote human resource development.

The most important strategy here is to set up continuing education centres. These centres are to be used not only for get togethers of neo-literates and discussions but for all activities of continuing education. These relate to all aspects of human existence and aim to meet the needs of the new literates to allow them to handle their daily routine activities better. In essence, continuing education is the stage where literacy skills acquired are used in relevant activities by neo-literates. It is consolidation through functionality.

There can be various facilities that a continuing education centre can offer. One would be having a library which would be a collection of reading material for neoliterates. There would also be a reading room where people would be encouraged

to come, sit and read. Then it could also work as a training centre where people from outside agencies and departments can come and provide training on some incomegenerating activity. It would also function as an information centre where material regarding all development activities is available and where officers and employees of different departments come to talk to the neo-literates, about their schemes and their concerns. It is a place where discussions on various aspects of their life take place and the neo-literates learn from each other and become more adept at solving their life problems. It is also a centre for bringing about convergence of all development schemes and making them need-based. Not only the government, but the NGOs also get a platform to work and co-ordinate their efforts with general development process. Above all, it functions as a centre for cultural and sports activities. The continuing education centre thus becomes a place around which life of the neo-literates, school dropouts and school children revolves.

What has been explained above is the frame work of the NLM for TLC, PLP and CE programmes. There have been a large number of evaluation studies of TLCs which show that there are wide variations in the literacy achievements from state to state with relatively better performance in southern states, Maharashtra, West Bengal, Gujarat and Rajasthan and poorer performance in Hindi belt. There are wide variations between the districts and also within districts between various socioeconomic groups, between male, female, between rural-urban, etc. It is also observed that the initial success of the TLC programmes is waning in the recent past. There are certain reasons of the general nature because of which any development programme suffers after initial successes and after a time lag. The approach of NLM towards monitoring and continuous evaluation of the programmes would perhaps help in keeping the quality of the programmes get revitalized. However, NLM will have to take some steps for revitalizing the programmes.

The aim of all these programmes is to create a learning society. To what extent this would be achieved could only be seen with the passage of time. However, it can be said that the programmes of NLM have good chances of reasonable success.

Evaluation Systems Under NLM

The important laudable feature of the literacy programmes under the National Literacy Mission is that there is built-in evaluation process throughout the various stages of the programme and that the NLM insists on carrying out these valuations. There is hardly any other programme where such evaluation systems are followed. This implies the openness of the NLM in terms of achievements and results of the literacy programme.

IV Literacy and Human Resource Development

As has been explained above, human resource development is emphasized in the continuing education programme. After achieving literacy the adult learners can take advantage of the CE in various ways and if the ZSS plans properly and the NLM supports the CE activities adequately the human resource development of this neglected section of the population could be effectively achieved.

The effects of literacy could be studied by identifying three different types; the cognitive effects of pure literacy, the social effects of literacy and the instrumental effects.³The cognitive effects of the literacy on individuals have received considerabe attention from researchers. McLuhan⁴ says that literacy changes the way in which the literate individual acquires and organises knowledge of the surrounding reality. In-depth interviews with new Tanzanian⁵ literates suggest that new literates do feel that they have become new persons. The list of characteristics that accrue from literacy include individualism, objectivity, self-confidence etc. The acquisition of self-confidence was evident among neo-literates in various districts visited and Total Literacy Campaign evaluated by the author where a number of group meetings were held and group discussions carried out.

The illiterate after becoming literate is better equipped to carry on his own dayto-day activities and also to participate in the society in which he lives. For example, literacy *per-se* may not result in increased participation in political institution, it certainly equips the individual for possible participation. While it is not out of question for illiterates to participate in political institutions within the community, leadership in such institutions as Panchayats in India is becoming more and more difficult for illiterates.

Some argue that the information and the skills the illiterates urgently need can be communicated to them through non-print media without any need for them to become literate first. It is countered that development must come first, and this will create needs for literacy which can be met when they arise. Those who advocate literacy assert that literacy cannot be postponed. We strongly feel that the human resource development would always be better achieved if people are made literate. The non-formal education should always be based upon a programme of adult literacy, with literacy being one of the central objectives.

Development theorists as well as development planners have asserted that literacy does often mean higher income for the new literates both in urban and rural settings. In the rural setting, the new literate is able to make use of such economic institutions as extension activities, rural banks and marketing co-operatives. In the urban setting, literacy contributes to higher income to safety on the job, and to the possibility of unionisation to protect economic interests (Bhola 1984).⁶

Literacy by itself is human development. Literacy opens up new options for the enjoyment of culture. The literate can use the print mode to enjoy the cultural forms and creations of people.

Any human resource development programme would be more effective if the participants are literate than when they are illiterate.

V Literacy and Development

The argument that there is a positive relationship between the level of literacy in a society and the economic, social and political development of that society has been frequently made and strongly argued. Phillips⁷, and many others have provided support for the connection between literacy and economic development in their review of studies conducted within different socioeconomic settings and different political cultures. Blaugh⁸ found that literacy contributed to economic development in different ways: (a) raising the productivity of new literates, and also of individuals working with literates the so-called spillover benefit of literacy; (b) expediting the flow of general knowledge to individuals and thus reducing the cost of transmitting useful information; (c) stimulating the demand for vocational training and technical education; (d) enhancing their occupational mobility and so on.

Blaugh's findings are more important and relate to literacy per-se. There are a number of studies carried out on macro-level analysis where percentages or levels of literacy include the entire literate population of literates made literate through adult literacy programmes, school educated and those who had higher education. There is a minor question of affectiveness in these studies. Still the findings such as association between high level of illiteracy and poverty, literacy and per capita income and in many studies development indices and literacy indicate linkage of literacy and development. Literacy and development are inextricably linked to each other and at each stage tend to supplement and complement one another (Alok Ranjan)⁹.

Though it is well accepted that the literate population is in a much better position to participate in the process of growth, take advantage of the opportunity and to respond productively, there is a need to carry out well designed research studies to examine the finding of Blaugh in Indian context. It would be most important to compare the illiterate population with the literate population, who were made literate through adult education programmes. The ongoing TLC, PLP and CE programmes can provide adequate setting to take up such studies on scientific basis. Hardly any such study is available. The author plans extensive research covering these issues.

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From Quantity to Quality: Need for a Paradigm Shift in Food and Agricultural Sector

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1 Focusing on Quality

Indian food and agricultural sector is in a state of flux. Gone are the days when agriculture was described as a food-deficit sector. Today, India is self sufficient in foodgrain production. In fact, marketed surplus is growing, millions of tonnes of foodgrain stocks are accumulating, and India is a leading producer of a number of horticultural products. Moreover, for quite some time now, importance of value addition in agricultural sector has received attention, and it has been hoped that food processing sector will grow rapidly. However, over the decades, in pursuit of these objectives, quality consideration has not received the kind of attention it should have. Instances of rotting fruits and vegetables at major APMC markets, poor quality of foodgrain stocks rendering them uncompetitive both in domestic and export market, food poisoning and/or adulteration cases, and, a general perception that imported products are of a better quality, have been quite symptomatic of this inattention.

WTO led trade liberalization has heightened such quality perceptions. For example, imported apples are now available throughout the year, and are perceived to be of better quality in terms of uniformity of size, shape, colour, and packaging. Similarly, in processed food products, customers are getting attracted by better variety, packaging, and shelf life of foreign brands such as Tropicana, Nestle, and Lays, though not necessarily imported. Moreover, trade liberalization has resulted in asymmetric trade opportunities. While, low international prices increase imports, high international prices have not necessarily led to increase in exports. On many occasions, poor quality has become a hindrance to export promotion. Rejection of shipments of wheat, shrimp, meat products, groundnut, and mangoes on various sanitary and phytosanitary grounds are just a few examples of this. In fact, the WTO agreements on sanitary and phytosanitary measures (SPS), technical barriers to trade (TBT), and to some extent trade related intellectual property rights (TRIPS) have shifted the focus from price competitiveness to quality competitiveness.

Concurrently, Indian customers are also becoming more demanding in terms of quality. A reasonable per capita GDP growth rate, increased workforce participation by women, changing lifestyles, and a heightened awareness about hygiene and nutrition have contributed to this change. In this context, survival and success in domestic and global markets has become a challenge for agribusiness managers, horticulturists, and farmers alike. And, therefore, it has become imperative that there is a paradigm shift in the thinking of agribusiness stakeholders, including policymakers, to concentrate efforts on

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understanding what food quality is, how consumers perceive it, how to control and enhance it, and, what are its global benchmarks.

2. Dimensions of Food Quality

The concept of food quality can be looked at from various perspectives. The first is how to maintain and improve quality at the production stage. Second, it is important to understand how quality is perceived by consumers so that agribusiness firms can make changes to their products to suit their preferences. Third, which is more relevant for policy makers, is the institutional perspective. Food, like other products, not only gives material pleasure, but is necessary for maintaining a healthy lifestyle for the population. Therefore, food safety and nutrition issues are extremely important to policymakers. Finally, food quality is undergoing changes due to phenomenal changes in technology. For example, introduction of GMO foods holds good prospects in the near future, although they are banned in India at this time.

All these perspectives on quality revolve around different dimensions of quality. Garvin (1988) talked about various dimensions of quality in the context of nonagricultural products. One can extend those dimensions to food and agricultural products - Conformance is the degree to which a product meets the pre-established standards. There are all kinds of specifications that need to be adhered to for food products. These specifications may involve a permissible range of variation for a particular parameter or an inequality norm for it. For example, there always will be a permissible range of acidity level and salt concentration for pickles that maintain a standard taste and prevent spoilage as well.

Control charts can be used to monitor conformance to the specifications. Similarly, Codex standard for maximum permissible level of aflatoxin in groundnut is 15 ppb, much less than the Indian standard of 30 ppb. In fact European Union standard is less than at 5 ppb, creating a non-tariff barrier to Indian groundnut exports.

Performance refers to primary operating characteristics of a product. For example, ceteris paribus Basmati must be aromatic rice, which gives the typical enhanced aroma when cooked. Similarly, an ice cream that melts faster than a competing brand would be ranked lower on performance dimension. Features are the secondary characteristics that supplement a product's basic functioning. Instant Coffee powder sold in glass jars, which can be used later for storing kitchen items, or selling orange juice in tetra-packs enhancing convenient use are examples of the features dimension of food products. Reliability reflects the probability of a product's malfunctioning or failing within a specified period of time. This dimension is applicable more to durable food items than items consumed instantly. A brand of pickle that has a higher chance of getting spoiled compared to other brands within a specified period, will rank lower on this dimension. Durability means amount of use one gets from a product before it physically deteriorates. Durability in the context of food products reflects its shelf life. Safety is one of the most important dimensions of food quality. If a food item is spoiled, its safety dimension is easily recognisable. However, food products can contain microbial, toxic and/or physical contaminants, which are not recognisable before consumption. Consumer either falls sick after consumption of a food product or long-term effects of repeat consumption of a product could be hazardous to health.

Aesthetics are important in the sense that how a product looks, feels, tastes and/ or smells is clearly a matter of personal judgement and a reflection of consumer preferences. Nevertheless, there appears to be some uniformity in consumers' ranking of products on the basis of aesthetics. Study by Bonner and Nelson (1985) shows that high quality of food was most often associated with attributes such as 'rich/full flavour', 'tastes natural', 'tastes fresh', 'good aroma' and 'looks appetizing'. Another dimension is the Perceived Quality. Consumers do not always possess all information about the product attributes. Hence, perceptions of quality in terms of images, advertising and brand names become critical. For example, a consumer may perceive that tetra-packed juice sold by Dabur is made in India, but it is in fact manufactured in Nepal.

And then there are some other dimensions of food quality that have become relatively important in recent times. Nutrition is one such dimension. Although traditional dietary practices did address this issue through holistic food habits, lifestyles are changing traditional food habits, and nutrition aspect is now revisited through modern scientific findings. Another dimension is Product Origin, and Method of Production which is valued both by consumers and producers. A Hapus (Alphonso) mango, Basmati rice or French wine has to come from a particular. geographic location, and, importance is attached to the way the product is made or processed. This quality attribute has assumed importance because the trade related intellectual property rights agreement (TRIPS) of the WTO has

underscored the importance of protecting such geographic signs of agricultural products. A related quality attribute is the ability to reproduce itself. Agricultural commodities have the ability to reproduce themselves through use of their own seeds. With intellectual property rights being increasingly protected, some limitations have arisen on farmers' right to use seeds for the next crop.

A sum total of all these dimensions of a food product represent quality of that product. Among the quality dimensions mentioned above, *conformance* to standards is clearly a production related dimension, and *esthetics* is a dimension which is very much consumer-centric. Quality can be improved by better production processes, better understanding of consumer preferences, a better regulatory framework, and judicious use of changing technology. Let us consider these aspects below.

3 Managing Food Quality

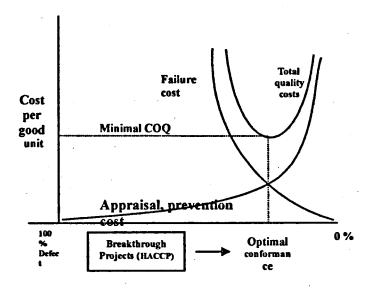
Production Perspective

As mentioned earlier, in the quest for quantitative goals, quality aspect has been somewhat ignored in the food and agricultural sector. No doubt, farmers, horticulturists and food processing firms, based on their accumulated wisdom, are best placed to judge what are good production practices in their operations. However, there are some simpler ideas that could be shared with them as an extension activity, which have the potential to improve their product quality and profits. For example, on-farm, cost-benefit studies show that a mandava method of tomato cultivation is much better than para method, and, grading of tomatoes do give higher actual profits to farmers (Deodhar, 2001). The proposition sounds elementary, however, co-opting a farmer for demonstrating this by taking the produce to wholesale market drives home the point. Similarly, statistical concept of acceptance sampling can be effectively used for accepting/rejecting produce lots. With the advent of contract farming, such practices do hold a lot of promise.

It is always in the best interest of a food processing firm to produce good quality products. Else, a single bad event can cause customers to desert. Recent examples of substantive loss of sales for Cadbury and soft-drink manufacturers due to quality problems are cases in point. Cost of quality can be divided into two categories. One is the failure cost, and, another is the prevention cost. Whereas the failure cost consists of cost of lost sales, inspection, rework and disposal; prevention cost consists of cost of employing quality management systems in production. As depicted in Figure 1, as one moves towards zero-defect production practices, failure cost comes down but prevention cost goes up. The prevention cost for a zero-defect situation will be extremely high and impractical. However, as suggested in the diagram, total cost of quality can be minimized by introducing threshold level quality management systems. of Introducing production control charts for processed foods, acceptance sampling methods for fresh produce, and, employing logical food safety and quality systems like Hazard Analysis and Critical Control Points (HACCP) can be such threshold quality management practices and system (Deodhar and Dave, 1999).

Is implementation of food safety and quality system such as HACCP expensive? Study by Deodhar (2003a) shows that in food processing firms, annualised average expense of HACCP system is less than 1 percent of the turnover. In fact, there are significant scale-economies in its use. Implementation of HACCP was suggested by Codex Alimentarious Commission more than a decade ago, and it has been endorsed by the SPS agreement of WTO. Unlike in the United States and European Union, where HACCP has been incorporated into their domestic food laws, HACCP is not mandatory for Indian food processing companies. Indian food law needs to incorporate HACCP as a mandatory requirement for food processing companies. In the case of foodgrain and horticultural crops, implementation of HACCP may be difficult; however, its logical concepts can very well be applied.

Figure1: Minimizing the Costs of Quality



Valuing Consumer Perceptions

In the post-WTO regime, international trade in food and agribusiness has exhibited intra-industry character where similar goods are being traded. Significant growth in intra-industry trade implies that in the domestic market there will be intense competition between foreign brands and domestic brands. In such a market, while price competitiveness would matter, firms would increasingly focus their attention on differentiating their products from those of others. Product differentiation and branding is possible if firms build quality competitiveness of their food products. And, building quality competitiveness implies identifying various quality dimensions of a given product, understanding consumers' perceptions about these dimensions, and, making adjustments to the product based on these perceptions. One of the techniques to evaluate consumer perceptions is called the hedonic price analysis.

The basic assumption of the hedonic price analysis is that utility is enhanced not by the consumption of a good per se but by the quality dimensions of that good. In this context, Rosen (1974) presented a model of product differentiation based on the hypothesis that any good is valued for its utility generating quality dimensions. Therefore, market price of a good is the sum of the shadow prices consumers are willing to pay for each quality dimension. The demand function derived from maximising consumer utility function provides the foundation for hedonic price analysis. The hedonic price function for the ith brand of a product can be described as a function of its quality dimensions:

(1) $Pg_i = Pg(z_{i1}, ..., z_{ii}, ..., z_{in}),$

where z_1, \ldots, z_n are product quality dimensions. The utility maximization problem for a representative individual can be formulated as:

(2) Max U = U (X, Z)
s.t.
$$M - Pg_i - X = 0$$
,

where X is a composite, numeraire commodity and M is income. An implicit assumption is that each individual purchases only one unit of the product in a given period. Applying first order condition for the choice of characteristic z_i we get:

$$\frac{dU/dz_{j}}{dU/dX} = \frac{dPg}{dz_{j}}$$

Equation (3) is nothing but stating the law of equimarginal utility for the numeraire good X and the characteristic z_j . dPg/dz_j is the marginal implicit price for characteristic z_j and corresponds to the regression coefficients when estimating equation (1). Further, the utility function U can be rewritten as:

(4) U = U (M - Pg_i,
$$z_{i1}, ..., z_{ij}, ..., z_{in})$$

Inverting equation (4) and solving for Pg_i with z_j as a variable and U* and z^*_j being held constant at their optimal values associated with problem in (2), we can write a bid curve Bj as follows:

(5)
$$B_i = B_i (z_i, z_{i}^*, U^*)$$

Holding other things at the optimal level, (5) describes the maximum amount an individual would be willing to pay for a unit of the product as a function of z_j . A wellbehaved bid curve ought to exhibit a diminishing willingness to pay with respect to z_j . Based on their individual preferences and/or incomes consumers can have different bid curves $B_j^1(z_j)$ and $B_j^2(z_j)$ as shown in Figure 2.

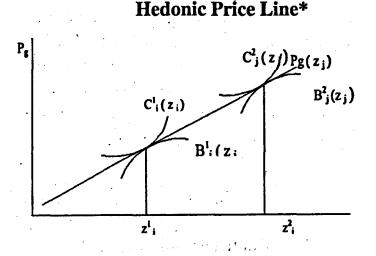
On the supply side as well, firm's cost of production depends on the quality dimensions of the product. Offer curve for the characteristic z_j derived from the firm's cost function can be represented by:

(6)
$$C_i = C_i(z_i, z_{i}^*, p^*)$$

Equation (6) explains the minimum price a firm would accept to sell a unit of ghee as function of z_j , holding other attributes and profit at the optimal level. Offer curves

 $C_{j}^{1}(z_{j})$ and $C_{j}^{2}(z_{j})$ for two individual producers are also shown in Figure 2. Now, the equilibrium condition is that bid and offer curves for all quality attributes and for each market participant must be tangent to the Hedonic Price Function $Pg(z_{j})$, which is an equilibrium locus for all individual bid and offer curves. Thus, based on this analysis, equation (1) can be estimated and the coefficients and the significance of the independent variables can describe the relative importance of different quality dimensions.

Figure 2: Bid & Offer Curves and



* Adapted from Schamel, Gabbert

Studies based on this analysis have been conducted quite routinely in other countries where sufficient relevant data are generated for various agricultural commodities and processed foods. For example, Chen, Ethridge, and Fletcher (1997) had undertaken such study for cotton, and Schamel, Gabbert and Witzke (1998) for wines. In India, very few studies have been conducted that identify the quality dimensions and the consumers' perceptions and valuations. For example, a study based on hedonic price analysis of ghee (Deodhar and Intodia, 2002), shows that consumers value flavour of ghee much more than other quality dimension. Similarly, consumers value aroma and colour of tea over other quality dimensions

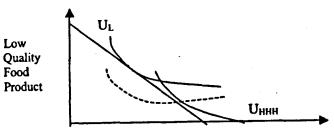
(Deodhar and Intodia, 2004). Such studies can help firms to alter their products to suit consumer preferences. Domestic food industry could pay attention to undertaking such studies to develop strategic food quality management practices. However, to conduct such studies, relevant data needs to be generated. Non-government organizations such as Consumer Education and Research Centre (CERC), Ahmedabad have been generating such data over the last few years.

Institutional Perspective

If one were to address the food quality issue as a standard neo-classical economics problem, then one will have to leave this problem to markets alone, and, there is no scope for any regulation by government. For, in a full information environment, producers may produce various kinds of quality foods and consumers are expected to choose the precise quality combinations that maximise their satisfaction. Figure 3 presents this standard neo-classical argument. Consumer H prefers a "high-quality" food item and consumer L prefers a "low-quality" item as reflected in their respective indifference curves U_{H} and U_{L} . Given the prices of the two types of quality foods, consumers make their optimum choices. Forcing either of them to choose the quality combination chosen by the other would lead to lower satisfaction. Henson and Traill (1993) and Viscusi, Vernon and Harrington (1995) give such arguments based on food safety considerations.

However, the limitation of the above analysis can be explained by drawing the distinction between 'search goods', 'experience goods' and 'credence goods' (Nelson, 1970, 1974; Darbi and Karni, 1973). As shown in the classification of goods in Figure 4, for search goods, consumers can determine a product's quality before they buy it by examining the product. i.e., they have full information about the product before consumption. The neo- classical analysis can hold good in this case.

Figure 3: Choice of Food Quality under Perfect Information



High Quality Food Product

For experience goods, consumers cannot determine the quality until they buy and use the products. Here, if goods are of repeat-purchase nature, where choice is based on prior experience with product quality, the market may take care of itself. High quality food producers can charge higher prices to signal high quality. Thus, market imperfection may be overcome by repeat purchases, build-up of a firm's reputation, and higher prices.

However, there is a moral hazard problem for producers if they sell experience goods without warranty to onetime consumers. A fly-by-night milk vendor may adulterate milk with urea. If you fall sick the next day, it is your bad luck, for you do not know the whereabouts of the vendor. More importantly, food items can also be classified as credence goods where consumer information stays imperfect both before and after the purchase.

Many times consumers cannot establish for sure, the cause and effect

relationship between contamination and ill effects on health. A producer may know the quality of a good but consumers cannot discern quality both before and after the purchase. For example, adulteration and chronic effects of low-level exposure to toxins can be dangerous in the long-run.

Another possibility is that both producers and consumers have imperfect information about the product, before as well as after the use. One could say, in principle, conspiracy theories notwithstanding, the contamination of edible oil with Argemone oil in 1998 may not have been a purposeful act, but ignorance of economic agents on both sides of the market did cause dropsy related deaths.

The overriding consideration in the above analysis is the safety attribute of foods. Due to experience and credence nature of food products markets cannot handle this issue by themselves, and, hence, institutional intervention becomes necessary. In India, there is a well established institutional structure for regulating food quality. It is a three-pronged structure that includes food laws, food standards, and the ministries implementing the laws. First, there are many central acts including Essential Commodities Act, 1955; Agriculture Produce (Grading and Marketing) Act, 1937; Prevention of Food Adulteration Act (PFA), 1954; and Export Quality Control and Inspection Act, 1963. There are a few more, and then there are state level acts as well. Second, many ministries such as Ministry of Food and Civil Supplies, Ministry of Food Processing Industries, Ministry of Food and Civil Supplies, Ministry of Food Processing Industries, Ministry of Agriculture, Ministry

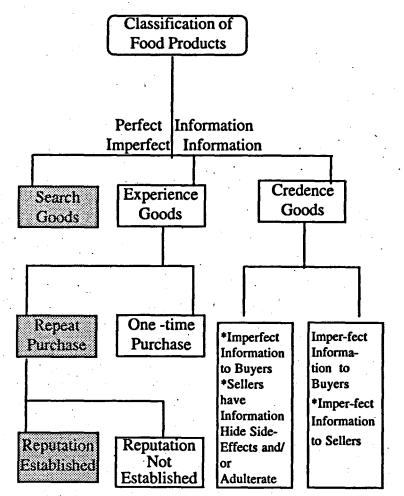


Figure 4: Quality Information Based Classification of Food Products

of Health and Family Welfare, Ministry of Commerce, Ministry of Consumer Affairs are involved in implementations of various laws. Not to mention that state level ministries are involved as well.

Third, there are a number of food standards in existence. The PFA standard is set and revised by the Central Committee for Food Standards. PFA law and standards are mandatory in India. The Agmark standard defines quality of cereals, oilseeds, oils, butter, ghee, legumes, eggs, and many other products. These standards are not mandatory unless and until the commodity is included in compulsory certification list by the central government. Moreover, Bureau of Indian Standards (BIS) is the national standards organisation for India, responsible for laying down standards for all products. These standards again, are not mandatory standards. Similarly, many product orders such as Fruit Product Order (FPA) exist that define standards for a specific agricultural sector.

This institutional structure, however, has become too unwieldy. There are multiplicity of food laws, ministries controlling these laws, and the food standards. Many times, administrative authority of various ministries in implementing the laws overlaps. The laws themselves need to have a modern worldview. For example, PFA only specifies what additives are permitted in a food product. Therefore, if any new additive, which is perfectly safe, is added to the product, it becomes a case of adulteration. Moreover, degree of adulteration is not the basis for conviction. The offence and the punishment are the same irrespective of whether the adulteration is great or small. Also, inadequacy of manpower for effective implementation of the laws is also an issue. Another important dimension that Indian food laws ignore is nutrition labelling. Time has come for packaged food products to have nutrition labelling that informs consumers on nutritional parameters of that food as a percentage of daily recommended allowances. Foreign brands have already initiated this practice in India.

Efforts have also been made at the international level to address the food safety concerns. To minimise the occurrence of unfair trade restrictions, two agreements relevant to food regulations were signed under the WTO accord. These are Agreement on Sanitary and Phytosanitary Measures (SPS) and Agreement on Technical Barriers on Trade (TBT). The SPS agreement aims at eventual harmonisation of national food standards with international standards, guidelines and recommendations. For food products, guidelines of Codex Alimentarius Commission (CAC) have been endorsed by WTO. Similarly, for exchange of plants and animals, the guidelines of International Plant Protection Convention (IPPC) and International Office of Epizootics (IOE) have been endorsed. The SPS agreement has a loophole, in that, article 3.3. of SPS allows countries to have standards higher than the codex standards. This has created potential for non-tariff barriers to trade. It also must be noted that on many occasions, codex standards for heavy metal and pesticide residues are much stricter than Indian standards. In this context, there is a considerable scope for quality improvement in Indian agricultural products. The TBT agreement deals both with food and nonfood products on issues related to their size, shape, packaging, labelling, handling safety, and environmental issues. For example, if Indian food product is exported to United States, it will have to have weight labelling in ounces and pounds. Similarly, imports to India should have weight labelling in grams and kilograms. That we see foreign food products in Indian markets with weight labels in ounces, and, at times in non-Indian languages, an indication is of implementation problem at our end.

Quality and Technological Change

The last couple of decades have witnessed significant advances in biotechnology research. Crop improvement using biotechnology and genetic engineering is already a reality in some countries. India is one of the few developing countries with scientific infrastructure, human resources and the capability to exploit biotechnology for the benefit of society in general, and farming community in particular. Although India has banned use/import of genetically modified (GM) foods at this time, scientists are either ready for field trials or are at different stages of development of GM crops. India might have achieved food security, but nutrition security still eludes her. A possibility of superior nutritional quality of GM foods assumes considerable significance. Development of golden rice, a variety of rice that has higher levels of minerals and micronutrients is a case in point. Another important aspect of biotechnology is that it. has opened up new avenues for reducing post harvest losses, minimal use of pesticides, and increased shelf life.

The potential for quality improvement in agriculture due to changing technology has, however, generated newer sets of concerns that need to be addressed. Biotech firms are trying to patent their inventions and justly so. Article 27.3(b) of TRIPS agreement allows for patenting inventions that use genetic material as also the traditional knowledge of a community. India does not have a product patent law yet, however, to fulfil the WTO commitments she has to enact the law by 2005. While doing so, provisions must be made in this law to protect the traditional knowledge of communities which at times is used freely by the biotech firms. The protection may be in the form of disclosure of the biological resource and traditional knowledge used, and, evidence of prior consent to use the traditional knowledge and its benefit sharing. Moreover, in future, farmers are likely to buy patented better quality seeds from biotech firms. While firms need to be protected from the commercial re-use of the patented seeds, the

law should provide for farmers to re-use the seeds on their own farm and for noncommercial purpose. Another issue is of labelling and segregation of GM foods. It is important that consumers be offered a choice through clear labelling of foods. Therefore, GM labelling must become mandatory whenever GM foods are allowed to be sold in India.

4. Concluding Observations

Indian food and agriculture sector is going through a transition phase. India is no longer a food-deficit country. Since the last decade, per-capita growth rate of GDP has also been reasonably good. There is not only a growing demand for value-added agricultural and processed food products, but a heightened awareness regarding hygiene and nutrition. Concurrently, with the onset of WTO led liberalisation, foreign agricultural commodities and food products are having a relatively easy access to Indian market. Perceived to be of better quality, foreign products are competing very effectively in the domestic market. These are very challenging developments for the domestic agricultural and food industry. In this context, a paradigm shift has to occur in the thinking of agribusiness stakeholders, with a strategic focus on quality rather than quantity.

It will be quite rhetorical and repetitive to mention that agricultural extension activities need to be strengthened. However, in terms of specifics, one may point out that extension activities may include training programmes on HACCP concepts for food processors and farmers, demonstrations of acceptance sampling techniques and driving home a point in practical terms, that grading improves both quality and profits for the farmers. Promoting training institutions for farm labour and farmers, on the lines of Industrial Technical Institutes (ITIs) seems a reasonable proposition. Participants with some high-school backgrounds could be given training on basic hygiene and farm operations/food processing techniques. Understanding of consumer perceptions about quality is also equally important. Industry associations and NGOs such as CERC, Ahmedabad must be encouraged to conduct evaluation of quality perceptions by consumers. This may involve undertaking hedonic price analysis or market surveys.

On the regulatory aspects, it is quite evident that the institutional mechanism has become quite unwieldy with multiplicity of food laws, standards, and ministries. In UK for example, there is a single agency, Food Standards Agency (FSA), that deals with all the issues related to food safety. All food laws and standards are amalgamated under this single nodal agency (Deodhar 2003b). India needs such single agency and a comprehensive food law to deal with food safety issue effectively. In fact, with changing technology, food safety issues are also changing and the food law needs to reflect these changes. Inclusion of nutrition labelling, a newer perspective on permissible/non-permissible food additives, and GMO labelling in the event of entry of GMO foods in the markets, are some of the important issues. Finally, as long as some form of protection is offered to small farmer, biotechnology has a good potential to improve food quality.

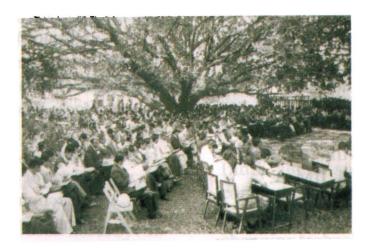
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63rd Annual Conference of the Indian Economic Association, 1980 - Under the banyan tree Gramin Mahila Va Balak Vikas Mandal

K Dinker Rao and VA Deshpande*

1. Introduction

Gramin Mahila Va Balak Vikas Mandal (Gramin Mahila) established in 1989 in Velhe block of Pune district, now operates in 5 districts viz. Pune, Thane, Satara, Nasik and Jalna of Maharashtra, working with 17 public sector banks, Regional Rural Bank and 5 District Central Cooperative Banks. It has initiated 3,922 self-help groups (SHGs), of which 2,333 are credit linked with banks. The origin of Gramin Mahila is related to the two authors, alumni of Gokhale Institute of Politics and Economics (GIPE), and few more alumni¹ are associated with this Non-Government Organization (NGO).

2. Pre-amble

Dinker Rao (DR) as a Faculty Member of National Institute of Bank Management (NIBM) was associated with formation of Farmers' Service Societies (FSS). The task was later taken over by a Non-government Organization (NGO): People's Institute for Development and Training (PIDT), New Delhi, which is an off-spring of NIBM. DR worked with PIDT for two years 1981-1983, when he came in contact with United Nations Children's Education Fund (UNICEF). On his return to NIBM, UNICEF requested DR to implement an action research project on Development of Women and Children in Rural Areas (DWCRA) focussing on involvement of banks. The choice fell on Bank of Maharashtra headquartered in Pune. The bank designated its Rural Development Centre to co-ordinate the action research project on its behalf. The Rural Development Centre had then just made its beginning with V A Deshpande alias Bapu Deshpande (BD) as its first coordinator.

3. Initial Period 1986-1993

The project was initiated in Velhe block. The choice of Velhe, the most backward block of Pune district, was more due to the first Field Officer, who was associated with Jayaprakash Narayan Movement, and thought of taking development to the needy and also perhaps, desired to be away from the hub-hub of bureaucracy and the entailing controls. The DWCRA is an integral part of the parent scheme Integrated Rural Development Programme (IRDP). The DWCRA, sponsored by UNICEF, aimed to reach the children through the mothers. Therefore, the ARP on DWCRA at Velhe was to focus on poor women. In contrast to IRDP, DWCRA adopted group approach and was holistic covering economic, education, health, social and organizational aspects.

Formation of women's groups and dialogue on health and education of the children were the imperatives of the action research project. On the economic front it was thought prudent to select a few income generating activities and localize them in

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order to facilitate ensuring of backward and forward linkages. Velhe is a mango growing area. A pickle unit was started, a couple more were to follow. A master craftsman was engaged to train women in a cluster of villages to make articles: bags, pouches, etc., from rexine and leather. Hosiery products were started with one group and it was envisaged more groups would join in the neighbourhood. Similar strategy was thought for umbrella making. We could not get-off the launching pad of the first unit because of lack of enterprise or will on the part of the master craftsman or the manager of the leader and / or inadequate / slow response of women for regular work to meet the orders.

Notwithstanding the mixed experience with regard to IGAs, the objectives of initiating participatory process and an organizational set-up to sustain the efforts was felt necessary. Hence, over and above the women's groups, mahila mandals were constituted at the village level. A cooperative society viz. Savitri Bai Cooperative Society was instituted at the block headquarters to coordinate the women's groups and the mahila mandals. Anticipating further expansion into the other blocks of Pune district. Gramin Mahila Va Balak Vikas Mandal (Gramin Mahila) as a Public Charitable Trust, was founded in 1989. The trustees are representatives of Bank of Maharashtra, NIBM, SHG women and staff. DR acted as the Chairman of the Trust.

During 1989-90, Gramin Mahila spread to relatively more developed blocks: Khed, Indapur, Haveli and Junnar. The response in these blocks was much better than in Velhe. The block level cooperative societies could not be established in the new blocks. But Gramin Mahila worked in close liaison with the District Rural Development Agency at the district level.

The UNICEF support came to an end in December 1990. Around the same time BD was transferred from the Rural Development Centre. There was a slow down. With shoe-string budget and spartan field staff Gramin Mahila had to struggle to survive from 1991 to 1993.

4. Maharashtra Rural Credit Project (MRCP) 1993-2001

In 1993, International Fund for Agricultural Development (IFAD) sponsored MRCP was launched in the four districts : Pune, Yavatmal, Nanded and Chandrapur. The MRCP, which focussed on women for poverty alleviation of the rural households, adopted group approach and participatory banking. The NGOs were invited to assume the role of establishing SHGs and their capacity building. Gramin Mahila acted as the main NGO in Pune district. The MRCP had its credit plan and infrastructural support. Certain economic activities were identified and the support of relevant backward and forward linkages was provided. Implementation did not adhere to these tenets. The entire attention was on the formation of SHGs, which turn out to be the silver lining of the MRCP. The Gramin Mahila was paid for the formation, capacity building and linking of SHGs with banks. There was an overall empowerment of women inside and outside their houses, built on their confidence to save and recycle the savings to lend to the SHG members. When MRCP was extended to 8 more districts in the state, Gramin Mahila provided its services in addition to Pune, to Thane district. Besides Bank of Maharashtra, its services were requested by

other few banks participating in MRCP. The number of Field Workers in Gramin Mahila increased from 3 to 15 Field Workers and 33 Animators during the MRCP period.

5. Swarnajayanti Gram Swarozgar Yojana (SGSY) 1999-

The SGSY was launched in April 1999, merging IRDP, DWCRA and the allied schemes. The SGSY, focussing on women, has three main tenets: (i) key activities i.e. selected activities - not more than seven per block, (ii) cluster method each key activity has to be implemented in a cluster of villages and (iii) group approach to be implemented through SHGs. By reducing the number of activities, number of villages and the number of customers of banks, respectively through the three tenets, SGSY envisages to reduce the burden of providing backward and forward linkages to the Income Generating Activities. The main tenets of SGSY are not adhered to in practice and there is large scale adhocism in regard to Income Generating Activities, less said about backward/forward linkages be better. Nevertheless there are conscious efforts to adopt group approach by forming SHGs of women. Gramin Mahila, as a bank sponsored NGO is viewed a better intermediary to facilitate credit extension. Not only is Gramin Mahila made a 'mother NGO' in Pune district, its services are sought in Thane, Satara, Nasik and Jalna. It is now serving 17 Public Sector Banks, 1 Regional Rural Bank, and 5 District Central Co-operative Banks in the context of SGSY. SHGs under Gramin Mahila increased from 391 to 3,922 during the period 2000-2004. With this expansion, Gramin Mahila's field staff has increased to 95 (27 Field Workers and 68 Animators).

6. Marketing Aspect

The IRDP did not live upto the expectations both due to credit and noncredit reasons. Among the latter, lack of market in the rural areas, and the need to link the poor rural entrepreneurs with the semi-urban and urban markets is very important. Though SGSY recognized this shortcoming, has not been able to make much head-way. As an NGO, Gramin Mahila believes that it is possible to provide credit to SHGs, provide them technical training, give them the latest designs, the crucial step would still be reaching the products to the markets and selling them. One may think that this is too much spoonfeeding and the right way is to let the rural enterprises evolve themselves. Gramin Mahila is of the view that initially support is required and the participation of the poor women has to be consciously increased; (though the same has not happened in Bangladesh where the NGOs have played a stellar role.) Therefore, Gramin Mahila has distinguished itself as a marketing NGO. It has 4 outlets in Pune district run in association with the District Rural Development Agency. It helps SHGs to sell their products in weekly markets in Pune district. While Gramin Mahila organizes exhibitions in Pune, it also participates in exhibitions outside the state. The marketing assistance would be gradually extended to other districts. Unfortunately, as it happens in most of the poverty alleviation schemes, non-poor also have accessed the benefit. In other words, their products are sold through the above outlets.

In the context of liberalization, marketing has taken a new turn. In IRDP, some beneficiaries undertook trading activity. Similarly, under SGSY the SHGs take up trading as an income generating activity. Of late, Hindustan Lever and to compete with it the Bharatia Swadeshi, woo SHGs to retail out their products. Though there are risks involved, trading is less burdensome than producing or manufacturing and the latter also ultimately involves selling. There is a tendency for the better-off, as above poverty line groups, to respond to these corporate initiatives.

A further extension of the marketing approach is taking up turn-key projects; (which has parallel successful experiments in Bangladesh). Gramin Mahila has of recent listed up ready-made garments a la Kakinada, Andhra Pradesh, leather footwear, jardori, papad making and ayurvedic medicine projects in Pune district. There would be private entrepreneurs already experienced in the concerned field providing technical and marketing support, while the SHG women would stake their capital and earn wage. Gramin Mahila has to be watchful of the returns to the private entrepreneurs and have to ensure gradual handing over the control to the SHGs, which risk their money. If that fails, we would have provided to the poor employment instead of self-employment.

Gramin Mahila, as said earlier, is now spread over five districts, working 17 Public Sector Banks, 1 Regional Rural Bank and 5 District Central Co-operative Banks and has 3,922 SHGs with it, of which 2,333 are credit linked with banks. The growth had been slow until 1992, picked up during 1993-2002 under MRCP, and with advent of SGSY, there has been a large-scale expansion. Nevertheless, there is concentration of SHGs in Pune district thanks to MRCP and SGSY. In retrospect, it is said that SHGs of MRCP were better as they were less target and subsidy oriented. There are experts, who held that intermediation of SHGs for subsidized credit is a sure method of ruining them. Notwithstanding the debate, the NGOs who have to depend on external resources may not have much of choice. The quality of SHGs does influence savings mobilization and recycling of these funds internal credit for consumption, emergency and petty production, but it is more critical at the time of using production credit for income generating activities. There is not much of evidence of any change in the pattern of income generating activities from IRDP to MRCP and then on to SGSY. Better recoveries of SHG is claimed both in the case of MRCP and also in respect of SGSY, though many a times authentic data may not be available to support the same.

7. Insurance

A beginning has been made to gain access to insurance services for SHG women. It was possible to provide accident and hospitalization insurance to about 2,500 SHG members. There is a long way to go as Gramin Mahila has more than 35,000 SHG members.

8. Organization

DR, an ex and presently visiting faculty member of NIBM, is acting as the Chairman of Gramin Mahila. BD was one of the trustee whenever he was working in HO of Bank of Maharashtra at Pune. After his retirement in 2003, he has been designated as Administrative Trustee and is involved with the NGO whole-time Gramin Mahila has been provided space within the premises of Rural Development Centre at Hadapsar, Pune. The Coordinator, Rural Development Centre is the ex-officio Secretary of Gramin Mahila. The

Bank of Maharashtra has also deputed a lady officer to Gramin Mahila. The premises and the services of the Rural Development Centre, coordinator as Secretary and of the lady officer are provided free to Gramin Mahila. At the field level, Gramin Mahila has 27 Block Coordinators and 68 Animators. Those designated as Field Workers, with the expansion of Gramin Mahila, now act as Block Co-ordinators. Twenty one of the Block Co-ordinators are male and 6 are females. Twenty three of the Block Co-ordinators are MSWs. Block Co-ordinators supervise the work of 3 to 4 Animators in a block. The Animators are local villagers, 30 males and 38 females; are generally high school educated i.e. matriculate or around. Generally, an Animator is responsible for forming, bookkeeping, credit linking and monitoring of SHGs in 15 to 20 villages, which may be in the service area of 4 to 5 bank branches. The area of operation of an Animator is termed as a cluster. The clusters within a block are nominally federated at the block level; presently, for the purpose of monitoring. The concept of federation may be extended for non-credit aspects and eventually, may be utilized for covering credit. While Gramin Mahila's by-laws have to be modified for credit extension, the view of Bank of Maharashtra in this regard may also have to be elicited!

9. Financial Support

The origin of Gramin Mahila cannot be rooted to any short/medium/long term vision or ideology of the initiators. It was merely the gut-feeling for the need of a people's organization to sustain the process of DWCRA. Gramin Mahila was only the district level cap for village level Mahila Mandals and the taluk level cooperative societies (of which only one has come into being). Naturally, with these antecedents funding or financial resources was not a deep concern. Infrastructure and overheads were shared by UNICEF, Bank of Maharashtra, NIBM. Gradually UNICEF and NIBM withdrew and the spartan working expenses were managed. With MRCP, there was expansion of staff and the complementary financial support. As said earlier, the advent of SGSY marked the big shift and today Gramin Mahila has a wage bill of about Rs.2.5 lakhs per month.

SGSY is for BPL population and as soon as all the listed households are covered. financial support from the government channel will dry-up. Even when it is current, the flow is not on schedule due to bureaucratic lethargy or budgetary constraints or both. The National Bank for Agriculture and Rural Development (NABARD) provides support for the formation and capacity-building of SHGs belonging to Above Poverty Line sections, which channel is being utilized. There are funding agencies, which provide support for education, health, legal-aid, etc., but that is for specific purpose and hence, would need extra manpower or efforts. It is possible, practical and may be necessary that the beneficiaries/SHGs are made to pay for the services after a time when they reach the threshold level. Importantly, banks can bear the costs of formation and capacity building of SHGs, who eventually become their customers. Sharing of the financial burden by the banks and the SHGs is already practiced in some areas. In the context of Gramin Mahila what is to be observed is that there are hiccups in meeting the salary needs of the staff and which is negotiated through overdraft facilities from Bank of Maharashtra.

10. Voluntarism

It is said, voluntarism starts when people in comfort start feeling for the people in discomfort. Such people can come from various sections of the middle class: academics, doctors, engineers, architects, lawyers, bureaucrats and even bankers. A sociologist has argued that though the volunteers may start from diverse functional areas, soon they would understand the interconnectedness of various aspects and realize the need for systemic change, instead of marginal adjustment. Though an NGO may begin as an apolitical initiative may ultimately transcend to some degree of politization. There would be NGOs, which have reverted to apolitical stance after disillusionment with extreme political ideology left or right. If the above people are outsiders to the oppressed/poor/ people in discomfort, sometimes the initiative for organising the poor has come from within; the best example of which is close home i.e. Anna Hazare of Ralegaon Shiddli. The NGOs are viewed as talisman for all ills! One school thinks that they have a role in changing the society. The other expects NGOs to repair the damages created by free market! There are fewer NGOs prepared to oppose or confront the delivery system or political parties. The issue is the point upto which an NGO can, should or would compromise.

The empowerment of poor would ultimately need their politicization. The NGOs would be an influencing factor in choosing the political affiliation. In this process, NGOs would have to understand or learn the guiles of political parties or become their stooges in the delivery system.

Notwithstanding the beginning or the core objective : awareness, empowerment or any other, NGOs have become development oriented i.e. Non-Government Development Organizations and of recent have taken up SHG intermediation, more due to resource support available therein. While most NGOs accept participatory development, they differ in relation to the distance they maintain with the delivery system: government agencies and banks.

The origin or emergence or leadership of Gramin Mahila cannot be strictly put anywhere in the above framework. It is rather an accidental outcome / offspring of an Action Research Project on DWCRA, implemented by a bank. Its survival during the initial years was more due to general sense of accountability of the founders for sustaining the institution created by them and broad commitment to participatory development, though not with any long-term vision for Gramin Mahila.

11. Government

The implementation of the action research project on DWCRA was begun with close association between Bank of Maharashtra and District Rural Development Agency. There was a hiatus in this relationship because of lack of initiative on the part of the subsequent coordinators of Rural Development Centre, and even misinterpretation of their role by some. During the period of MRCP there was better co-ordination. Gramin Mahila acted as the most important NGO for the establishment and development of SHGs in Pune district. Since the coming of SGSY, the NGO has become a cynosure in the eyes of the government. Since Gramin Mahila is bank sponsored NGO, the government is of the view that same would facilitate credit

extension and disbursal, which is crucial to the successful implementation of SGSY. The same, however, has not been truly realized in spirit either because the top management has not explicitly conveyed the message or the grassroots have not responded or bit of both. Of recent, there has been joint efforts between Gramin Mahila and the District Rural Development Agency in Pune in the context of marketing of SHGs' products, which experiment is being extended to the other districts in Pune division. While leakages reminiscent of many government schemes have made their appearance in this joint endeavour, compromises on the part of Gramin Mahila have been necessitated. The payment for SHG formation capacity building and credit linking is channelled through the District Rural Development Agency. Apart from delay in releasing the funds, District Rural Development Agency views that Gramin Mahila is dependent on it, which at times is reflected even in interference in the latter's management. In a way, all this means loss of autonomy, imperative for healthy working of any NGO.

12. Staff

Gramin Mahila had less than five Field Workers in the initial year. The number reached 13 during the MRCP days. With the launching of SGSY in 1999 and extending the operations to other districts, there are 27 Field Workers. Most of them are MSWs. They have joined Gramin Mahila as job seekers. It would be the responsibility of the leadership of Gramin Mahila to orient them as volunteers or as members of an NGO. As youngsters, these MSWs are also prone to be attracted by better opportunities in terms of remuneration and exposure.

13. People's Participation

Needless to state, Gramin Mahila like most of the NGOs, believes in participatory process of development. SHGs are democratic institutions. Though it was envisaged that there would be Mahila Mandals at the village level and cooperative society at the block level, the same has not been realized. It was hoped that cooperative society would be self-reliant in identifying Income Generating Activities for SHGs and helping them in regard to backward-forward linkages. Gramin Mahila has not persued the same. The only block level cooperative society at Velhe is unable to function without external support from Gramin Mahila.

Self-enterprise is difficult and hence, there is lesser inclination for it. There is preference for wage employment, which is SHG members under income easier. generating Activities initiated by Gramin Mahila would like to view themselves as wage earners rather than owners of the enterprise. The members of SHGs are represented on the governing board of Gramin Mahila. Due to the tenor, level and language of deliberations, they are unable to participate. Therefore, their ownership and management of Gramin Mahila would be a long cherished goal. Perhaps, networking of SHGs at the block level may initiate the process.

14. Bank of Maharashtra

Gramin Mahila is looked at as a bank sponsored NGO. What is its acceptance by the bank? After it crossed the threshold of time and size, existence of Gramin Mahila became a question of image for Bank of Maharashtra. Depending on the individual inclination of the Chairman and the good offices of some executives of the top management and the overall fund position of the bank, Gramin Mahila has received small donations, which helped to augment its corpus, though yield from which could make only small contribution to the working expenses. It is necessary to note here that in no quarter of Bank of Maharashtra there is any clear appreciation of role of NGOs in general, and that of Gramin Mahila in particular. Nevertheless, the functionaries at Top Management, who represent the bank in Gramin Mahila's board, have an idea of its working.

Gramin Mahila may be helpful in terms of image building and keeping good relation with the government agencies. In real terms, SHGs can improve the quality of lending to poor and can be the vehicle for nurturing future clientele. There has to be explicit endorsement of this intrinsic advantage by Top Management and the same has to be consciously conveyed to the grassroots. To translate the strategy in practical terms, Bank of Maharashtra can hire the services of Gramin Mahila. Other banks would follow suit. As said earlier, there are instances where NGOs are selling their services to banks.

15. Future Perspective

The scope for the SHG of the poor is circumscribed by the size of BPL population. The NABARD provides support for forming and developing above poverty line SHGs. Here too, there would be a limit. Can Gramin Mahila think of forming SHGs of the urban poor? Gramin Mahila can also price its services to the poor, who certainly would pay for it, if they stand to gain.

From its beginning aiming at holistic development, Gramin Mahila can access

support for working on health and educational aspects.

The crucial issue is who owns Gramin Mahila: Bank of Maharashtra, Government of Maharashtra, Field Workers or the people. Certainly not the first two. People's ownership is a long term goal. Where do Field Workers stand? As said earlier, Field Workers are essentially job seekers. They have to define Gramin Mahila in terms of:

- i) Their role and function as Non-Government Development Organization
- ii) Relation with government and Bank Of Maharashtra,
- iii) Professionalization in terms of enhancing their skills and pricing the services and
- iv) The degree of autonomy required.

Can they do it on their own or the leadership has to evolve the consensus. In which case, the more difficult issue is whether the leadership has any unanimous view and strategy? Whether Field Workers or the leadership have the autonomy is the first issue. Further, these basic issues are not discussed.

The situation may not be different in regard to many NGOs. The Field Workers are job seekers with varying commitment. Leadership, which is committed, endeavours to orient Field Workers for development. The less committed leadership may stay neutral or worse, even exploit them. When Fence Eats the Crops -A Story of White Elephants and Parasites

John Abraham*

A discourse on Land Reforms and Agricultural Ceiling Act in the globalised world would be treated with disdain, if not lackadaisically, even by the radical reformists.Such a misplaced discourse is prompted by the ludicrous phenomenon emerging in a society which has too much but too few people to consume. A cute legal tangle in the matter discussed here may make this discourse more thrilling to legal experts, tickle the nerves of the managers of white elephants, like the Maharashtra State Farming Corportation, and activate some dormant but avowed land reformers.

The original Maharashtra Act No. XXVII of 1961, known as Maharashtra Agricultural Lands (Ceiling on Holding) Act 1961 was placed on the Statute Book, for securing the laudable object of "distribution of agricultural land as best to sub serve the common good." The preamble of the Act proclaimed that it provided for the distribution of the surplus land to the landless and other persons.

Under the original Maharahstra Agricultural Land (Ceiling on Holdings) Act, 1961 land measuring 85637 acres out of which 80% was perennially irrigated held by 13 joint stock sugar companies was declared surplus, and it was given to the Maharastra State Farming Corporation Ltd. (MSFC) a State Public Sector undertaking for further cultivation along with all the 25000 permanent and

daily rated agricultural workers with continuity of service and other benefits Out of the total land mass 35,910 acres was previously owned by these 13 joint stock Sugar Companies while 49,727 acres were taken on lease by these companies from 4015 landlords on long term basis for fifty or more years. Sugarcane was the main crop taken by the sugar companies on these lands. The Act was amended in 1970 and was given assent by the President of India. By this amended Act, the MSFC was granted the entire land. This land was vested in State Government as per the provisions of section 21 of the Maharashtra Agricultural Lands (Ceiling on Holding)Act 1961 free from all encumbrance. The MSFC is thus seen to be an apology of the socialist farming system practised in the erstwhile Soviet Russia.

This amendment also made a provision to enable the State Government to grant a part of this land for self cultivation to the persons who had previously leased their land to the industrial undertaking from whom the surplus land was taken over by the State of Maharashtra on certain terms and conditions laid down therein. It was provided in amended sub section 3 of 28-1AA .that "The State Section Government may, subject to provisions of sub-section 4 and 5, after considering the vies of the persons interested in the land referred to in subsection 1 also grant a

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part of such land to a person who previously leased land to the undertakings whose net annual income from all sources does not exceed Rs. 4,000 and who (not being public trust) requires that land for personal cultivation subject to the terms and conditions laid down therein".

The state Government in pursuance of sub section 28-1 AA handed over an area of 14.261 acres of land to 2067 persons who were ex-landlords. The total number of exlessors as it stood on the appointed day i.e., January 1962 was 4015. The remaining 1408 ex-lessors had applied for grant of the land but these applications were rejected by the state government after following the due process of law and after proper hearing, after giving them fullest opportunity to participate in the enquiry. This leads to the obvious conclusion that there was no substance in their claims. Now by way of the proposed amendments, the previous decision of the State government denying the alleged claims of the ex-lessors after quasi judicial enquiry and confirmed by various tribunals and High Court are sought to be reversed with the intention of returning the, excess land which is now vested in the state government permanently.

All the small and medium sized landlords were granted land during the seventies for self cultivation. However, almost half of them have sold or disposed of the land and most of the rest do not personally cultivate the land. These exlessors' forefathers were not interested in cultivating the land or were unable to cultivate the land personally and for this reason they transferred this land to the companies on long term lease.

This original Act was amended again through Maharashtra Act No. XXI

of 1975 by which the Ceiling limit was lowered. The preamble to this amendment states that "it is now expedient to lower the Ceiling limit for making available additional land as surplus, so as to secure a still more equitable distribution of land and for the purpose of removing economic disparity and thereby for assisting more effectively landless and other persons. This amendment has proclaimed to prevent "the concentration of means of agricultural production and wealth to the commons detriment". Section 2 of this Amendment declared that provisions of this Act are enacted in pursuance of Article 31-C of the Constitution of India for giving effect to the policy of the state towards securing the principles specified in clauses (b) and (c) of Article 39 of the Constitution of India.

It should be noted that the MSFC has already paid the occupancy price in as demanded by the State full Government. In turn, State government has already paid the full amount of compensation to these ex-lessors under chapter 5 of the original Act. However, the state government has deliberately not made appropriate book entries to this ever after the payment of effect occupancy price. All this has been admitted by Revenue and Forest Department, Government of Maharasthra through the affidavit dated 18th July 1998 of one of its officers, Shri .S.K Jondhale. The state government has taken a retrograde step by giving encouragement to the zamindari system and to the lost claims.

The total land now in possession of the MSFC is 69559 acres out of which 20,444 acres is waste land and again out of which 8404 acres is under building The original boundaries of the individual land does not exist now. The government proposes to return 33,000 acres to the ex lessors.Out of the remaining 16000 acres hardly 50% is irrigated.

The Amendment also seeks to enable the Government to withdraw the entire land from the MSFC and grant any area of land now belonging to the Corporation for any "public purpose". The term public purpose can be misused.

This is one part of the story. The other side of the story is that of the MSFC.In the affidavit given by The MSFC through its Assistant Estate manager (Administration), Shri Patil Vithal Deoman, it is stated that "though the name of "Government" is shown in Kabjedar Column, the land is permanently allotted to the Corporation as per the notification dated 13/8/1970. Infact the state government had directed the Collector to incorporate the name of Corporation, in Kabjedar Column, but the Collector of Ahmednagar has not corrected the name of Corporation as yet. This is only a technical formality remained to be completed."

Thirty four years have elapsed and the name is not rectified! The 7/12 from the village records still indicate that the government is the owner of the land.

It is necessary here to reproduce the relevant sections of the notification dated 13-8-1970.

3. Grant of lands to Corporation-The lands specified in column 3 of the schedule hereto (being surplus lands taken over from the undertakings referred to in section 28 and specified in column 2 of that schedule) and which are being cultivated by the Corporation are hereby granted to the Corporation on payment of occupancy price and on the terms and conditions specified in this order.

4. Conditions as to maintaining integrity of surplus lands 1) The Corporation shall ensure that in managing the Corporation lands their integrity in one or more compact blocks is maintained. 2) The Corporation shall not delete assign, mortgage, sub-let or otherwise part with possession or dispose of in any manner whatsoever, the Corporation lands or any part thereof or any interest therein except with the previous permission in writing of the State Government.

5. Condition as to ensuring full and continued supply of raw materials to industrial undertatings. 1) The Corporation shall utilize the Corporation lands primarily for the cultivation of agricultural raw materials which it was producing immediately before the commencement of this Order, and shall adopt all necessary measures to ensure full and continued supply thereof to the industrial undertakings concerned in accordance with the provisions of the Act. 2) The Corporation shall in accordance with the provisions of the Act, sell to the industrial undertaking concerned raw materials produced by it on the Corporation lands which was taken over from that undertaking at a fair price. 3) The Corporation shall endeavour to bring under cultivation as much area of the Corporation lands as possible, and to raise as many food crops and other cash crops without in any manner affecting the supply of raw material to the industrial undertakings as required by clause (1).

It is worth noting that the claim made in the affidavit that the land is **permanently** given to MSFC is an extended imagination. The term permanently does not appear in notification dated 13/8/1970. If the land is given to the MSFC on a permanent basis, how could the government of Maharashtra make amendment to the Ceiling Act and make provisions for distributing the said land to the Khandakaris?

Struggle for Land by the Tribals. Bhumi Hukka Andolan

The movement which began in 1994 was a response to the decision of the government of Maharashtra to dissolve the Maharashtra State Farming Corporation (MSFC), a state-owned enterprise, and give part of the land to the former owners of the land and the rest to multinational seed companies. The landless adivasis in this area have been depending on these lands for a number of years, even before the corporation came into existence. The corporation could cultivate hardly half of its land and the thorny trees (firangee babool) which grew on these lands became a blessing in disguise for these adivasis especially when there were no employment opportunities. For many of them, firewood collection from these lands was more profitable than farm labour.

A number of new occupations had come into existence even before the movement began. The movement was a platform to bring together various groups that had already occupied large tracts of wasteland in Kopergaon and Shrirampur talukas and some parts in the newly formed Rahata taluka. There were a few dalits and landless labourers from other communities who joined the movement. However, more than 90% of the people involved in the movement were adivasis.

The order passed by the High Court in response to a writ petition filed by the tribals was almost a pleasant surprise . Despite the fact that the order passed in was January 2001, the government authorities were slow to act. After a month, around two hundred adivasis submitted application at the Tahasil office asking them to follow the High Court order and carry out enquiries regarding their occupations. More and more applications started piling up at the Tahasil office. The direction by the High Court that the judgment by Supreme Court should be followed gave relief to the adivasis and boosted the morale of the movement. The Supreme Court judgement prohibits any eviction of occupations of government wastelands by adivasis before their demands are fully examined.

Even though the matter is still not conclusively disposed of the huts and crops of the tribals are being destroyed by the officials without giving proper notice to the tribals.

According to the news paper reports the MSFC is intending to lease out large plots of land to companies and landlords for a period of four years. (Sakal 7th May 2004) This move is strictly against the terms and conditions under which the land was given to the Corporation. The government might have given permission, without which the MSFC cannot sublet this land. Even if the notification permits subletting ,it is paradoxical that the land is being leased out to big undertakings, either companies or landlords. This is in direct contrast to the purpose for which the land has been acquired in the first instance. This land is Ceiling Land. It has to be distributed to the landless if the purpose of the Corporation is not fulfilled. Efficient utilization of land, supply of raw materials to the industries etc are objectives which the Corporation is not likely to fulfil under the present climatic and managerial conditions.

It has also been reported in the news papers (19 March 2004 Times of India) that powerful politicians have occupied large tracts of this land and are using them to further their political interests. It is with this background one has to see the forced eviction on 21st July 2003, of around 200 adivasis who had been surviving on the wastelands for more than two decades. The land which was not being used by MSFC had been converted into fertile agricultural land by the toil of these adivasis.

The proposed land utilization pattern neither satisfies the

social justice criterion nor employment generation objectives. The big companies and operators will be utilizing this land with highly mechanized techniques. A reversal of the policies is indicative of a lopsided development pattern. Moreover, a handful of bureaucrats will benefit from all these leasing out business and not the ordinary workers of the Corporation or the unemployed people of this area.

Under the above circumstances, it is highly desirable that the land under question should be taken back by the government and distributed to the landless people of this area. This will be in consonance with the Directive Principle of our Constitution and the objectives of the Maharashtra Agricultural Lands (Ceiling on Holding) Act 1961. It may be out fashioned to speak of Ceiling Act in this era of globalisation. But one hopes that sense and sensitiveness prevails over unbridled market forces.



The Institute Campus

Indian Industry : A Look at its Future

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Malati Roy*

Ever since the Reform process began in 1991, doubts have been cast on Indian industry: would it be able to face global competition? If it modernized would it not mean that its employment potential, never too high, would be further eroded? Without labour law reforms would restructuring of industry be possible? What about Small Industry – If reservation was removed would it survive? With opening up of the Indian economy would not some low efficiency firms or industry close down and imports take their place? Would Multinationals take over all the good firms? Would there be any entrepreneurs at all or would Indian industry only depend on foreign entrepreneurship?

Fortunately many of these questions received favourable answers from studies made by researchers in the period since 1991. Let us take up the questions one by one.

Facing Global Competition: A Study has shown that Indian firms experienced a decline in efficiency soon after1991, but recovered from1996 onwards¹. Domestic firms either with strategic alliances with foreign firms or on their own, by adopting best practices, showed increases in efficiency. There was also a difference between productivity of firms, with Japanese affiliated firms showing highest productivity followed by domestic firms and lowest productivity in U.S. affiliated firms². Thus in future we can hope that with the opening up of the economy Indian industry will go from strength to strength, improving efficiency and productivity at least in the organized sector.

Employment Potential: A Study shows the employment elasticity of Indian manufacturing industry was close to 1 in 1974-80, however the employment elasticity became negative in 1980-86, but in 1986-96 it again became positive but slightly lower than that in 1974-80³. The period of the 1980's was one of "jobless growth", but the 1990's saw an increase in employment in industry except for the years 1995-96 to 2001-02 when 1.3 million employees lost their jobs in organised manufacturing industry⁴. It seems that the employment potential of the organised sector may have reduced but that in the unorganised sector of industry has increased in recent years; those who lost their jobs in the organized sector are likely to reappear in the unorganised sector. An increase in subcontracting in industries, like metalbased, machinery, auto-components, electrical equipment, forging in fabricated metal products, metal casting in basic metals, has taken place. This is one way industry has got around the labour laws. The labour laws have not changed but industry has managed to introduce "reforms by

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stealth"⁵! Thus industry's employment potential has not exactly reduced but rather shifted from organised to unorganised industry and this will continue unless the government reconsiders the labour law. One of the reasons for substituting machines for men is the labour law.

Small Industry : Small industry in India provides employment to over 19.2 million people according to information for 2002. There are 3.4 million small industrial units in India, accounting for more than 40 per cent of gross value of output in the manufacturing sector, and about 35 per cent of total exports. In providing employment this sector is second only to agriculture⁶. Reservation of items for exclusive production in the small-scale sector has been substantially reduced, yet it still persists in some cases. The Abid Hussain Committee recommended that reservation for the smallscale sector should be completely abolished. An adverse outcome of reservation has been that production units tend to move horizontally rather than vertically, that is an owner tends to put up a number of small units, since he wants to avoid the growth into a bigger unit. However this policy along with other concessions like low excise duties has perpetuated inefficiency of smallscale units. An example is what happened in the Coimbatore pump-manufacturing cluster, which has been protected by quota and highly subsidised energy. Manufacturers concentrated on making cheap pumps and neglected quality and energy efficiency. With the ending of quota restrictions, they lost out to competition from China, Italy and U.S.A.⁷

Apart from the modern section of small-scale industry, an important part is the traditional industry, mainly khadi and village industries and handloom industry. The Khadi and Village Industries Commission has been doing yeoman service to the former. It covers 487 products, produced in 3 lakh villages. It has funded 165,000 village entrepreneurs; investing Rs.5000 crores in venture promotion. It has recently set up the "Confederation for Promotion of Khadi and Village Industries", to market products⁸. If it modernises its marketing structure to advertise on the net, focusing on the niche uptown domestic and foreign market for rustic and traditional goods, directing the producers to colours and patterns and items preferred in these markets, there is no doubt that it can tap a huge market. The handloom market also has a niche market but in addition also a local market. In some cases for example in Chirala, Andhra Pradesh, producers have managed to change production according to market trends of export demand⁹. All this points to the fact that the small-scale industry, whether modern or traditional, can in the future be an important player in both domestic and foreign market with a little help. However this help must not be one of unrealistic concessions, but of market research, advertising and promotion, and marketing.

The definition of small-scale industry at present is as follows: A smallscale enterprise is one having original investment in plant and machinery, whether held on ownership terms or lease/hire purchase basis, not exceeding Rs.10 million. However recently the Ganguly Committee proposes a change to definition according to turnover, especially for credit purposes. Intra-Industry Trade: One study points out that India is experiencing the phenomenon of "intra-industry" trade rather than "inter-industry" trade. The former refers to simultaneous exports and imports in the same industry, while the latter refers to exports from one set of industries and imports from another set of industries. Usually it is expected that with the opening up of the economy the pattern of specialization would change. Three types of change are possible:

- inter-industry resource shift from inefficient to efficient industries.
- shift of resources from inefficient to efficient firms within an industry.
- intra-firm shift of resources from inefficient to efficient activities.

Due to the rigidities in the factor markets and difficulty in the exit of firms, the third option above has occurred in India. Firms have not closed down but have shifted to more efficient production¹⁰. Thus fortunately liberalisation has not caused widespread demise of Indian firms. This trend looks likely to continue.

Likelihood of domination by multinationals: Indian industry is going through the throes of mergers, acquisitions, splitting up of family business, but there is no sign of mass take-over by multinationals. In fact some Indian firms have been taking over foreign firms; notable among these is Ranbaxy Labs acquiring the French genetics company, R.P.G. Aventis Ray. So it is time for us to overcome our fear of multinationals.

Entrepreneurship: The Global Entrepreneurship Monitor, published in 2002 by the London Business School,

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estimates that nearly 18 percent of India's workforce is engaged in some form of entrepreneurial activity, specially in new industries, as compared to 2 percent in Japan and 10.2 percent in the U.S.A. The Global average is 7 percent. India is only second to Thailand in this regard¹¹.

However Mr. N. Vaghul, Chairman, I.C.I.C.I. Bank pointed out recently that India needs a good venture capital funding system, oriented towards seed capital funding, to encourage entrepreneurship¹². Unless this happens we may stunt the growth of entrepreneurship in the coming years.

As one can see studies are pointing to healthy developments in the Indian industrial scene. However there are some obvious exogenous factors, which may hold up future industrial growth:

poor infrastructure, holding up and raising the cost of transportation of inputs and outputs.

inadequate power generation and liberalisation of the power sector.

lack of liberalisation of the agricultural sector and poor attention to water and other inputs to it. The interlinkage between the various sectors of the economy is too great for industry to grow without other sectors growing side by side.

avoidance of the issue of industrial labour policy. There is a need for industrial organizations like FICCI, MCCIA, CII to introduce norms for layoff which safeguard labour: to assist in retraining of labour: to assist in placement of labour which has lost jobs. Otherwise the natural advantage we have of relatively cheap and abundant labour will be lost. If the lacunae in internal and external factors are climinated there is no doubt that industry will see double-digit growth.

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Professor Jagdish Bhagwati delivering a lecture - 2002

Myths Related to Muslim Demography

Malika B. Mistry*

It is argued in certain circles that Muslims do not practise family planning and are allowed to marry four wives under Muslim Personal Law. Therefore each Muslim would have four wives and 25 children (*"Hum char humare pachees"* is the slogan against the Muslims.) This leads to higher population growth rate among Muslims than among Hindus and in 2050 Muslims will over take Hindus and India will become a part of Pakistan. This type of propaganda leads to hatred against the Muslim community and contributes to the communal virus. Let us see what the demographers have to say?

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Demographers have studied the differentials in Hindu-Muslim population growth rates, fertility and related issues and have observed as follows:

(1) Hindu-Muslim Population

Growth Differentials : Mistry studied this problem in 1989 and made following observations: Present Hindu-Muslim fertility and population growth rate differentials are not large and are likely to narrow down in future. Even if the present growth rate differentials continue over a long period, the question arises whether Muslims can ever become a numerically dominant community

Table 1: Percentage of Minority Group in Total Population (q') by Mean AnnualDifferential Growth Rate and by Duration

Initial percentage of population in minority group (P_2)	Duration in years (t)	Mean Annual Exponential Growth Rate differential $(r_1 - r_2)$		
		- 0.002	- 0.004	- 0.006
$P_2 = 10.0$	0	10.0	10.0	10.0
	50	10.9	12.0	13.0
	100	12.0	14.2	16.8
	150	13.0	16.8	21.5
	200	14.2	19.8	27.0
P ₂ = 25	0	25.0	25.0	25.0
	50	26.9	28.9	31.0
	· 100	28.9	33.2	37.8
	150	31.0	37.8	45.1
	200	33.2	42.6	52.5
P ₂ = 50.0	0	50.0	50.0	50.0
	50	52.5	55.0	57.4
	100	55.0	59.9	64.6
	150	57.4	64.6	71.1
	200	59.9	69.0	76.8

Source : Mistry (1994).

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Formula :

 $1/q_{t} = 1 + (P_{1}/P_{2}) Exp.\{(r_{1}-r_{2})t\}$ in a reasonable time span, in the country as a whole. According to the 1981 census, Muslims formed only 11.4 per cent of total population of India (According to 1991 census, Muslims formed 12 per cent of India's population where as in 2001 they formed 13.4 per cent of the total population of India.) But in certain urban centers where they constituted more than 25percent, if the annual exponential growth rates observed for 1971-81 for Muslims(2.7 per cent) and Hindus (2.2 per cent) continue, then the Muslims could numerically over-take the Hindus in the long run.

To illustrate how long it takes for a majority group with a higher growth rate than the rest of the population to attain numerical majority, Table 1 has been constructed. The table shows for the two parameters, initial percentage of the minority group and the difference in the annual exponential growth rates between the minority group and the rest of the population what percentage the minority group constitutes after 50, 100, 150 and 200 years. The formula used is :

$$q_{t} = 1 / \{1 + (P_{1} / P_{2}) \cdot e^{(r_{1} - r_{1})t}\}$$

Where,

- P_1 = initial percentage of the rest of the population
- P₂= initial percentage in the minority group with

$$P_1 + P_2 = 1$$

- q_t = percentage in minority group after 't' years
- r_1 = annual exponential rate of growth for the rest of the population, and

r_2 = annual exponential rate of growth for the minority group

It is assumed that r_1 and r_2 remain constant over the projection period of 200 years. Thus the model can only determine the percentage in the minority group in future years on the assumption that the rates of growth do not change. The model shows that the difference in growth rates $(r_1 - r_2)$, and not the actual levels of r_1 and r_2 , determine the future population composition. The initial ratio for the two groups (P_1/P_2) is also needed for this.

Depending upon the initial percentage of the minority group, we consider three situations: When the percentage is 20, 25 and 50. Where the initial percentage P_2 is 10 and the annual growth rate differential $(r_1 - r_2)$ is 0.002, after 50 years q becomes 10.9 per cent, after 100 years 12 per cent, after 150 years 13 per cent and after 200 years 14.2 per cent. As against this, when $(r_1 - r_2)$ is 0.006, q_1 becomes 13 per cent, 16.8 per cent, 21.5 per cent and 27 per cent after 50, 100, 150 and 200 years.

Where the initial population percentage (P2) is at the highest level of 50, with $(r_1 - r_2) 0.002$, q_t becomes 52.5 per cent, 57.4 per cent, 55 per cent, 57.4 per cent and 59.9 per cent after 50, 100, 150 and 200 years respectively. When $(r_1 - r_2)$ is 0.006, q_t becomes 57.4 per cent, 64.6 per cent, 71.7 per cent and 76.8 per cent after 50, 100, 150 and 200 years respectively.

The model shows that a minority can become a majority, only when three conditions are jointly met: (i) the minority constitutes a significant proportion (above 25 per cent) of the total population, (ii) the population growth differential $(r_1 - r_2)$ is large (more than 0.005) and (iii) the time

period involved is long (over 200 years). An observation of Indian scene reveals that differential annual growth rate of Muslims and Hindus is around 0.005, at national level Muslims constitute only 13.4 per cent(2001 census). With the exception of Kashmir valley, the pockets in which Muslims constitute 25 per cent or more, whether rural or urban, are few. Following the method explained earlier, one can say that, at national level, Muslims cannot attain a majority in the near or far future. But in certain places, as mentioned earlier, they may constitute equal numbers with Hindus after 200 years if the present growth differential persists. Further 200 years is a long period of time during which changes are bound to take place in the society leading to a reduction in the difference between Hindu and Muslim growth rates. Already the historical growth differentials between Hindu and Muslim population show a declining trend (Mistry, 1994). 2001 census has shown that the decline in the Muslim population growth rate is steeper than that of the Hindu population. (Times of India, 8/9/04:1)

The above model can be used to project the population of a group backwards in to the past. At present if the Muslim population (P_2) is assumed to be 13 per cent and the annual growth rate differential is assumed to be 0.006 over the last 50 years then the Muslim population may be placed at 10 per cent 50 years back. The Indian census figures for the period 1891 to 1941 show that in 1941, Muslims constituted 24.3 per cent of total population of India, where as in 1891 they constituted 20 per cent. Thus over a period of 50 years, the proportion of Muslims in undivided India increased by 4.3 per cent. We further note

that average annual Hindu-Muslim growth differential was 0.0046 over the period of 60 years. In post-Partition India, Muslims constituted 11.4 percent of the total population in 1981 where as in 1951 they constituted 9.6 per cent. During these 30 years, the percentage of Muslim population has increased by 1.8 and the growth differential has been 0.0067. This trend shows that Muslims cannot become a majority at the national level in the foreseeable future. Thus the simulation model above shows that Muslims cannot become a majority at the national level in the next few centuries.

(2) Polygamy : According to demographers, the effect of polygamy (polygyny) on fertility is indeterminate. Demographers argue that in polygynous marriages, fertility rates are expected to be lower as compared to monogamous marriages for the following reasons: The number of coiti which a man can have remain almost unchanged whether he has one wife or more than one; If the coiti are randomly distributed over the menstrual cycle of a woman, a fixed number of coiti per man are likely to lead to higher chance of fertilizing a woman in case of one wife compared to the case of more than one wife, depending upon their ovulatory cycles; Death of a man in a polygnous marriage prevents reproduction among more than one woman for a period. (Seal' and Talwar, 1974:113). Regarding the incidence of polygyny among different communities, the Census authorities noted that during the decades 1931-41, 1941-51 and 1951-61, the percentage of polygynous marriages among Hindus was 6.79, 7.15 and 5.06. The corresponding percentage for Muslims was 7.29, 7.06 4.31 among Tribals 9.53, 17.53 and 17.98. (Report of the

Committee on the Status of Women in India, 1975:66-67). A survey was conducted by the Census authorities in 1961 with a sample of nearly one lakh marriages. Among these 5,911 marriages were found to be polygynous. The incidence of polygynous marriages was found to be the highest among the Tribals (15.25 per cent), Budhists 7.97 per cent, Jains 6.72 per cent, Hindus 5.8 per cent and Muslims 5.7 per cent. (Ibid.). The percentage of men in polygynous marriages would be below 2.9 per cent for Hindus and Muslims (since each man would have two wives). Thus incidence of polygynous marriages was about the same for both communities. Also the sex ratio (females per 1000 males)among Muslims (936)is not very different from that of Hindus (931), (2001 census).

(3) Fertility and Family Planning Practice: The latest data on fertility and family planning practice among different communities is available from -93 NFHS, India, 1992-93. The total fertility rate for different religious groups at all India level was observed to be as follows: Muslims, 4.41; Hindus, 3.30; Christians, 2,87 and Sikhs, 2.48. Thus the fertility was the highest among the Muslims and also above the national average (3.39). The percentage of currently married women practicing contraception among different religious groups is as follows: Muslims 28; Hindus, 42; Christians, 48; Sikhs, 58; Jains, 63 and Budhists, 50. Even though the above data show that the fertility is the highest and the family planning acceptance is the lowest among Muslims, this should not make us arrive at erroneous conclusion. Muslims are laggards in many other respects. For example, the recent census data have shown that the literacy rate is the lowest among the Muslims: Jains 94.1, Christians 80.3. Budhists 72.7, Sikhs 69.4, Hindus 65.1 and Muslims 59.1. Against female literacy rate is the lowest among the Muslims: Jains 90.6, Christians 76.2, Sikhs 63.1, Budhists. 61.7, Hindus 53.2 and Muslims 50.1(Times of India, op. cit.). So it is not surprising that they lag behind in respect of fertility decline and family planning acceptance. In course of time they too will change as modernization proceeds even if the threshold level differs for Muslims. For example, the National Family Health Survey 1992-93 observed that education has a negative effect on fertility and a positive effect on family planning practice even among Muslims.

To conclude the discussion, demographic transition is taking place in India and the related changes in the proximate variables are taking place at different time and pace for different communities. It is unfair to blame Muslims that they intentionally have low practice of family planning and high fertility to achieve high population growth rates so that they become a majority. And we have seen that practically it is impossible for Muslims to become numerical majority at all India level.

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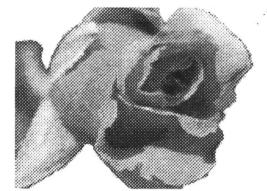
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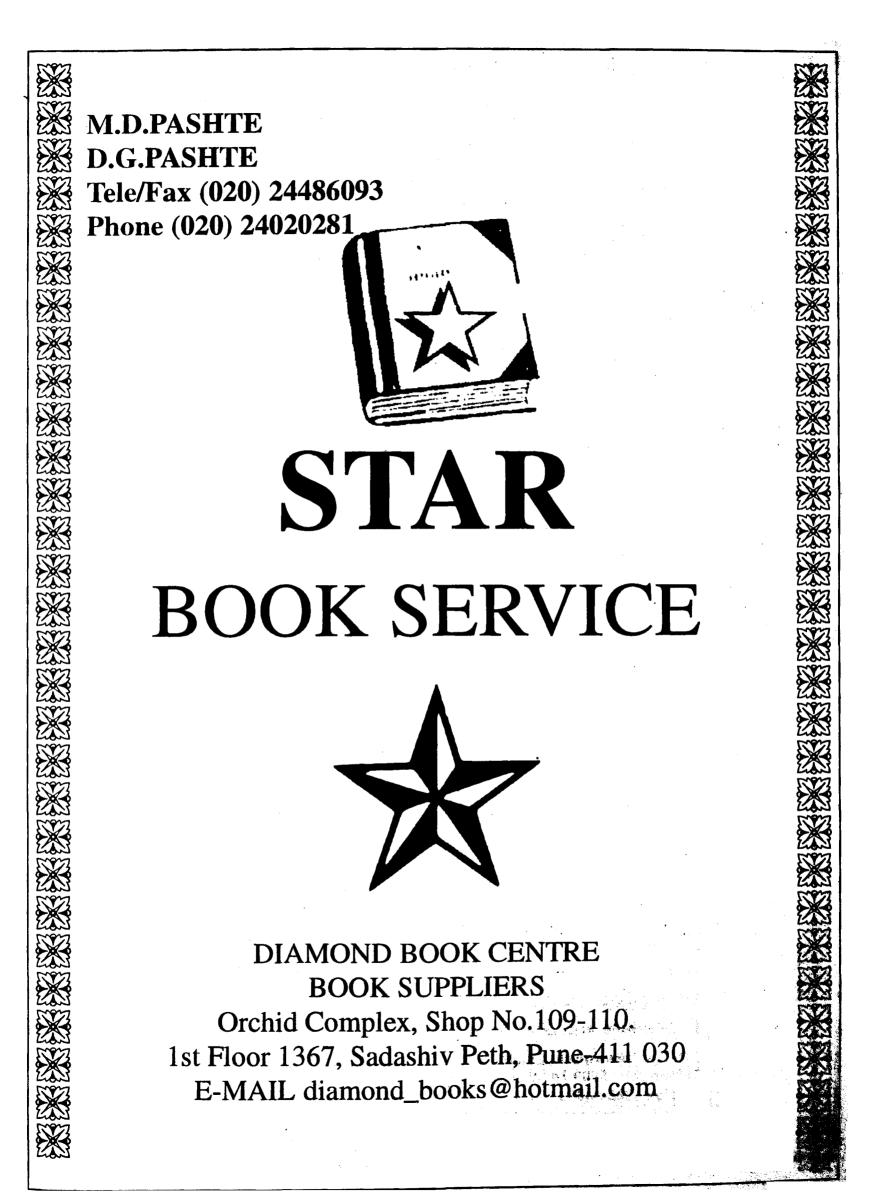
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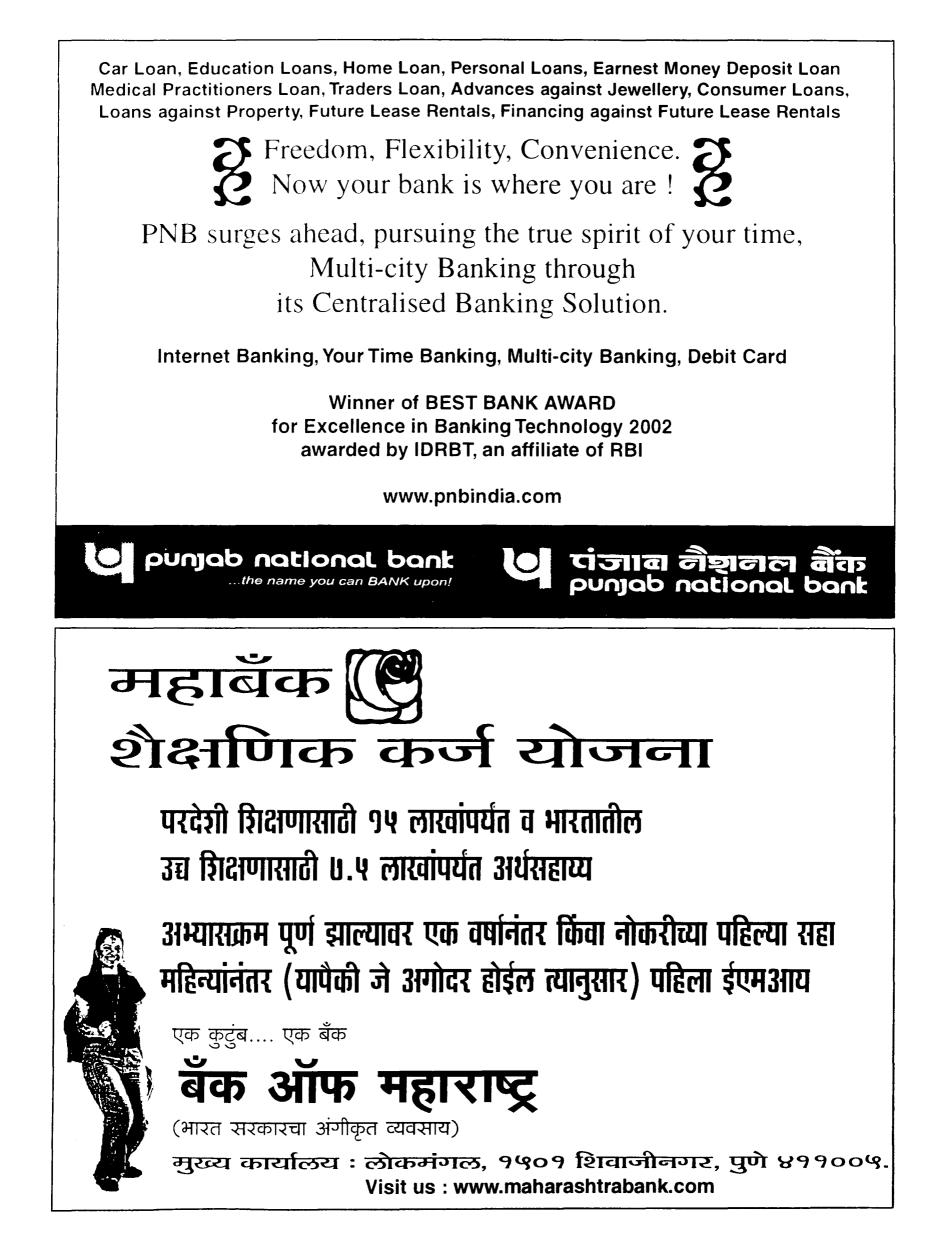
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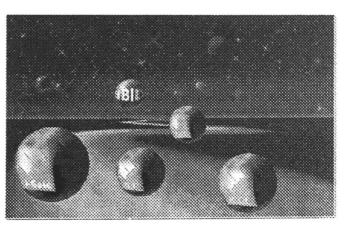


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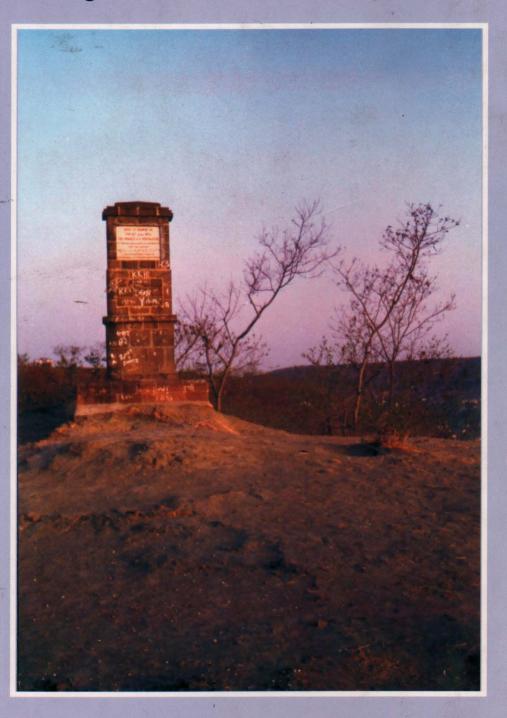
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