

Indian Economic Association

PROCEEDINGS

OF THE

SEVENTH

INDIAN ECONOMIC CONFERENCE,

BOMBAY.

January 22nd, 23rd, 24th and 25th, 1924.

PRICE RUPEES **Two**

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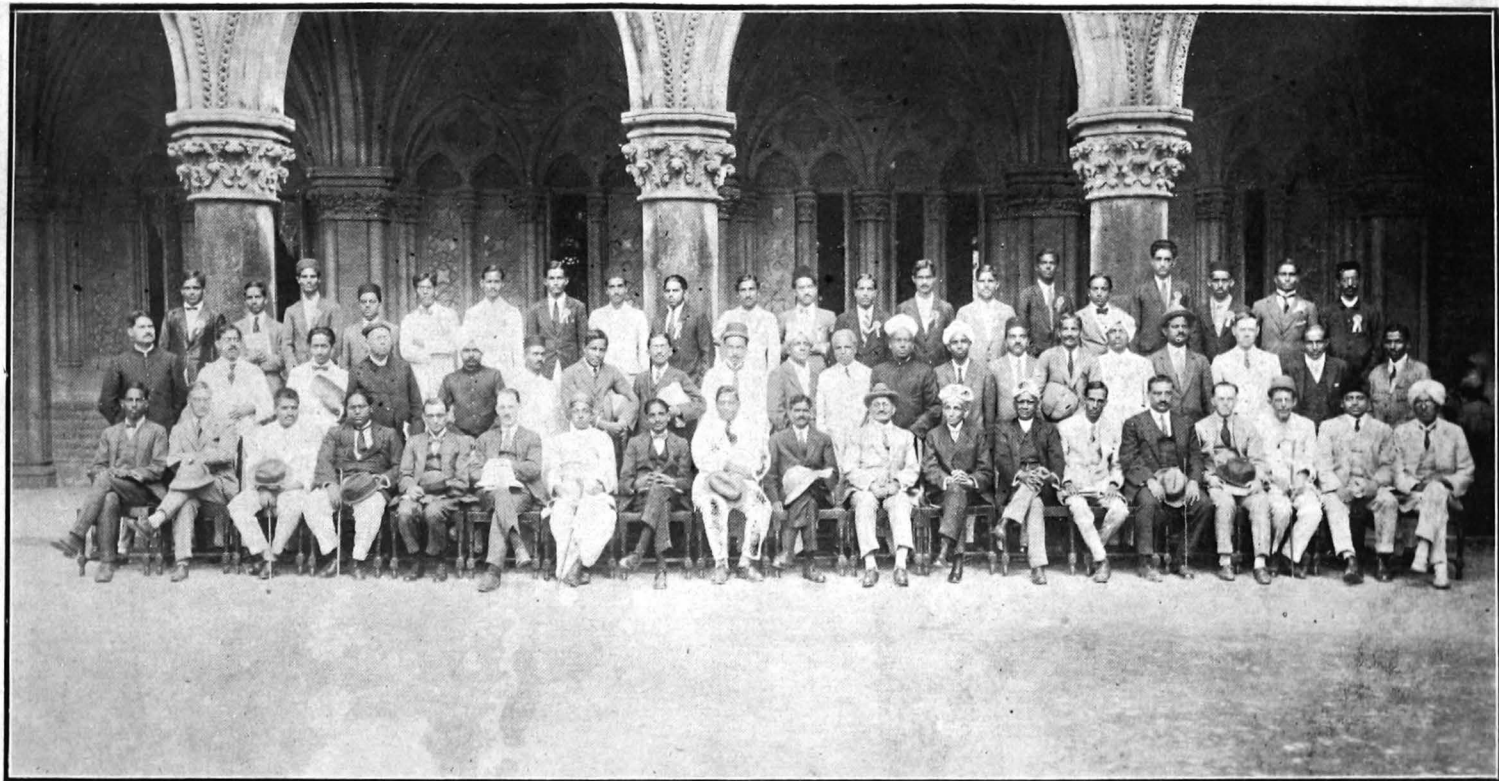
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Prof. H. L. KAJI, Secretary, Seventh
Indian Economic Conference, Sydenham
College of Commerce and Economics,
Bombay.

NOTE.

It was proposed to get the papers submitted to the Conference printed and circulated to the members of the Indian Economic Association some days previously. But in view of the fact that several contributors delayed sending in their papers to well within the last week, it was not possible to do this and the papers could only be distributed on the opening day of the Conference. The papers having been thus printed off in a short time, we regret that mistakes have escaped correction.

Further, the report of the discussion on a particular paper could not be placed just after it, unless the papers were printed after the Conference, and reprinting, for reasons of economy, we had regretfully to give up.

H. L. KAJI,
for self and co-secretaries.



THE SEVENTH INDIAN ECONOMIC CONFERENCE, BOMBAY :
Members and Visitors.

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INDIAN ECONOMIC ASSOCIATION.

Constitution.

1. The objects of the Indian Economic Association shall be
 - (a) the holding of annual conferences,
 - (b) the publication of the proceedings of the annual conferences,
 - (c) the publication of a journal and its free issue to members,
 and (d) such other action to promote Economic Science and the dissemination of economic information as may be deemed advisable.
2. The membership of the Association shall be open to teachers and students of Economics and to other persons interested in Economics in general or in special economic problems, if duly elected.
3. The government of the Association shall be vested in a Committee of not more than twelve and not less than six members elected at the annual conference, exclusive of *ex-officio* members.
4. (a) The officers shall be a President, an Honorary Secretary, an Honorary Treasurer, and a Local Honorary Secretary.
 - (b) The posts of Honorary Secretary and Honorary Treasurer may be held by the same person.
 - (c) The Local Honorary Secretary shall be elected for one year at the annual conference from members resident in the locality selected for the ensuing conference, for which a local Committee shall be formed.
 - (d) The officers shall be *ex-officio* members of the Committee.
 - (e) The tenure of office of the Honorary Secretary and Honorary Treasurer shall be for one year or until their successors be elected.
5. The agenda of the annual conferences shall be drawn up by the Honorary Secretary.
6. In addition to papers from members the Honorary Secretary may arrange for papers from associates and non-members, if thereby valuable contributions can be obtained from experts on particular questions.
7. The annual contribution from members shall be Rs. 12. This shall entitle members to attend conferences and to receive copies of such papers read at the annual conferences as may be published, and any other publications of the Association unless expressly excepted.

8. The annual contribution for associates shall be Rs. 6 and this shall entitle associates to attend conferences and to receive such reports of the proceedings as are published by the Association, but not to vote on the affairs of the Association.

Members of the general public may be admitted as visitors to the conferences by ticket at the discretion of the local Committee, at a charge to be fixed by the General Committee.

9. Candidates for membership shall be proposed and seconded by members and accepted by the Committee by a two-thirds majority.

10. Applications to become associates shall be submitted to the Committee by the Local Honorary Secretary.

11. A Member on paying a contribution of Rs. 200 shall become a life member, exempt from all further contribution.

12. It shall be the duty of the Committee to arrange for such cordial co-operation as may be found practicable, with local Economic Associations and with all-India Associations having cognate aims.

13. It shall be the duty of the Committee to arrange for the publication of the proceedings, either through existing journals or independently.

14. Notice of proposed amendments to existing rules and of proposed new rules shall be forwarded in writing, not later than 31st October preceding the meeting to which they are to be submitted and not less than two months before the meeting, to the Honorary Secretary, by whom they shall be circulated to members not later than 25th November, and not less than one month before the date of the meeting.

15. A two-thirds majority of the members present and voting at the Annual Meeting shall be required to alter the Constitution of the Association.

16. The annual accounts shall be closed at the end of September and shall be submitted, after audit, to the Annual Meeting by the Honorary Treasurer.

17. One or more Honorary Auditors shall be appointed by the Committee.

INDIAN ECONOMIC ASSOCIATION.



A.—*Executive Committee.*

1924.

President :

The Honourable Mr. Lallubhai Samaldas, C.I.E.

Members :

Prof. C. J. Hamilton (Patna)	Prof. H. Stanley Jevons (Rangoon)
„ W. H. Myles (Lahore)	„ P. C. Basu (Indore)
„ B. G. Bhatnagar (Allahabad)	„ M. L. Tannan (Bombay)
„ A. C. Sen Gupta (Nagpur)	„ T. K. Shahani (Bhavnagar)
„ John Matthai (Madras)	Mr. H. Calvert (Lahore)
„ J. C. Coyajee (Calcutta)	„ B. F. Madon (Bombay)

Honorary Secretary :

Prof. R. M. Joshi, Sydenham College of Commerce & Economics, Bombay.

Honorary Treasurer :

Prof. H. L. Kaji, Sydenham College of Commerce & Economics, Bombay.

Honorary Auditor :

Prof. S. S. Engineer, Incorporated Accountant, Sydenham College of Commerce & Economics, Bombay.

B.—*Hindi Technical Terms Committee.*

1924

Prof Bhimpure Dr. Bal Krishna
Mr. D. S. Dubey (convener)

C.—*Official Statistics Committee.*

1924.

Mr. G. Findlay Shirras Dr. John Matthai
Prof. H. L. Kaji (convener)

SEVENTH INDIAN ECONOMIC CONFERENCE.

A.—*Reception Committee.*

Chairman :

Mr. K. S. Aiyar, B.A., L.T.J.P., Incorporated Accountant.

Vice-Presidents :

Mr. Jehangir B. Petit Sir Hormusji Cawasji Dinshaw
Sheth Narottam Morarji

Members :

Mr. B. F. Madon	Prof. S. S. Panandikar
Sheth Hansraj Pragji Thackersey	„ B. K. Thakore
„ Gulabchand Devchand	„ C. N. Vakil
Prof. S. S. Engineer	„ S. N. Pherwani
Principal M. L. Tannan	„ A. C. Fernandez
Mr. Mansukhlal A. Master	„ N. N. Lala
Prof. P. A. Wadia	„ G. N. Joshi
Principal E. Blatter	„ B. G. Sapre
„ T. K. Shahani	„ P. M. Limaye
„ S. R. Davar	„ M. R. Palande
Mr. J. A. Madan, I.C.S.	Mr. Fazul Ibrahim Rahimtula
Dr. Harold H. Mann	„ J. K. Mehta
Mr. G. Findlay Shirras	„ G. B. Trivedi
The Hon. Mr. Pheroze C. Sethna	„ C. S. Deole
Sheth Devidas Madhavji Thackersey	„ V. L. Mehta
Prof. Patrick Geddes	„ T. H. Khanna
„ K. T. Shah	„ P. K. Wattal
„ H. L. Kaji	„ J. A. Wadia
„ M. J. Antia	Dr. P. N. Daruwala
„ R. M. Joshi	

Besides these, "A Sympathiser" gave a generous donation of Rs. 1,000 and Sir Dinshaw M. Petit of Rs. 200. The following Bombay Associations also contributed generously to the funds of the Conference :—

The University.

The Chamber of Commerce.

The Indian Merchants' Chamber and Bureau.

The Grain Merchants' Association.

The Bombay Provincial Co-operative Bank.

The Bombay Shroff Association.

The Central Co-operative Institute.

The Social Service League.

B.—Executive Committee.

Chairman :

Principal M. L. Tannan

Honorary Secretaries :

Prof. P. A. Wadia Prof. H. L. Kaji

Prof. M. J. Antia

Members :

Mr. J. B. Petit

Sir Hormusji Cawasji Dinshaw

Mr. Fazul Ibrahim Rahimtulla

Dr. P. N. Daruwalla

Mr. G. Findlay Shirras

The Hon. Mr. Lallubhai Samaldas

Mr. B. F. Madon

Mr. J. K. Mehta

Prof. K. T. Shah

„ P. Geddes

„ R. M. Joshi

„ C. N. Vakil

„ A. C. Fernandez

„ N. N. Lala

SEVENTH INDIAN ECONOMIC CONFERENCE.

PROGRAMME.

Tuesday, 22nd January.

12 Noon :—Welcome Speech by *Mr. K. S. Aiyar.*

Inaugural Address by *H. E. The Rt. Hon. Sir Leslie Wilson,*
Governor of Bombay.

Vote of thanks to *H. E. the Governor.*

Election of the President.

Presidential Address by *Sir M. Visvesvaraya.*

Lunch Interval.

2-30 p.m. to 4 p.m. :—Reading and Discussion of the following papers :—

- (i) British Imperial Economic Relations, by *Prof. Saunders.*
- (ii) The Tariff Board and Indian States, by *Sirdar M. V. Kibe.*
- (iii) Export Duties and Protection, by *Mr. S. Subbarama Aiyar.*

4-15 p.m. :—Visit to (i) The Sir Currimbhoy Ebrahim Workmen's Institute,
De Lisle Road, near Lower Parel Station (B. B. & C. I.
Ry.)

- (ii) The Bombay Workingmen's Institute, Elphinstone Road,
Poibawdi, Parel, near Elphinstone Road Station
(B. B. & C. I. Ry.)

Wednesday, 23rd January.

11-30 a.m. to 1-30 p.m. :—Reading and Discussion of the following papers :—

- (i) The Government of India and its Currency Policy, by
Prof. P. A. Wadia & Prof. G. N. Joshi.
- (ii) Gold Exchange Standard before and after the War, by
Prof. Chatterjee.
- (iii) Gold Exchange Standard (Pre-war Period), by *Mr. T. J.*
Kumarswami.

Lunch Interval.

2-30 p.m. to 4-30 p.m. :—Reading and Discussion of the following papers :—

- (i) Non-Credit Agricultural Co-operation in India, by
Mr. J. A. Madan.
- (ii) Distributive Co-operative Societies in India, by *Prof. H.*
L. Kaji.
- (iii) Housing of the Working Classes, by *Rao Bahadur S. S.*
Talmaki.

5-15 p.m. :—The Reception Committee **At Home** at the Sydenham College of Commerce and Economics, near Sir J. J. School of Art, Hornby Road, Bombay.

Thursday, 24th January.

11 a.m. to 1-30 p.m. :—Business Meeting of the Indian Economic Association.

(For members only.)

Lunch Interval.

2-30 a.m. to 4-30 p.m. :—Reading and Discussion of the following papers :—

- (i) The Population Problem in India, by *Prof. C. J. Hamilton.*
- (ii) Agricultural Improvements in India, by *Prof. P. Basu.*
- (iii) Agricultural *versus* Industrial Development in India, by *Prof. R. M. Joshi.*

Friday, 25th January

11-30 a.m. to 1-30 p.m. :—Reading and Discussion of the following papers :—

- (i) India's Real Balance of Trade in 1922-23, by *Mr. G. Findlay Shirras.*
- (ii) The Problem of Poor Relief in India, by *Mr. K. G. Ramakrishna.*
- (iii) Indigenous Banking in the Madras Presidency, by *Mr. T. K. Duraiswami Iyer.*
- (iv) Supply of Labour to the Madras Cotton and other Industries, by *Mr. P. S. Lokanathan.*

Lunch Interval.

2-30 p.m. to 4 p.m. :—Reading and Discussion of the following papers :—

- (i) Excise Policy in South India, by *Dr. J. Matthai.*
- (ii) Indian Economics, by *Prof. P. Basu.*
- (iii) New Methods in the Teaching of Economics, by *Prof. S. N. Pherwani.*
- (iv) The Trend of Indian Thought in Economics, by *Mr. B. C. Bhatnagar.*
- (v) The Dawn of Economic Science, by *Mr. C. Gopal Menon.*

Concluding Remarks by the President.

Vote of Thanks to the President.

4-15 p.m. :—Visit to the Harbour and Cotton Green, Sewri, by Steam Launch from the Ballard Pier.

H. L. KAJI,

For self and co-secretaries.

SEVENTH INDIAN ECONOMIC CONFERENCE.

FIRST DAY :—*Tuesday, 22nd January 1924.*

The seventh session of the Indian Economic Conference was opened by His Excellency The Right Hon. Sir Leslie Wilson, Governor of Bombay, at 12 noon in the University Convocation Hall in the presence of a large and distinguished gathering of citizens, including many prominent officials and leaders of different communities. Among them were to be seen the Hon. Sir Ibrahim Rahimtula, the Hon. Mr. Cowasji Jehangir, the Hon. Mr. C. V. Mehta, the Hon. Mr. Hidayatullah, the Hon. Mr. B. V. Jadhav, Sir Lawless Hepper, Sir Frank Nelson, Principal A. L. Covernton, Mr. Narottam Morarji Goculdas, the Hon. Mr. Pheroze C. Sethna, Mr. J. A. Wadia, Mr. G. Findlay Shirras, Mr. H. G. Sayer, Prof. Patrick Geddes, Mr. G. K. Devadhar, Mr. N. M. Joshi and others.

On arrival His Excellency was received by Sir M. Visvesvaraya, the President-elect, the Hon. Mr. B. V. Jadhav, Minister of Education, Mr. K. S. Aiyar, the Chairman of the Reception Committee, Principal M. L. Tannan, Chairman of the Executive Committee, Professors H. L. Kaji and M. J. Antia, Secretaries, Sheth Narottam Morarji, one of the Vice-Presidents and Prof. R. M. Joshi, Secretary of the Indian Economic Association, and conducted to his seat.

Mr. K. S. Aiyar then began the proceedings by a welcome speech. He said :

YOUR EXCELLENCY, BROTHER DELEGATES, LADIES AND GENTLEMEN,

I rise in obedience to the orders of the Reception Committee to accord to one and all of you a hearty welcome on their behalf.

We are exceedingly thankful to Your Excellency for your having so graciously accepted our invitation and agreed to inaugurate the proceedings of our Conference this year. I may assure you, Sir, that we have no sinister motives in inviting Your Excellency to this Conference, as we have no lists of grievances to enumerate, and there will be no direct or covert appeals for financial aid from Your Excellency's Government. The Reception Committee's financial condition is sound, and we hope to be able to close with a credit balance at Bank after meeting all our reasonable and legitimate expenses. We have been lucky in enlisting the services of a past-master in the science and art of *begging*, in the person of the Principal of our College of Commerce and Economics, Professor Tannan, who knew when and where to beg in this city of Industrial Magnates and Merchant Princes. The velocity with which Principal Tannan successfully relieved our Bombay friends of some of the contents of their purses alarmed some of us and he had to be

requested to stop his predatory activities so that we may not be loaded with a surplus for which we have at present no use. We hope to be able to present out of our surplus a small purse to the Indian Economic Association and enable that Association to start a journal of its own, where members can from time to time, expound their views and publish the results of their researches. The presentation of this purse will, however, be only a voluntary contribution from Bombay to the All-India Association of which we form a part, and will therefore materially differ from the annual contribution levied, may I say, "extorted", by the Government of India from the Bombay Government out of the legitimate provincial revenues of this Province.

We must here express our thankfulness to the public spirited citizens of Bombay, but for whose ready response, our financial condition would not have been so satisfactory. We are also indebted to the University of Bombay for their handsome contribution to the Conference funds, and for the sympathy and support of the Vice-Chancellor and the Syndicate who have cordially helped our Committee in organising and holding this Conference in Bombay.

To you, Sir M. Visvesvaraya, we accord an equally hearty welcome. We are grateful for your having come down all the way from Bangalore at such short notice to take part in and to preside over the deliberations of this Conference. As an ex-Dewan of Mysore you have carved out for yourself a *niche* in the economic history of that model State, and we may congratulate ourselves on our having secured your co-operation and guidance on the present occasion.

We are also proud to note that our invitations have been accepted by so many distinguished visitors, several of whom are our leaders in commerce and industry—the practical economists of the day. We are exceedingly thankful to them for the interest they have thus evinced in the proceedings of our Conference.

Brother Delegates, this Conference is yours, and we, members of the Bombay Reception Committee, welcome you most cordially, and assure you that we shall do our best to make you feel at home during the period of your stay amongst us. Your enthusiasm and your eagerness to advance the interests of economic science have made you travel long distances at considerable discomfort, that you may give this Conference the benefit of your expert knowledge and of your valuable experience. We of the Bombay Reception Committee, therefore, accord you a special welcome to our City—a City recognized as taking the lead in indigenous mercantile enterprise. We have arranged for visits to Welfare-Centres and Workmen's Institutes, a cruise in the Harbour followed by a visit to our Cotton-Green at Sewri. The cruise will demonstrate that ours is an Island City and that we can not only motor down from one part to another part of the City, but

that we can also go by boat from the commercial centres of our City to other portions of our Island. We trust you will enjoy these visits and welcome such interruptions to your learned discussions.

Ladies and gentlemen, the economic upheavals and disturbances set up by the Great War of 1914-18, gave such rude shock to some of our economic theories that Professor Hamilton of Calcutta, and the late lamented Principal Anstey of the Sydenham College of Commerce and Economics, considered it desirable to start, in consultation with professors of Economics in other Provinces, an Indian Economic Association, and it was resolved to hold an annual Economic Conference in one or other of the principal University centres of India. The first of such Conferences was held at Calcutta in 1917, the second at Bombay in 1918, while the 3rd, 4th, 5th, and 6th Conferences were held respectively at Madras, Allahabad, Patna and Lahore. This is the seventh Conference and the second occasion on which we hold it in Bombay.

Though Calcutta may dispute the right of Bombay to be ranked as the Commercial Capital of India, Bombay may with some confidence claim to be the financial barometer of the continent of India. In respect of indigenous enterprise, Bombay is easily first, as it is here that we have the largest number of successful Indian financiers, industrial magnates and merchant princes, who have established industries and opened out overseas trade and thereby proved the capacity of the Indian to excel in the world of commerce and industry. A visit to a City so circumstanced will enable the economist to explore the reasons for the successes as well as the failures of Indian commercial enterprise. My association with the business houses of Bombay for the past quarter of a century has impressed on me one special feature of the business world in Western India, *viz.*, the harmony with which business men of all communities, Europeans, Parsees, Hindus and Muhamedans, work together. In practically every kind of business, members of these different communities are intimately connected with one another either as partners of firms, or as Directors of companies; and to put it at the lowest, their enlightened self-interest makes them work together without any friction. Those engaged in business cannot afford to quarrel; for if they do, it injuriously affects the financial interests of each one of them. They therefore agree to differ and speedily arrive at a satisfactory compromise, and every business man relies upon friends belonging not only to his own community but also to every other community. Such friendships are fostered in Bombay by ignoring the weaknesses and idiosyncrasies of business associates and magnifying their merits and virtues. This is a frame of mind which helps the consolidation of business intimacies and the assimilation of the merits and virtues of associates in business.

Bombay is essentially a man-made City; and no small portion of the credit of having converted this marshy Island of Fishermen into such a busy



HIS EXCELLENCY THE RIGHT HONOURABLE SIR LESLIE ORME WILSON,

**P. C., G. C. I. E., C. M. G., D. S. O.,
GOVERNOR OF BOMBAY.**

centre of commerce and industry, is due to our industrial and commercial magnates, drawn from different communities. The study of the economic history and growth of a city so situated must prove fascinating to enthusiastic economists. There was therefore some appropriateness in the first College of Commerce and Economics having been established in Bombay by the joint efforts of the University, the merchants and Government of Bombay. The great war having unsettled some of our economic theories, it was natural to expect the Professors of our College of Commerce and Economics to take an active part in the deliberations of this Conference ; and they have accordingly attended every annual conference and exchanged views with their fellow economists from the other provinces.

Ladies and Gentlemen, during the next four days the learned delegates of this Conference will be engaged in exposing economic fallacies, exploring economist truths, investigating Indian economic problems, and trying to reconcile post-war economics with pre-war economics. I will not detain you any longer with a rambling speech as you must be eagerly waiting for the inaugural address of His Excellency the Governor, and I have therefore the honour and the pleasure to request Your Excellency to deliver the Inaugural Address and to declare the Conference open.

His Excellency in declaring the Conference open, delivered the following inaugural address :

LADIES AND GENTLEMEN,

The opening words of the speech of the Chairman of the Reception Committee have filled me with confidence and have added considerably to the pleasure which I feel in being present at this gathering. It is indeed unusual to find an occasion when Government is not asked either directly or indirectly for financial assistance, and I find myself to-day in a gathering which I am tempted to call unique, living as we do in a world full of troubles and anxieties, where there is such a complete lack of grievances as I find here. The Chairman has also given me, perhaps inadvertently, some most useful information, and I can assure you that I shall not hesitate to borrow, if I can possibly acquire them, the services of Professor Tannan, as I myself have some schemes in mind in which his invaluable services as pastmaster in the science and art of begging will be of the greatest value to me. I shall also be able to suggest to the Chairman of the Reception Committee some, in fact many, methods by which he can be relieved of that incubus of a surplus under which at the present moment he is staggering.

In the few words which I shall say to you, I should like, in the first place, to congratulate you on this annual Economic Conference, and I am glad indeed that the seventh Conference should be held in Bombay so shortly

after my arrival here. I should indeed hesitate to tread the dangerous and controversial path of discussion and argument as to the respective merits of Bombay and Calcutta as the commercial capital of India, but even in my short time among you I have been much struck by what you, sir, call the cosmopolitan character of the business community of this great city, and even before I arrived here I have had ample evidences of the manner in which men of all communities carried out their industrial undertakings working whole-heartedly together for the industrial and commercial development of the city and the Presidency.

Nothing to my mind can be of greater use or advantage to the business world than that there should be so many who can be brought together to discuss the vital question of economics, particularly economics as affecting India in an atmosphere where political feelings play no part and where the greater good of the community is the sole consideration.

We are fortunate in Bombay in the possession of the Sydenham College of Commerce and Economics and I am particularly fortunate to-day in hearing a very eloquent welcoming address from Mr. Subramani Aiyar, its first Principal, whose services not only to the College but to economic education in general have been so remarkable and to whom we look in the future for a continuance of his great assistance.

Many of our theories on economics were sadly disturbed by the war. But now we have had time to learn the economic lessons of the war and I can think of no more suitable occasion to hold unbiassed investigation to which you, sir, have referred than at the present time. We have seen the effect of the great war on the curtailment of the productive services. We have felt the result of a complete derangement of all our per-war financial systems and the world is called upon now to endeavour to make up a deficit of losses, human and financial, losses of a magnitude which ten years ago would not have been thought possible.

In all our problems, great as they are, it would seem to me that the greatest danger we have to meet is that too much attention should be paid to financial deficits and too little attention to the human deficit. Let me not be misunderstood and let it not be thought that for one moment I do not advocate the strictest economy in public and private life. That is vital at the present moment but we cannot over-estimate the danger of not doing all that lies in our power to wipe away these deficits in education, production and industrial development due entirely to the ravages of war.

Undoubtedly, a great task lies before every nation at the present time and it is only in the hard cold school of economic thought that we shall find solutions to those problems which confront us. It was a great man who once said that some talk, as if some people in the world had a natural

cleverness and could do things without trouble, but he had never heard any one who did anything worth doing without taking a great deal of trouble, and that is a great truism. You will spend your time at this Conference, tempered I hope by an adequate amount of relaxation, in discussing these great problems, problems which even though your conference is called the Indian Economic Conference, are just the same as those which are trying the mental strength of the economists of all countries, and in inaugurating this Conference not, as you, sir, have suggested with an inaugural address but with these very few remarks, I wish you well and may your deliberations result, as I feel sure they will, in practical suggestions which will be of benefit not only to this great country, but to the world in general!

Principal Tannan in proposing a vote of thanks to His Excellency said: I deem it a great privilege to be entrusted with the most pleasant duty of proposing a hearty vote of thanks to His Excellency the Governor for inaugurating this Conference. I am sure, I am voicing the feelings of all of you when I say that His Excellency has laid us under a deep debt of gratitude by coming here this morning to declare the Conference open and to wish it success. I must confess that when I was asked to approach His Excellency soon after he assumed charge of the high office he holds to make a request to come and open this Conference, I felt very diffident about the success of my commission. It was indeed a matter of pride as well as rejoicing when we learnt that in spite of the numerous calls upon his time His Excellency had kindly consented to accept our invitation. It is therefore quite clear that we are extremely grateful for the trouble he has taken. With these few words I commend the proposition for your acceptance and trust you will carry it with acclamation.

His Excellency replied: I am really grateful to you for so cordially accepting the vote of thanks for coming here. I speak in all sincerity that it is a great pleasure to have been present and have the opportunity of saying a very few words in inaugurating this Conference. But I regret I have other engagements which compel me to go away now. I shall take a copy of the Conference Papers with me. I do wish the Conference every success. You will have difficult problems to consider but I trust your deliberations will result in suggestions serviceable not only to yourself but to the public particularly at the present time.

His Excellency then left.

Dr. John Matthai (Madras), in proposing Sir Visvesvaraya to the chair said that Sir Visvesvaraya had proved himself on three grounds best fitted to

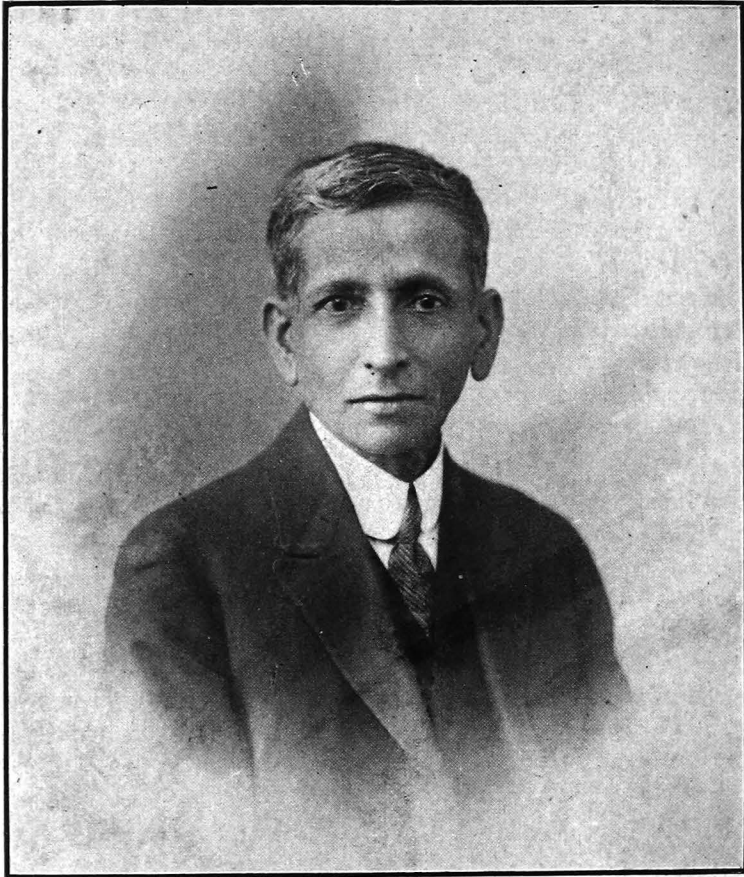
preside over their deliberations. As the Chairman of the Reception Committee has already told us, Sir M. Visvesvaraya comes to this Conference with a long and distinguished career as an engineer, and as the Divan of a premier Indian State. What is of interest to us is that in both of these capacities he has given his best to the solution of the most difficult economic problems in this country. I am sure he will be very welcome to us at this session of the Economic Conference. He is a tried and a tested administrator and an old alumnus of the University of Bombay. On this account I have very great pleasure in proposing Sir Visvesvaraya to the chair, and in commending the proposition to your acceptance (cheers).

Sir M. Visvesvaraya then took the chair.

Prof. H. L. Kaji then read out a letter sent by the Hon. Mr. V. G. Kale, the President of the Association for 1923 :—

“I regret that owing to important and pressing duties here I cannot get away to preside over and even to attend the Economic Conference. This is disappointing to me personally but I have not the least doubt that under the distinguished presidentship of Sir M. Visvesvaraya, the Conference will prove a splendid success. The progress which economic research and study are steadily making in India is gratifying and I am sorry I shall miss the opportunity of meeting the many active and zealous economist friends who will assemble in Bombay. Several problems of the highest national moment to the economic development of India await correct diagnosis and effective cure and I trust that devoted students of these problems will be able to make their legitimate contribution to the task of finding and applying the remedies. I wish the Conference every success.”

Sir M. Visvesvaraya then delivered his Presidential Address :—



SIR M. VISVESVARAYA, K. C. I. E.
President, Seventh Indian Economic Conference, Bombay

Seventh Indian Economic Conference.

Bombay, Tuesday 22nd January 1924.

Presidential Address :—By Sir M. VISVESVARAYA.

When I received the request of your Executive Committee to take up the duties of President of this Conference a few days ago, I was travelling in the interior. For several reasons, the shortness of notice being one of them, I hesitated to comply at first, but, when later I gave my consent in response to a more pressing message, I did so with a mental reservation that I would not inflict a lengthy address on you.

I do not intend to dwell here on the present depressed condition of industry and trade in the country which, let us all hope, is a passing phase. I propose rather to discuss some of the more permanent factors, including certain glaring defects in economic equipment, which have retarded the progress of this country for some time past.

Many of you, particularly businessmen in Bombay, who have always taken an honourable share in public affairs will realise how difficult it is to discourse on Indian Economics in a practical spirit without coming up against controversial topics. In discharging this difficult task, however, I propose to take special care that, as far as possible, no words of mine shall have a jagged edge.

Indian Economics has been in a state of complaint ever since the subject came to be handled by men of courage, ability and independent thought. Questions germane to the subject have been discussed with great candour in the past in the writings of eminent men like Dadabhai Naoroji, Romesh Chunder Dutt, William Digby and others.

The All-India Industrial Conference, which until recently used to meet annually, also dwelt on topics of allied interest. The late Mr. Ranade wrote books, published magazines and carried on propaganda for several years. Under the auspices of that great Indian, annual industrial conferences were held in the nineties in the city of Poona. I lived in those days in Poona. In spite of its early awakening there has been no actual wealth-building in that city. While the intellectuals of Poona were investigating intricate economic problems, prominent commercial communities of Bombay, *viz.*, the Parsis, the Bohras, the Bhatias and the Banias with their keen business instincts were engaged in building up trade and wealth for themselves and for their city. Bombay owes the wealth and prosperity it enjoys to-day to the enterprise and example set by the leading men of these communities—the Tatas, the Petits, the Currimbhoyas, the Mehtas, the

Goculdases, the Thackerseys and many others, who have built up enduring reputations for themselves and left behind large business concerns for their successors.

We must not in this connection forget that the growth of Bombay, as a great commercial centre, is primarily due to the stable conditions built up by British rule. The present economic framework of India is a British framework, originally meant for British commercial needs, at a time when population was sparse and food cheap and the advantages of factory industries and modern systems of commerce were not sufficiently known or understood in this country.

General Economic Situation.

One great disadvantage under which we labour here is the unsatisfactory state of its economic statistics. Such statistics as we have are incomplete and indefinite. For example, the money value of production from agriculture by villages or districts is not known to the Provincial Governments. The correct capital and production from industries and the Indian share in them and in the country's commerce is not known. If the approximate money values were available, as is the case in smaller countries like Canada and Australia, we should have a basis upon which to judge our position from year to year, compared with other Dominions and advanced countries. As matters stand, there is no means of appraising our real economic situation. Nobody, except perhaps the professors of the Sydenham College, go into these root facts.

Such statistics as we have, however, reveal a very unsatisfactory position. With your permission I will call attention to a few typical features. The wealth of India before the War was estimated at £3,600 millions or Rs. 5,400 crores. This meant an average property or wealth amounting to Rs. 180 per head of population. The corresponding figure for Canada was a little over Rs. 4,400 ; that for the United Kingdom Rs. 6,000. Again, the annual income per head in India at the present reduced value of money varies from between Rs. 45 and Rs. 60. Even assuming the maximum figure of Rs. 60, it would mean an average income of Rs. 5 per head per month. The corresponding yearly income given for Canada is Rs. 550 and for the United Kingdom Rs. 720. The trade for the whole of India comes to about Rs. 20 to Rs. 25 per head. For Canada and the United Kingdom, the figures are Rs. 510 and Rs. 640 respectively. On account of the general low level of occupations and low standard of living the death rate in India is very high, being over 30 per 1,000 while the same is less than 14 per 1,000 in the two countries named. The average expectation of life is about 24 years in India while it is about 45 in European countries. Education is extremely meagre, less than 6 per cent of the population being literate. Every other primary test that you may apply will show the same low standing, the same low level of efficiency.

Besides this such property or wealth as there is, is unequally distributed. Industries are confined to three or four large cities like Bombay, Ahmed-

abad, Cawnpore, Calcutta and in a small way to a few other places like Madras. I have already referred to the unprogressive character of the city of Poona, unprogressive I mean as regards material wealth. An eminent Bengali economist told me a few weeks ago that over 80 per cent of the wealth of Calcutta was in non-Bengali hands. Vast numbers of population cling to occupations which outside competition has rendered unremunerative but there is no agency to advise and no one to go to their help.

Ignorance and Poverty.

The monthly income I have just stated: is Rs. 5 per head. This is the average but the income of the poorest classes is of course much lower than this. The masses of the population are steeped in poverty bordering on destitution, poverty to which there is no parallel in Western countries. You will agree that a people with so low a record of literacy as 6 per cent. and so poor an income as Rs. 5 per head per month cannot be said to be equipped for the struggle for existence and yet our late Governor, Sir George Lloyd, in a speech he made in November last, before a meeting of the Associated Chambers in Bombay, read the situation in a very different light. Said Sir George:—"The more closely the situation is examined, the more amazed does the student become, not at India's poverty but at her prosperity and wealth." He then went on comparing the increase in the cultivated area, in the production of wheat and rice, within the past 20 years. Sir George Lloyd was able to push, to the stage of sanction, the Sukkur Barrage project, which, it must be admitted, is a scheme of great economic importance to the country. We commend this measure; in other respects, his view is by no means the Indian view. As you know, this statement which I have quoted has been hotly disputed by Indian publicists all over the country. Sir George in making it has adopted a wrong basis for his comparisons. A progressive Government would take pride in the growth of production from industries, of volume of commerce, of science, of arts and crafts and of technical education. Our late Governor, however, referred to none of these; he chose rather to point to the increase in certain *agricultural* products as evidences of India's prosperity. For example, he said that in 20 years the area under rice rose from 50 million acres to 80 millions and wheat from 25 to 30 million acres. If he had compared the figures for wheat with those of some of the Dominions, he would have found something startlingly instructive. For instance in Australia in the same period mentioned by him, the area under wheat rose from about 3.6 million acres to a little over 9 millions; in Canada, the increase was from under 4 million acres to nearly 23 millions. Agriculture, as we know, is the least remunerative of occupations and no country can maintain a civilized existence on agriculture alone. Then he compared India's present condition not with any average progressive country outside but with the past condition of India itself. That is the usual official way of demonstrating progress in this country. In

a competitive world, it is not what we are to-day as compared with our past that matters, but how we stand with our competitors in other parts of the world. The fact that we were once doing very ill in some respects but are now better is no proof that we are doing anything appreciable in comparison with our neighbours.

It will be seen from the facts I have adduced that the general economic position of India may be summed up in the two words, ignorance and poverty. What pains every thinking Indian who is anxious about his country's future is that there is no policy in the administration and no continuous effort on the part of our public men to combat these two evils. It is the obvious duty of Government to compile and maintain correct statistics to show the progress made by the people of the country in matters relating to their development. The absence of such statistics creates the suspicion that their maintenance is inconvenient because it leads to the obvious imputation which the figures convey. There should be, in fairness to Government, no scope for criticism of this nature. I am grieved to learn that, as a measure of retrenchment, even some of the meagre statistics which were being published till recently are being discontinued and the country is being plunged into deeper darkness.

In the educational activities of the country, it is an undeniable fact that technical and commercial education has come last and come late. The training available for industrial and commercial pursuits is extremely limited. The Sydenham College of Commerce and Economics was started only ten or twelve years ago. Even at this late date there does not exist, within the four corners of the Indian Empire, a single well equipped College of Technology such as we find in Europe or America.

I hope you will not mind if I give one or two instances from my own personal experience.

Some sixteen years ago, I served on a Bombay Government Committee which went into the question of the improvement of the College of Engineering, Poona, and that committee recommended, *inter alia*, what arrangement should be made for instruction in the highest branches of electrical engineering. The then Government approved of the recommendations made but the degree in electrical engineering, then proposed, is not established to this day. Some of you may be aware that a Technical and Industrial Education Committee was appointed by the Bombay Government in March 1921, of which I happened to be the Chairman. We laboured for a year under difficulties and produced a scheme. The unanimous report of the Indian members of that committee was, as far as I know, approved by the entire press with the exception of one influential paper. But so far as the public is aware, Government have taken no action on our Report for over 20 months. The state of the finances may be a reason, but if the Government were in earnest, they might have approved of the scheme or at least one of the two schemes presented,

and laid down a programme and asked the people to do what they could by their own unaided efforts, until funds could be found. But unfortunately there has been no inclination so far in that direction. In 1918 the Indian Industrial Commission, although debarred from considering questions of fiscal policy, made some recommendations calculated to give an impetus to industrial development. I could name a dozen instances in which the more important recommendations have remained a dead letter. No public official in this country deems it his duty to discuss these questions from the broad standpoint of policy or national interest. There is no visible move on the part of any one in authority to remedy many of the root defects I have enumerated.

A New Economic Structure.

We miss, in this country, the equipment and many of the measures usually found in the Dominions and progressive countries to protect or promote their economic interests. This is admitted. The semi-official review, *India in 1922-23*, states the bare truth when it says that "the country is not at present organised for the production of wealth." It is this organization and other concomitant measures, which are overdue, that we want our Government and public men to take in hand without further loss of time. The object of this new economic structure should be to provide the machinery and agencies needed to promote agriculture, industries, commerce, banking, communications, technical and general education and the multiplication of occupations generally.

You are aware that Boards of Industries have been established as a result of the recommendations of the Indian Industrial Commission. There is much room for improvement in the performances of these Boards. Sometime in 1922, I met the well-known Industrial expert Sir Alfred Chatterton in this city and as he and I had previously worked together on industrial questions in Mysore for about seven years we exchanged views about the new Boards of Industries, "How is business, Sir Alfred." I enquired. "Oh very bad, they are only manufacturing files," was his reply. He meant of course files of correspondence.

The Board of Industries in each Province ought to work under the control of the Minister-in-charge of the Development Departments and he ought to be advised by a Development Committee of the local Legislative Council. There is a large amount of opinion in favour of the present Boards being made a statutory body; the members instead of being nominated should be elected from among prominent businessmen and agriculturists. One section of the work of the Board should relate to industries with the Director of Industries as Secretary. A second section should concern itself with agriculture, commerce, technical education, co-operative societies and propaganda work generally to create an economic atmosphere, and this section should be in charge of a General

Secretary. The Board should have its subordinate and expert staff in all the districts and work in collaboration with the local people's associations.

People's associations exist in many places already, chambers of commerce, manufacturers' associations, District and industrial associations, agricultural associations etc. The creation of new agencies or new associations should be encouraged in localities and regions where none exist at present and the activities of the whole body of them should be co-ordinated if possible through a central body of the headquarters of the Presidency or Province. This central body may be an existing association or it may have to be newly created. The people's associations which may be actively engaged in practical development work or propaganda ought to be assisted with technical advice and other help by the officials and experts of the Board of Industries.

As in Japan, every city, town and village, or if the village is too small, a group of villages, should have a council or committee or panchayat to attend to increase of production under agriculture and industries and the spread of education, including vocational education and discipline. As in Japan, each city, town and village should maintain statistics of production and education through its own agencies and the Government Departments should be held responsible to compile figures for the district and the Province and at intervals to review and comment on the actual progress achieved not only in individual unit areas, cities, towns and villages—but also in regions and Provinces.

The Member or Minister of the Government of India in charge of the Development Departments should work in association with a Committee of the Central Legislature and should be able to enunciate policies and programmes which command popular support and review the progress achieved from year to year. The Provincial Minister should do similar work in the Province.

All-India Associations like the Indian Economic Association should be up-to-date business organizations with paid Secretaries and office equipment and should be in constant communication with the leading merchants and manufacturers, the Central and Provincial Governments and the Development Committees of the Central and Provincial Legislatures.

Lastly, to meet the difficulty so frequently urged of want of funds for developing industries and education at a time of financial strain like the present, it is suggested that for the next ten or fifteen years, the development projects be financed by loans. We have some unproductive debt already at present. We spent Rs. 150 crores or more on the great war. We might as well add to that debt a little more to fight ignorance and poverty. These loans will, of course, be Provincial. Such an expenditure, even though financed by loans for which interest and sinking fund charges would have to be met from current revenues, if it helps to reduce illiteracy and poverty, will in the long run prove a valuable investment.

We require an economic survey for the Provinces to prepare estimates of their present assets. Starting with the results of this survey as a basis, progress should be watched in each of the developments by yearly and periodical stock-taking. Yearly, and in some cases monthly, returns should be published showing the attendance at educational institutions, growth of joint-stock undertakings, of production, of indigenous banking and shipping interests, etc., in each local area or region as well as in the Province as a whole.

There should be a constant and cordial co-operation between Government agencies and people's associations and representatives, and in the present state of development, Government aid is of the greatest value. But under a healthy organization we may confidently expect that the responsibility for stimulating and maintaining economic activities will be shouldered more and more by public bodies as time goes on.

Other Special Measures.

Such is the main structure I would recommend for economic regeneration. I do not say that the scheme as outlined by me is the best. But it includes the essential features usually borne in view in progressive countries. In saying this, I have two countries particularly in view, namely Japan and Canada, countries which I have twice visited, of whose economic framework I can claim some knowledge. Any other similar scheme will answer, provided there is no deviation from the principles indicated.

In addition to providing a new economic framework, there are a few special measures which the State should take in hand, simultaneously, to promote the material prosperity of the country. An impetus should be given to the manufacture of railway materials and rolling stock in India. This will come about automatically if Government places orders for railway materials and rolling stock within the country, through local merchants and contractors, subject to delivery according to specifications. I think for some time Indians should consent to purchase in England all such materials as cannot be had in India. Under present abnormal conditions, even British-owned factories in India fail to secure Government patronage. In Germany, before the war, not only were all railway materials purchased from firms within the country but each State insisted upon orders for plant and machinery for its railways being placed within the State itself. Similar measures of State patronage in each Province will go far to help to build up industries in India.

The manufacture of locomotives, machinery and motor cars will not take long to be established, if suitable subsidies and freight concessions on railways are granted. In the case of such new industries, dividends at reasonable rates for stated periods might be guaranteed or part of the capital needed for starting them provided by the State. Some money should be spent, or wasted, by the Government to make a start.

The manufactures for which there is a market within the country should receive earliest attention. At present, we are exporting Rs. 40 crores worth of raw cotton and Rs. 13 crores of cotton manufactures making a total of Rs. 53 crores per annum. We are importing cotton piece goods valued at Rs. 60 crores. But it is superfluous to remind a Bombay audience that there is room for 300 more cotton mills in the country and that with a little forethought and preparation, we ought to be able to manufacture for export cotton goods valued at about Rs. 75 crores more. The country might have an income of Rs. 68 crores from cotton and cotton manufactures instead of a loss of Rs. 7 crores as at present. Employment can be found for the poorer classes in Bengal by utilising some of the raw jute which is now exported. It does not seem right that, while unemployment is rife in this land, the Indian should be allowed to remain idle and expect richer nations to spin and weave for him!

As regards protection, a high tariff policy may not be good for a country like England, which depends for its support on manufactures and services, but as the experience of all the Dominions has shown, it is the only sound policy for India. The detailed enquiries into the steel trade, the meticulous care with which the Tariff Board are weighing pros and cons are a superfluity. From the close enquiries I have made in foreign countries, especially Canada, the case for protection for the steel industry in India is fully established on general grounds. Under similar conditions no Dominion—no civilized country in these days would hesitate one moment to protect this basic industry.

The country has demanded shipping and banking facilities for a long time past and perhaps it is time that strong committees of the central legislature were formed to vigorously promote these much needed facilities.

The present system of sterling exchange and the practice of maintaining a token coin for internal circulation should be speedily replaced by a standard gold currency. Every impartial expert I have consulted is of this opinion.

The extension of technical and commercial education should be pushed forward by the elected Boards of Industries already referred to. One good College of Technology and one Commercial College will be needed in every province and liberal scholarships should be provided for each province for training our young men in England, America and Germany.

There is one more point on which I wish to lay some emphasis at this stage. Whenever Government appoint Commissions or Committees in future to investigate any reform or forward move such as industrial development or technical education, or forest exploitation, they would do well to depute those bodies to the Dominions and the progressive countries which have specialized in such subjects. The Commissions or Committees

would learn far more in a month in those countries than they would in India in a year if they toured gathering opinions of persons who have had no practical acquaintance with any better state of things.

These are some of the more important measures which the country wants and which the Government of India would undoubtedly have adopted long ago had that Government been amenable to Indian public opinion, had India been free to mould her economic destiny.

Conclusion.

I have had to dwell on topics, some of which may seem controversial. But how could I avoid them? My theme has been ignorance and poverty and measures of amelioration. I have an idea that no more appropriate subject could have been chosen for discussion at the present time before an All-India assembly of businessmen and economic experts such as this Conference is.

There is a steady attempt in progressive countries like U. S. A. and Canada to raise the standard of living by a liberal extension of education and by multiplying the use of machinery and by restricting immigration. Leading American economists have begun to declare with pardonable pride that their country is already within striking distance of abolishing poverty. From the facts I have placed before you, such a hope for India looks like a distant, very distant dream. The country is not organized for the production of wealth, says the latest semi-official report; then what is it organised for? We know the population is growing but we are not aware of any deep-laid plans or thought-out purpose in the Government either to provide for or to combat this increase. If there is a policy or programme for economic uplift in the councils of Government, let us know what it is. If it is a sound one, why every patriotic citizen, every association in the country would work for it. But if there is no policy, no programme and if it is just a case of drift, the situation seems grave. We owe it to our country and posterity not to rest content until suitable remedial measures are adopted.

It is true large irrigation schemes have been developed under British rule and railways extended from one end of the country to the other, but that is no reason why, if bigger economic schemes are possible, they should not be attempted. There are vast tracts of country still undeveloped and vast forests and mining resources remain untouched. The industrial possibilities alone are immense. America shows how extensive railway systems could be made if every ounce of iron and steel required were manufactured in the country itself. Millions and millions of money have gone out of the country to purchase iron and steel products and machinery in the past. We have got the raw material, we have got the men. We are already making pig iron cheaper than it can be manufactured in any other part of the world. If timely measures

are adopted, steel manufacture and machinery can be made equally cheap within the country. People are hungry for employment. We know that in many parts of rural India the cultivators obtain remunerative employment only for 6 or 8 months in the year and that quite 80 per cent of them live in mud huts sheltered by thatched roofs. We know what unemployment means and we cannot but deeply feel for the great numbers of the unemployed in England. But for every million of unemployed in the United Kingdom, there must be at least 30 millions in India, but we keep no unemployment rolls, we make no returns.

If the necessary organizations, both semi-official and public, are brought into existence in the manner explained already, if policies and programmes are laid down duly endorsed by legislative enactments, if a correct inventory of the present-day position is taken and if the progress in production from agriculture and industries, banking power, growth of jointstock companies and other similar matters is watched from year to year, if we know what assets we have and what debts we owe and have the satisfaction that from year to year our assets are growing or our debt is diminishing, or if there is no improvement we keep ourselves informed of the reason why, then the country can be sure that good use is being made of its opportunities, or if good use is not being made, that it must be due to causes which are unavoidable or beyond human control.

The inference must be plain to you all now that a change in the present economic structure, which is old and out of date, is overdue and that in future a permanent union between Great Britain and India should be promoted and maintained on the basis of mutual benefit and healthy common interests. But the change will not come about unless fiscal autonomy is first conceded. There is an awakening in the people who now know that they will not be able to get on without education and industries and are willing to make sacrifices. We have huge resources and an enormous population which has not been adequately mobilised. If the measures suggested here, or other equally effective ones, be adopted, there is every prospect that we may be able to double production from agriculture, and quadruple that from industries, in less than fifteen years. With the creation of reasonable facilities, there is every hope that the material progress of the country will proceed at a pace which will astonish the world.

BRITISH IMPERIAL ECONOMIC RELATIONS.

BY PROF. A. J. SAUNDERS, AMERICAN COLLEGE, MADURA.

Some time ago I was talking with a friend, a man British born, who had great fears for the future of the British Empire. He said:—"The Empire has become a Commonwealth of Nations; it is too large, it cannot be properly handled, its diversity of interests cannot be co-ordinated. I fear it will eventually break up, because it has not a sufficient and strong enough cement to hold it together." While I do not share my friend's pessimism I do recognise at the same time the serious nature of some of the dangers which were causing him anxiety.

The growth of the British Empire during the last two hundred and fifty years has been a most astonishing and wonderful thing. There has been nothing like it in the whole history of the world. The might and power of Rome in her golden days, and even the extent of the Holy Roman Empire, do not compare with the political and economic position of the British Empire in the world to-day. Her political objective, in regard to which there have been many serious and concerted efforts to unite upon and work a common policy, is a commonwealth of free nations but bound together by the strongest ties of an enlightened and progressive imperialism. Politically we have a policy, and we are trying to work it out together. But the thesis that I want to discuss with you to-day is—The British Imperial Economic Policy has not kept pace with our political policy. We are just beginning to go together and talk of an Imperial Economic Policy. The recent Economic Conference in London was a great step forward in this direction. But as I have said we are just beginning to consider an all-British Industrial and Commercial Policy.

Our former policy, or more correctly speaking, lack of policy was a practice of *laissez faire*. Each country set up its own form of house-keeping and its independent spirit would not allow to be dictated to by any other sister country, not even by Mother England herself. And so Canada, Australia, and South Africa have formulated their own economic and fiscal policies irrespective of Britain; and India will do the same thing as soon as she gains her freedom. Now, do not misunderstand me; I am not condemning this practice. For it is the absolute right of free nations. But, what I am pleading for is a policy arrived at by conference that shall determine Imperial Economic Relations in which imperial advantage and national advantage shall be so adjusted that the result will be the greatest good to the greatest number in both the Empire and the individual nation. I am an Imperialist, but not at the expense of the nation; there must be worked out an economic relationship that will be able to conserve the interests, of both. The two most important considerations in such a rela-

tionship at present, as it seems to me, are the protection of our own production against foreign competition and especially dumping, which shall lead us to a consideration of Imperial Preference and the allied question of conserving and extending our own markets within the British Empire. These are the two great economic problems—Protection and markets, before our Empire to-day, and I would like to discuss them very briefly with you this afternoon.

I.—Imperial Preference.

Imperial Preference is not a new idea which has just come to the British mind ; it is a revival of an old controversy—Protection *versus* Free Trade, and simply means a system of mutual concessions in the matter of imports and exports to member nations of the British Commonwealth, but protection against the goods of the outside world.

It was the influence of the French Physiocrats in the 17th and 18th centuries, Adam Smith and his *Wealth of Nations*, the American War of Independence and the French Revolution, and the Anti-Corn Law League which changed England into a Free Trade Country in 1846. That policy has been followed ever since for over three-quarters of a century. It was a bold adventure of faith ; it was an ideal which England hoped would be followed by other nations, but in this she was mistaken. As Professor Marriott in his recent book—“ *Economics and Ethics* ” (pp. 205-216) says :—“ Applying to International trade his fundamental principle of division of labour, Adam Smith argued that all the world would benefit if each national unit were to devote itself to the production of those commodities to which it was, by nature, best adapted, and freely exchanged its own products for the products of other national units. In the realm of practical affairs, Pitt, Peel, and Gladstone enthusiastically espoused the doctrines of Adam Smith, with the result that in England the policy of free trade displaced that of protection, as the theory of *laissez-faire* superseded that of mercantilism. But the commercial lead so rapidly established by England did quite as much to alarm its neighbours and competitors as to encourage imitation. Free trade, it was argued, might well conduce to the prosperity of a country so wealthy and so peculiarly situated as England, but less fortunately situated and more backward countries could not afford the luxury. Other causes, mainly nationalist and political, combined to induce a considerable reaction against the theory of *Laissez-faire*, especially in countries where the practice of protection had never been abandoned. On the side of theory; the publication in 1841 of Friedrich List’s “ *National Political Economy* ” proved a very effective counterblast to Adam Smith’s cosmopolitan doctrine. On the side of practice the rapid progress of Germany seemed to suggest that industrial prosperity was at least not incompatible with high protection.”

“ It may well be that the time is not yet ripe either for universal free trade, or for universal disarmament. But the disciples of the Manchester School, even if their proposals were premature and their policy were carried out with undue precipitancy, were at least rigidly logical. They hoped for and expected the reign of peace, and they desired to accelerate its advent by throwing down all commercial barriers, and by treating the whole world as a fiscal unit. They failed; but who shall say that their success might not have averted Armageddon ? ”

Within this present century we can recall persistent efforts directed towards tariff reform, such as the Tariff Reform League of Joseph Chamberlain in 1903; the Imperial War Conference in 1917, when it was resolved that :—“ The time has come when all possible encouragement should be given to the development of Imperial resources, and especially to making the Empire independent of other countries in respect of food supplies, raw materials, and essential industries. With these objects in view the Conference expresses itself in favour of (1) the principle that each part of the Empire, having due regard to the interests of our allies, shall give specially favourable treatment and facilities to the produce and manufacture of other parts of the Empire; ” and the recent British Election on the clear-cut issue of protection or free trade.

It is true that for the second time in the last twenty years Protection has been voted down by a majority of the electors in Great Britain. But there is this to be said of the recent vote—the 1923 election shows a very large increase for Protection over the returns of 1906. The Protectionist Party is the strongest single party in Britain to-day. I ask—does not a comparison of the results of the tariff elections in 1906 and 1923, and also the position of the Protectionist Party in England to-day, warrant one in drawing the conclusion that public opinion in Britain is tending towards the policy of protection ? In this opinion I am supported by no less an authority than Mr. Garvin, who, writing the other day in the *Observer* said that the tariffs will one day be carried in Great Britain, as in Australia, by Labour co-operation, but, while dropping this plank, the Conservatives must adhere to Imperial Preference safeguarding the industries and agricultural aid.

The Real Issue.

The three things which have brought England and the Empire face to face with the real issue involved in the problem are—the ugly and persistent fact of considerably over one million unemployed people in England, the chaotic economic state of Europe to-day, and the strong demand for some system of imperial preference on the part of several of the Dominion representatives at the 1923 Imperial Economic Conference. Mr. Stanley Bruce, Prime Minister of Australia, has been one of the prime movers in this agitation for preference. He desires to see the Empire growing by means of

"a great common Imperial trade policy 'into' the greatest and strongest economic Empire that the world has ever seen or ever dreamt of." In one of his speeches he said:—"The problem with which we are confronted to-day is not so much one of production as disposal of the goods produced. Australia needs markets. We are pursuing a great developmental policy, which must be proceeded with, and we are hurrying men out to populate our empty spaces and produce more goods. We must now find markets... Britain depends upon the Dominions for the absorption of the bulk of her exports. We depend upon each other. That position should be developed and consolidated and translated into a definite policy. Australia has already granted a measure of preference to Great Britain, and now it asks that Great Britain should reciprocate and place our trade relations upon a definite basis. Unless this is done, the scheme of Empire migration and settlement devised to keep Great Britain's sons within the Empire must fail through lack of markets for the goods they produce. The danger will be avoided if, as a result of the deliberations of the Economic Conference, an Empire policy is evolved of mutual benefit to Great Britain and the various Dominions."

The answer to that position is, and herein we come to the real issue so far as England is concerned: "You cannot give a preference to the colonies unless you put a tax upon food." The problem so far as Britain is concerned is—which is better to protect the home industry from foreign competition, or to maintain cheap food? But we are not so much interested in that question as we are in the larger issue—has not the time come when we should formulate a great common Imperial economic policy which should result in mutual benefit to the several member-nations and also to the Empire as a whole?

The Imperial Preference System.

A start has been made as the following brief summary will indicate (see Mysore Economic Journal, October 1923, p. 402), but it will have to be greatly extended before it can accomplish the object desired.

GREAT BRITAIN.—It was not until two years after the Imperial War Conference that this country, under the Finance Act of 1919, introduced preferential rates of duty on colonial imports. Such goods in order to come within the scope of the concession, must be shown not only to have been conveyed from, but "grown, produced, or manufactured in the British Empire." On the "revenue" duties, the chief of which are levied on tea, coffee, cocoa, currants, etc., sugar and tobacco, the deduction allowed is one-sixth of the ordinary duty. One-third is deducted from the duties levied in 1915 on motor cars, musical instruments, clocks and watches, etc., while a varying preference is granted to imports of colonial wine and spirits.

CANADA.—The development of Canada's preference system has been spread over a quarter of a century. In 1897 a preference of one-eighth, raised in 1898 to one-fourth and in 1900 to one-third, was allowed on all duties except those levied on wine, spirits, sugar, tobacco, and related products. The preference was extended during the first two years of its operation to the United Kingdom, British India, New South Wales, the West Indies, New Zealand and South Africa. In 1907 the flat rate of preference was abolished and specific reduction granted in the case of the separate commodities subject to duty, the preference on certain goods yielding large amounts of revenue being nil. This system is still adhered to in the case of Canada, and now applies to almost the whole of the Empire except Australia and Newfoundland. It amounts generally to about one-third of the duty, but in the case of many important classes of British goods to 10 per cent. *ad valorem*. The value of the preference, however, is reduced by the application of an "intermediate" tariff to certain countries entitled to most-favoured-nation treatment. A recent attempt to increase the British preference to 50 per cent was defeated in the Canadian Legislature. It is understood that arrangements are to be shortly undertaken under a reciprocity agreement for the application of the preferential duties to Australian goods.

AUSTRALIA.—In 1906, a preference was accorded by Australia to South African products, and in 1908 to British goods. The latter was considerably increased in 1920, and at the present time amounts in the majority of cases to 10 per cent *Ad Valorem*, and in more than a quarter of the total number of commodities to 15 per cent. The system therefore resembles that of Canada inasmuch as it varies between different articles on the tariff schedule, and further in the fact that concession to British goods is liable to be reduced by the introduction of an intermediate tariff, which has not yet, however, been applied by any reciprocal agreement with other countries. It differs from the Canadian system in that the geographical scope of its application is much narrower. This difference will be rendered less conspicuous in the event of the negotiations with Canada reaching a favourable conclusion.

NEW ZEALAND.—The introduction of Imperial Preference in 1903 took the somewhat peculiar form of the levying of a sur-tax on goods not having their origin in the British Dominions. The tariff now in operation, dating from 1921, gives a preference to goods of imperial origin in the case of two-thirds of the items on the schedule. On the majority of these items the preference amounts to from 10 to 20 per cent *ad valorem*. As in the case of Australia, an intermediate tariff has been introduced, but not yet applied.

SOUTH AFRICA.—A preference on United Kingdom products was first granted in 1903. The favourable rates were extended by reciprocal

agreement to Canada, Australia and New Zealand shortly afterwards. The preference, while accorded to most classes of goods, is small, as compared with those given by other parts of the Empire and amounts at the present time to about 3 per cent *ad valorem*.

INDIA.—No preference is at present accorded to goods of imperial origin. There is, in India, at the present time, a strong movement for protection. The majority report of the Indian Fiscal Commission, published last autumn, recommended the inauguration of a tariff system to be applied separately for revenue and protective purposes. On the subject of imperial preference the report recognized the possibility of granting substantial advantages to British goods by this means, but held that this could only be done by imposing a serious burden on India itself. Accordingly the commission took the view that preference, if granted, could only be given in the case of a comparatively small number of commodities.

From this brief summary it will be seen that the Dominions in general lean far more towards protection in their fiscal policies than does Great Britain. But if Britain will adopt the policy of protection it will give the daughter-nations of the Empire a basis for the negotiation of reciprocal trade concessions between each other, and that will place them in a much better position in meeting the competition of foreign trade.

India and Imperial Preference.

The great problem, however, in this whole scheme of preference is the attitude of India. Indian public opinion does not want Imperial Preference. The reason is expressed by Saint Nihal Singh writing recently in the *Daily Herald* "Anyone can easily realise why Indians have no use for preference. If they are to lower their tariff wall for the bulk of the imports into their country, they may just as well have no tariff wall. If Indian industries need protection, they manifestly need protection from the imports from Britain, which constitute something like three-quarters of our imports. When protection comes in India, it will be mainly directed against British exporters and manufacturers."

Now there you have the issue. India demands the right to buy in the cheapest market, and she has at present no great desire to further the interests of the British Empire of which she is a part. She is willing to take preference from England and the Dominions, but she is not so ready to extend concessions to them.

The attitude that we must all develop is—live and let live, give and take, mutual benefits for all. I have no cut and dried scheme to place before you to day. We are not ready yet for an actual scheme of tariff preferences. We need first to develop an attitude of mind in India which shall be willing to consider a policy of Imperial Preference, if it can be shown to include mutual benefits. The question is:—if India is allowed preferences in jute and cotton goods by Britain will she not allow correspon-

ding preferences to Britain in machinery, steel goods, and glassware? Cannot we as an Empire agree to allow mutual concessions to one another in the matter of tariffs while at the same time protect ourselves against foreign competition? The time has surely come when we should formulate a policy of Imperial Economic relations which shall aim at developing and protecting the resources of the Empire, and at the same time recognising the rights and interests of the several member-nations. And we can do that if we will agree to stand and work together as free and equal members of a great world Empire.

II. The Question of Markets.

Sir Philip Lloyd-Greame, in his opening speech at the 1923 Imperial Economic Conference, stated that the Export Trade of Great Britain was far below the pre-war standard, and that steady employment could be restored and maintained in England only by wiping out the deficit and increasing our old proportion of trade to meet the needs of an expanding population, and that the vital problem was the restoration of old markets, and particularly the development of new markets.

Mr. Stanley Bruce, Prime Minister of Australia, has pointed out the same great need. He has said:—"The problem with which we are confronted to-day is not so much one of production as disposal of the goods produced." The member-nations of the British Commonwealth are becoming more and more exporting countries. It should be a part of our economic policy to provide markets for these products. Our first concern must be to secure markets for our goods within the Empire itself by a system of mutual preference. Let each country of the Empire produce what it can best produce and exchange its surplus products with other nations of the Empire. Our imperial policy should be to become as self-contained as possible, and the vast size and diversity of the British Commonwealth is such as to make that objective easily attainable. With a thorough-going imperial policy of markets actually working we will then be in a position to negotiate with foreign nations for surpluses which may be available for the world market. An imperial protective policy will strengthen our position in such negotiations. The great Dominions are constantly receiving offers for reciprocal trade relations with foreign powers. That is a good thing, but such foreign trade relations should occupy a secondary place. The Empire should stand first. So that the question of markets resolves itself into this:—Let us develop our own markets within the Empire along the lines of Imperial Preference, and the surplus we will trade with foreign nations on the best available terms.

Conclusion.

I fear I have kept you too long; I have only time for this word in conclusion: In 1846 England possessed of a great ideal which she hoped would appeal to and be followed by the rest of the nations adopting Free

Trade. It still is the ideal and the only right economic policy in connection with a sane Internationalism. But England following Free Trade alone cannot stand against a protectionist world. England must now protect her industries against foreign dumping and so this paper advocates a policy of protection for the British Empire against foreign competition, but urges strongly a discriminating scheme of preferences for the mutual benefit of the member-nations of the British Commonwealth. It advocates a policy of protection for those Indian industries which have a chance to live and can be made to succeed, but it urges also upon Indian public opinion as a part of this general scheme the advisability of coming into and adopting the policy of Imperial Preference. If that scheme can be worked out successfully it will save our markets for Imperial trade, and it will afford a basis of negotiation with foreign powers for our surplus production. It is along these lines, as it seems to me, that we shall build up a strong, self-contained British Commonwealth of nations that need fear nothing from the rest of the world, which will be the better able to contribute in ideal and action to the progress of mankind, and in which we all-British, Indian, Canadian, Australian, and African, as brothers and sons of a common Mother can be happy and prosperous.

THE TARIFF BOARD & INDIAN STATES.

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It is a glaring anomaly in the economic life of India that the subjects of the Indian States are taxed by the British Indian institutions, not only without the consent of the people taxed, but also without that of the Sovereigns of those States. The sound principle that there should be no taxation without representation is in no case more defied than in this one.

But this is not all. The responsibility of governing the subjects of the Indian States does not primarily rest with the authority that taxes them. They are governed by their own rulers who exercise, in some cases at any rate, full sovereign powers. The system thus works in an unjust manner in more than one way. The Indian rulers have to govern their subjects with diminishing resources and with no idea as to what they would be. Their subjects have to bear the burdens of a double taxation.

It is the British Indian Legislature that has created the Tariff Board. The evidence which it has recorded hitherto relates to conditions in British India only. But the results of its recommendations will also affect the one-fifth population of India which is under the rule of Indian States.

While making its recommendation, the Board will apply the laws of Economics as modified by the existing condition of the people and the system of governing it.

It was for this last named reason that Professor Jevons while admitting the justness of the claim of the Indian States to a share of the custom's revenue of British India suggested that the claim should be admitted only in proportion to the expenditure incurred in works of public utility by a State. Such a recommendation, howsoever in accordance with abstract justice, is not practical politics.

But it is no doubt true that the life of a State is guided by its political institutions. If the resources of a State have not been developed in a particular manner or have not reached a certain stage in its development, a tariff laid down according to certain notions might prove its ruin, instead of its salvation.

It is plain to anybody who has eyes to see that all parts of India are not equally developed. Had they been under one system of Government the backwardness of one part may have been compensated by development of another. For instance, increased and rapid means of transport are desirable in proportion to their efficiency, but to a purely agricultural State railways may be too costly and be eventually detrimental to the economic interests of its people. For a big State containing differently developed parts, a system of Tariffs aimed at a particular object may be good in the aggregate, but could it be so to a State which is quite unsuited to a particular tariff ?

Hitherto, the policy of the Government of India in the matter of customs duties was purely guided by its revenue requirements. But the Fiscal Commission has declared itself for a protectionist policy, only modified by the proviso that it should be applied with discrimination. It is as the result of this recommendation that the Tariff Board has come into existence. It is out to examine every industry that is existing or could be brought into existence and to recommend how much or if at all protection is to be given to it by means of tariffs, bounties, or some other sort of preference. It is obvious that the last two measures will not directly affect the subjects of the Indian States except that they may support a competitor. But any raising or lowering of the duties will not fail to influence their economical life.

The Cotton Industry is perhaps the largest industry in India. The inroads of the foreign cloth detrimentally act to the interests of India as a whole. There may be cloth manufacturing by machinery in some Indian States only, yet it is or was an almost universal industry in India. Any protection given to it will be welcomed by all the Indian States including British India. Similarly any protection given to the manufacture of glass will be welcomed all over India as any inconvenience caused by the higher price of that commodity is not only bearable but could be gladly borne in the general interest of the country. So also duties levied on the import of sugar, if they would lead to an increase in its production in the country, would not be grudged.

But perhaps such would not be the case with steel, or at any rate, in the case of all its products. They are required for internal developments, some of which could not wait or would be against the human nature to wait and if the protective duties would lead to a rise in their prices owing to the want of an adequate supply of the home-made articles, then some other means for their protection than the levying of high import duties on steel and its products are required in the interests of the Indian States at any rate, so long as the production in India has not increased to such an extent as to meet all the legitimate demands of country as a whole, i.e. what is governed by one tariff system.

If the findings of the Tariff Board are not to be unjust to any interest, and the question which affects one-fifth population of India cannot be excluded from that description, it is necessary that the Indian States should be represented not only before it but on it. Since the recommendations that it will make will not only affect the economic wealth of the people in British India, but also of the Indian States under Indian rulers they must be based on a clear understanding of the economic, social and even the political life of the people, not only as a whole but also under different governments. It may be that in the political life, in the interest of the majority, minorities have to be sacrificed. That is perhaps the concomi-

tant of the struggle for existence. But it is one thing to take a certain step blindly and it is another to do it after understanding its pros and cons. In these days of moral fervour, when solicitude is shown for the representation of minorities, even the democracy in British India will admit that while it itself claims the application of the principle of no taxation without representation it would be wrong for it to deny it in the case of the large population inhabiting the Indian States. To pure economists, the point of view offered by the States in the matter of currency, customs duties and tariff reforms opens different avenues of economic thought. So long as a foreign bureaucracy governed the destinies of the country it was at least expected to be impartial and just to all the parties concerned.

Since however it is being replaced by democracy which may be more careful of its own interests than of those whom it unconsciously and indirectly, nevertheless powerfully, governs. The duty then of guiding it according to pure economic principles at least in the case of those affected by its rule devolves both upon the abstract thinkers and the practical economists. The future Tariff must therefore take account of the Indian States and the Tariff Board at work will run the risk of being partial and unjust, if it ignores their point of view either through non-representation or some technicality.

EXPORT DUTIES AND PROTECTION

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The main recommendation of the Fiscal Commission as regards exports duties—which, by the way, is unanimous—is contained in paragraph 182:—“Export duties should not be imposed for the purpose of protecting industries, but may be imposed for revenue purposes provided there is a reasonable probability that the tax will fall mainly, if not entirely, on the foreigner, and there is no appreciable danger that the production of the commodity in India will be affected. In short, export duties for revenue purposes should be employed sparingly and with great caution, and should be imposed only on articles in which India has a monopoly or semi-monopoly, and in every case the duties should be moderate.” This recommendation consists of two parts:—(1) Revenue export duties are not the best form of taxation, but if found necessary they should be pitched at as low rates as possible; and (2) protective export duties are objectionable in theory as well as practice.

The objection against revenue export duties is based on their incidence which is summarized as follows in para 175:—“Ordinarily an export duty tends to fall on the home producer and consequently to discourage production, except in the case of a monopoly; even monopolies are endangered by any considerable rise in price: and therefore a heavy export duty even on a monopoly may be paid in part by the home producer as a preferable alternative to risking the loss of the monopoly by an attempt to pass on the whole of the duty to the consumer.” Another objection which, according to the report, in the case of India deserves special notice is that if the duties diminish the exports an adverse effect on the balance of trade would be produced and it may cause for a time at least difficulties in regard to foreign exchanges (para 176).

On general economic grounds the principles of incidence discussed in paragraphs 173 and 174 are unexceptionable, but it is necessary to remember that excises imposed on commodities entering into the internal trade have more or less similar effects. The remedy is to impose export duties at such rates and on such commodities as will not impair the faculty of the State. If this can be done, the effect on the balance of trade will be *nil*. The sensitiveness shown by the Commission as regards the balance of trade is to be explained by their desire to retain the sterling exchange standard, but this anxiety will disappear when the Indian standard is placed on a more normal basis.

The main problem of interest as regards fiscal encouragement to industries is the advisability of imposing protective export duties. The Commission does not deny that “an export duty may form a potent method of

protecting an industry, for it either raises the cost of the raw materials in foreign countries or depresses the cost of raw materials at home and in either case the home manufacturer has the benefit of getting his raw material at a lower cost than his rivals abroad" (para 177). The main objections against protective export duties, according to the Report, are four:— (1) The general feeling in foreign countries is against any such measure for "the peculiar characteristic of a protective export duty lies in the fact that the protection operates on the raw material of the industry, and therefore places the whole foreign product at a disadvantage, whereas a protective import duty merely affects such portion of the foreign product as would ordinarily come to the protected market." (para 177). In support of this contention the Report quotes the view of the Economic Section of the Provisional Economic and Financial Committee of the League of Nations (para 178). (2) But the main objection to a protective export duty is the economic loss it causes at home; it taxes production instead of consumption (para 179). (3) There is a tendency for protective export duties to be high, for to produce a given difference in the cost of the finished article it is necessary to put a heavier duty on the raw material than the duty it would be necessary to place on the finished article; when export duties become heavy they tend to become unfair and even disastrous to the producer (para 180). (4) Even in the case of monopolies in which there is a reasonable probability that the export duty will not fall on the Indian producer, it should not be imposed for purposes of protection; for the protective duty, to be effective, has to be at a comparatively high rate and the dangers of export duties at a high rate will drive other nations to find substitutes or do away with the monopoly article and thus injure the home production. The history of the duty on saltpetre is given as an illustration (para 183).

These objections are based on certain general assumptions. The committee assumes that the present volume and course of Indian exports are to be maintained to keep up the level of production at home, a circumstance which does not square with the economic conditions in India. One does not deny that that may be true in the case of some articles at present, but the Committee forgets that in the new era of development of internal trade and industries the present dependence on the foreign market will become decreasingly important. The danger of economic loss will therefore get decreasingly less with the improvement of Indian industries.

Moreover the Committee altogether exaggerates the importance of price as a factor in stimulating or discouraging the production of raw materials and food-stuffs in India. The ordinary Indian peasant tries to produce as much as possible whatever the price. There is a general belief, which is also shared by the Fiscal Commission, that high prices of raw materials and foodstuffs tend to further the economic prosperity of the agricultural class^{es}.

This is wrong, for the facts of economic life prove just the contrary. "Out of 217 millions or 72 per cent of the population of India engaged in pasture or agriculture, 167 millions are cultivators of their own or rented land. Those who have a surplus for sale (and these form the minority) would ordinarily benefit by a rise in the price of the commodities they produce. If, as is often the case, the cultivator has received advances for his maintenance and for seed, repayable in grain after the harvest, any increase in the value of the grain repaid benefits the money-lender and not the cultivator. The agriculturist who has little surplus produce to sell and lives on what he produces would, in so far as he maintains himself on his produce, be unaffected by a rise in the price of foodstuffs. Farm servants and field labourers, estimated at over 41 millions, would ordinarily stand to lose by a rise in prices, except in so far as their wages are payable in kind and not in money. Those agriculturists whose holdings are uneconomic will be adversely affected since they have to buy their foodstuffs at a higher rate in the market." (Report of the Babington Smith Committee, page 21.)

The sharp distinction made by the Report in para 179 between a tax on production and one on consumption is not clear. Import duties are said to fall on the consumer and the export duties on the producer, but such a hard and fast distinction between the producer and the consumer is not applicable to Indian conditions. The vast body of producers of foodstuffs are also consumers of their produce. Supposing that the producers of commercial crops such as cotton, jute &c. are adversely affected by a protective export duty on those articles (which, however, need not be the case if the internal demand for them increases due to the industrial development), what may happen is that foodcrops will be substituted in places where it is possible and this, other things remaining the same, will tend to depress their prices. A fall in the price of food-stuffs will be beneficial to the growers of commercial crops as well. Since the Committee was prepared to ask the Indian consumers to put up with some loss and recommend discrimination to reduce the period and extent of the burden, a discriminative export duty, whenever suitable or necessary, should not be grudged in the interests of Indian manufactures.

One can quite understand the feeling in foreign countries, especially European, for they depend for their raw materials to a large extent on tropical and semi-tropical countries including India. If their feeling is to be the guide, not only export duties but import duties as well would have to be abandoned. Again it is not suggested that export duties alone would suffice to do away with the differences in the cost of finished articles in India and abroad, but coupled with import duties they may be judiciously employed for the purpose. Most of the civilized countries are exporting manufactured commodities and there is really no need in their case to impose protective export duties to give encouragement to indigenous

industries. The high export duty on saltpetre which the Government at one time imposed and which ruined the Indian trade in saltpetre does not teach the lesson that the Commission wants us to learn, for that duty was not imposed for the purpose of protecting an indigenous industry.

The principal exports and their value are as follows :—

(In Lakhs of rupees.)

Items.	Average Average				
	of		of		
	1909-10	1913-14	1919-20.	1920-21,	1921-22.
	to		to		
	1913-14.		1918-19.		
Grain, pulse and flour	.. 45,82	37,42	15,15	25,65	29,99
Tea .. ..	.. 13,07	17,55	20,53	12,15	18,22
Raw cotton	.. 33,28	32,63	58,65	41,63	53,97
Raw Jute	.. 22,20	12,80	24,70	16,86	14,05
Seeds .. ..	.. 24,37	12,17	26,27	16,83	17,41
Hides and skins, raw	.. 10,32	9,88	23,41	5,25	5,98
Jute fabrics	.. 20,25	40,19	50,02	52,99	30,00
Cotton fabrics	.. 11,41	11,73	27,41	18,27	15,65
Hides and skins, tanned or dressed.	4,30	7,19	12,71	3,30	4,03

Of these cotton, jute, oil-seeds, and hides and skins are the raw materials of industries, while food-grains and tea are consumption commodities. Having rejected the principle of protective export duties, the Report discusses the incidence of revenue export duties on these articles in paras. 185 to 195. Chapter XII is devoted to the discussion of special problems connected with restrictions on the export of food grains.

The Committee hold that the present duty on raw hides and skins (which was intended to have a protective effect) is wrong in principle and causes injury to the producer without corresponding benefits to the tanning industry. The reason why the tanning and leather industries have not been able to take full advantage of the present duty is that the other conditions for their development such as good transport and banking facilities, so essential for the growth of business and extension of the market, are not yet fully developed, while the Government which is one of the chief consumers of leather goods in India often makes its purchases abroad. Even in the case of protective import duties an industry cannot be successful in the absence of these conditions. Our contention is that if at any stage of the progress of the Indian industry, a fall in the value of the raw material brought about by an export duty is very helpful, there should not be any objection to its imposition.

Take the case of oil-seeds. The Committee writes in para 194. "Certain oil-seeds are grown very largely for the export trade. The Indian demand for the oil and the cake would be quite insufficient to absorb the

whole product, if all Indian oil-seeds were crushed in the country. At the same time there are considerable difficulties in exporting the oil, and it is unlikely that any appreciable export trade in oil could be built up. The main result therefore of imposing a protective export duty on oil-seeds would be that the producer would be sacrificed to an unsound economic theory, and that the production of a valuable crop would be discouraged." It is true that large quantities of oil-seeds are exported at present, but the Report has not adduced any reasons for the statement that the Indian demand for the oil and the cake would be quite insufficient to absorb the whole product, if all the Indian oil-seeds were crushed in the country. The present course of the Indian foreign trade is largely determined by the existing facilities for transport, currency and banking, and no organized and intelligent attempts have so far been made to divert such commodities to enter into internal trade. If we understand aright the ideal laid down by the Fiscal Commission, it has emphasized the importance of internal trade in its discussions regarding the import duties, but it is curious that the same solicitude is conspicuous by its absence in its discussion of the need for export duties. The *potential* demand for the oil and the cake is undoubtedly great; and an industrial India will certainly convert the potential into an actual demand. In exporting the oil at present lack of proper packing and transport facilities and the inability of the would-be manufacturers to utilize the bye-products which are very valuable and tap the Indian as well as foreign markets are difficulties in the way. Our contention, let us repeat, is that, if these external conditions are helpful and the country takes on a definitely industrial turn, the export of raw materials may be checked, if found necessary, and internal trade in those articles encouraged thereby without the danger of sacrificing the interests of the producer or discouraging the production of a valuable crop.

The Committee is right in its view that the use of manures under present conditions is not likely to be promoted by export duties, for the real obstacles are prejudice or ignorance of the cultivator as well as his incapacity to use artificial manures, the former more important than the latter. If this prejudice or ignorance is overcome, then the problem will become purely one of prices. There is, however, a fallacy in the line of argument adopted by the Report in its consideration of the effects of a low price of the oil-cake upon its users and producers. "The reduction in the price of the oil-cake," we are told in para 195, "would be effected at the expense of the producer of the oil-seeds and that therefore this potential user of the manure would be impoverished and might not be able to afford to use it even at a reduced price. Further, if the manure is cheapened to such a degree as would be likely to stimulate its consumption largely, it is probable that production would diminish owing to decreased profits, and eventually prices would again be raised." This statement assumes

that a fall in demand in the foreign market caused by a protective duty would diminish the actual sale of manures; this would be the case if the internal demand has not increased meanwhile. Secondly, since it is not a fact that the user of the manure is in all cases a producer of it, the producers of crops other than oil-seeds will not be adversely affected by a fall in its price or 'impoverished so as not to be able to afford to use it even at a reduced price.' If the manure is cheapened and consequently its consumption is stimulated, production will not be diminished (as the Report assumes), but the increased quantity consumed will tend to keep up the price-level and consequently production as well, while the larger quantities of agricultural products that can be raised by an intensive use of manures will enable the agricultural buyers to pay a higher price.

In the case of raw cotton, the Report considers that an export duty would fall on the cotton producer in India and would have the effect of discouraging the production of cotton, (para 186). Here again the Committee overlooks altogether the possible intensity of Indian demand for raw cotton in the near future and exaggerates the importance of Japanese demand to keep up the rate of home production. One has heard that it is cheaper to export raw cotton from Tuticorin to Tokyo and import the finished commodities back than to transport the same quantity to and from Bombay. Though one is not in possession of facts to vouch for the truth of this, there is nothing improbable, for the Japanese firms have access to excellent and convenient means of transport in their national mercantile marine. The remedy is to provide better facilities for transport within India, but occasions may arise when the export duty on raw cotton may have to be manipulated in order to help the home producer. This is likely to be more effective than a corresponding duty on imported cloth. The committee seems to concede this position when they write in para 197 that "they are not prepared to say that in special or extreme cases the imposition of such duties should be absolutely excluded from India's fiscal policy, provided they are based definitely on defensive considerations and have no taint of economic aggression."

The Committee is of opinion that differential export duties are generally inadvisable as the system is quite obnoxious to countries discriminated against and it will give rise to serious practical difficulties in administration. "Further it is difficult to ensure that any country discriminated against is not able to get supplies of the commodity from countries against which no discrimination is exercised and unless the cost of rehandling and retransporting happens for special reasons to be very heavy this would inevitably be done." (para 196). On these grounds the Committee recommends that the present preferential export duty on hides and skins be abolished at once (para 198). This raises the larger question of Imperial Preference which is outside the scope of the present observations.

AGRICULTURAL IMPROVEMENTS IN INDIA.

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By agricultural improvements we mean two things, *viz.*, (1) improvements by which the output of land is increased more than the increase in the cost of production, and (2) increase in the share of the income from land on the part of the agriculturists. The former is a question of production while the latter is one of distribution. It is evident that an effort towards agricultural improvement should proceed along both these lines. The need for such improvement is urgent now because the agricultural income per head tends to decrease as a result of the increase in the population which is dependent upon land. This increase is the result of two sets of causes, *viz.*, (1) increase in the total population and the consequent increase in the number which has to be supported directly by land in productive employment. This is so because India is an old country and therefore the increase in the area under cultivation cannot be as rapid as in new and developing countries, unless means be devised to divert this surplus population to productive employments other than agriculture. (2) Owing to the disorganisation of India's industries as a result of the competition of machine-made goods, an additional number has been forced upon the land, which formerly lived by other industries. The hand spinner and the handloom weaver are the typical example of the condition. During the last one hundred years or so, there has been an almost continuous rise in the price of food grains. This makes agriculture profitable. At the same time the profits of the artisan classes have diminished as a result of the growing competition of machine-made goods both locally manufactured and imported. The result is that these classes tend to abandon their traditional occupations. They usually take to agriculture, and to a much less extent, to manufacturing industries. Many existing village artisans are also partly dependent upon agriculture. Therefore, we find that in 1891, 63 per cent. of the total population of India subsisted upon land. In 1901 the percentage was 68, in 1911 it was 72, and in 1921 it was also 72. This last is really no improvement since during the decade ending in 1921 the total population increased by less than two per cent. This is mainly the result of the influenza epidemic of 1918-1919 which especially affected the rural people. †

According to the census figures of 1921 the total number which subsists by agriculture is 178 millions out of a total population of 247 million acres, that is, the acreage per head of the agricultural population is about 1.5 whereas in the United Kingdom it is about 16 acres. This together with the improved methods of farming in the latter country shows

† Census of India Report for 1921.

the difference in the economic condition of the agriculturists of the two countries. Sir T. W. Holderness says † : " Subtracting the land utilised for supplying foreign markets from the total area under cultivation, we shall find that what is left over does not represent more than two-thirds of an acre per head of the total population. India, therefore, feeds and to some extent, clothes its population from what two-thirds of an acre per head can produce. There is probably no country in the world where the land is required to do so much." This makes it imperative to develop our lands as much as is possible with the aid of modern science. Again, the value of Indian agricultural products is higher than that of British agricultural products, in spite of the improved methods of the United Kingdom. This will be apparent from the following table ‡:—

	Total value of agricultural output in millions of rupees. §	Total area under actual cultivation in millions of acres.	Value of agricultural output per acre in rupees.	Total population in millions.	Value of agricultural output per head of agricultural population in rupees.
India ..	17,250	223	77	178	97
United Kingdom ..	2,946	47	62	3	982

From the above it is evident that the pressure of population on the soil is acute in India. This pressure can be relieved by four ways: (1) By releasing the population from agriculture for absorption in other industries. With this question we are not now concerned. (2) By extending the area of cultivation. The total area under cultivation in India is now 223 million acres and the current fallows 52 million acres. But culturable waste other than fallow is more than 113 million acres. Most of this land is now far away from human settlement and difficult to reach or is otherwise unattractive. But with the growth of the means of communication and the redistribution of population by internal migration from the densely populated to the sparsely populated areas, some of these lands are likely to be converted into agricultural lands. The chance is specially good for lands in Burma, Assam, the Central Provinces, and Central India. Systematic efforts should be directed towards facilitating this.

† Peoples and Problems of India.

‡ The figures for India are taken from the " Estimates and Yields of Principal Crops in India, 1919-20," No. 1344, 1921, and the Prices and Wages, " 1920, No. 1512, 1922. Those for the United Kingdom are taken from the " Final Report of the Census of Production, Cd. 6320, 1913.

§ This is the gross income from agricultural lands, from which the expenses of farming should be deducted to get the net income. This surplus is the share of the cultivator, the landlord or landlord middlemen, all the merchant middlemen dealing in agricultural output, and the State,

(3) By improvements in the methods of cultivation, including the methods of reorganising the agricultural system in order to make the improvements more effective than they would otherwise be. This will not only increase the total output and thereby relieve the present distress, but will also release labour from land for use in manufacturing industries, for a shortage of labour is now felt there rather acutely. (4) By improved methods of organisation. This will help to redistribute the income from land, diverting more to the actual tiller of the soil from the middlemen, whether landlords or traders, who now receive a substantial share of the total income from land.

For a substantial increase in agricultural output three things are necessary, *viz.*, (1) efficient and industrious labour, (2) improvement in the implements used in agriculture and introduction, so far as possible, of machinery, and (3) improvement of the soil.

(1) Whatever may be said of our factory worker our cultivator has always been found to be industrious and efficient. "At his best the Indian ryot or cultivator is quite as good as, and in some respects the superior of the average British farmer, while at his worst it can only be said that this state is brought about largely by an absence of facilities for improvement which is probably unequalled in any other country" †. This opinion has been confirmed by later authorities who are familiar with the Indian cultivator ‡. The industry of the Indian cultivator is also well-known. His most arduous work is the cultivation of the terai lands on the slopes of the foot-hills of the Himalayas. Rice cultivation is also very hard work which is carried on in Bengal, Burma, Madras, and certain parts of Pombay and the Central Provinces. In other parts of the country his work is easier although he is engaged in continuous work for long periods during the working seasons.

(2) The Indian cultivator ordinarily uses only a few simple implements. The most important of these are the plough, scarifier, seed drills, harrow, sickles, and winnowing sieves. The power used is universally that derived from human beings and animals. Thus improvement in this line requires a two-fold innovation, *viz.*, the introduction of better and more economical implements, and the use of automatic power from machines using steam, oil, or electricity §. For this purpose as also for that of improving the soil it is necessary to have more capital invested in this main industry which supports and, in spite of any scheme of developing manufacturing industries, will continue to support, the major portion of the people of India. But Indian capital is attracted mostly to manufacturing industries or financing businesses of the country. This probably is to be explained by the gap which now exists between the rural cultivating classes and the capitalist middlemen. Little of rural hoarded wealth which may be utilised for pur-

† Dr. Voelcker's Report on Improvement of Indian Agriculture.

‡ Dr. Mann's Life and Labour in a Deccan Village; Mackenna's Agriculture in India.

§ Report of the Indian Industrial Commission, pages 58-59.

poses of production has as yet been coaxed out to be used in agricultural or any other rural industry. Most of the active capital of India has been made in trade or manufacturing industries, and it naturally seeks re-investment in the hereditary line. This is due to ignorance of the facts and prospects of an industry, which is not confined to what are considered as advanced areas. The first need, therefore, is to draw more and ever more capital for investment in agriculture and allied industries. Another desideratum is to facilitate the use of modern implements of agriculture through the hire-purchase system.

The use of power-driven machinery can come only at a later stage of development. The motor tractor, for example, can be purchased by either of two ways. The landlords or the village communities in those areas where they exist can co-operate with the cultivators and buy for the use of the latter such costly implements and machinery. In such circumstances the relation between the landlord and the tenant must be reorganised on the basis of the system of *metayage*. Or, the cultivators must be advanced enough to co-operate on a large scale and buy or hire such machines for the joint use of several villages. In either case a condition precedent seems to be the consolidation of the agricultural holdings which, in the existing conditions of inheritance for both the Hindus and the Musalmans, are sub-divided into too small plots and which, even when owned or held by one person, whether a family or an individual, are widely scattered over one or more village. In the alternative some scheme must be devised to distinguish different holdings without the aid of a complete boundary line round each plot, since such lines cannot exist between different plots of land of small area when the motor tractor is in use. This device is probably not difficult to find out if the boundary lines are not zig-zag, or if a portion of the boundary line is removed in order to allow the tractor to move from one holding to another. So long as such machinery cannot be introduced means may be devised to change the present light-weight plough and have a heavy one in its place, so that a greater turning of the turf and a deeper furrow may help the plants to draw more upon the nutrition provided by the soil.

(3) The most important need towards increasing the agricultural output is to improve the soil itself. This can be done by irrigation and manure. It is necessary to devote attention simultaneously to both these inasmuch as the full effects of the one are not realised without substantial development of the other.

Irrigation.

In India irrigation is undertaken systematically in only a few parts of the country. Out of a total cultivated area of 275 million acres, including current fallows of 52 million acres, the irrigated area is only about 50 million acres, that is, less than 20 per cent. Of these again irrigation in

the scientific meaning of the word does not exist in all parts. In the rest of India the cultivator ploughs the land and sows the seed as his forefathers did thousands of years ago. After that his function is mainly to look up to the gods for rain or drought or flood. This is not pursuing a profession. It is agriculture by gambling in rains. It is necessary to distribute water according to the needs of the soil and crops standing on it, supplement the rainfall by supplying the required water by irrigation, drain the land if there be too much rainfall and the consequent flood, and by irrigation, be, as far as possible, independent of rainfall by devising means of an artificial but regulated supply of water. The effect of such a system of irrigation is best seen in the Panjab where canal irrigation has, within a generation, converted traditionally arid land into one of the best lands in India. The Ganges-Jamna-Doab together with the hinterland on either side is similarly fed by irrigation canals constructed from two of the most constant rivers in India. In Southern India too there is canal irrigation, especially in Orissa and Madras. In Mysore the river Cauvery is being utilised, and a huge dam, the second biggest in the world, has been constructed, and the waters are used to irrigate the agricultural lands of the State. But in Southern India, owing to the nature of the soil, tank irrigation is more suitable. Water is held in reservoirs, natural or artificial, during the rainy season, and is used in the course of the year. Sometimes what is known as overflow irrigation is preferred in these parts. The need of Bengal is different. Most of the lands here receive a plentiful supply of rainfall, and they are, especially in Eastern and Southern Bengal, flooded with water. This is very good for jute and rice crops. What is necessary is the regulation of this natural drainage, so that all lands may participate in the advantages. This need is urgent in Northern Bengal. In the rest of India, that is, in the middle part of the sub-continent, there are not overflowing rivers, nor indeed any constant river system, neither is the soil suitable for the construction of reservoirs for purposes of irrigation. But these regions are particularly rich in underground water channels, so that well irrigation is the easiest thing in these parts. There is scarcely any part here, including the higher regions on the Vindhya, where underground water is not available within easy depths.

The control and management of most of the important irrigation works are in the hands of Government, and this is undoubtedly one of the most efficient work which Government are doing. Wells are all privately owned, and Government help the agriculturists to dig wells by giving them *takavi* loans. But this system has not developed well-irrigation as well as might be desired. This may be attributed partly to the paucity of Government funds used in this behalf, and partly to the inertia of the agriculturists themselves. The extreme sub-division and fragmentation of agricultural holdings is also responsible, to no small extent, for the unsatisfactory development of well-irrigation. Also there is not the requisite amount of concerted action among the agriculturists and those who work on their behalf,

Here also it seems that an important problem is that of attracting capital. Government help by granting *takavi* loans can never be to the desirable extent. Funds must be raised otherwise, and this can be for the ultimate good of the country only if the organisation is on a business footing, that is, the capital invested must earn a reasonable return. From experience in various parts of India it appears that the enterprise is highly profitable as a business endeavour. This shows that, under proper organisation and co-ordination of efforts between the villagers and the capitalist middlemen, well-irrigation can be widely extended.

When this problem is tackled another follows in its wake, *viz.*, the problem of a more rapid lifting of water from wells on an extensive scale.

The present method is too crude to be very effective. But if the problem of sinking wells be properly handled, the work of water lifting will improve inasmuch as mechanical devices may be introduced for lifting water. † The system of tube wells will probably help to solve this problem to some extent.

Manure.

Besides irrigation the soil can be improved by manuring it. Owing to the ignorance of the Indian cultivators and the want of funds which they command, very little is now done towards manuring the soil. But this is so important a problem that it must be tackled if the main industry of India is not to remain moribund.

Usually the soil is gradually exhausted of some chemical substances which feed the crops. Different crops do this differently, and some crops even replenish to the soil what others take away. Thus a proper rotation of crops can prevent a rapid exhaustion of the soil with regard to some chemical substances. But the best guarantee against soil deterioration is to supply directly to the land what is deficient in it. Normally there are three things which require to be artificially supplied to land, *viz.*, nitrogen, phosphoric acid, and potassium. Sometimes it is necessary to add lime also. Nitrogen is supplied to land by nature to some extent through rainfall, soil erosion, silts, etc. In India nitrogen is artificially supplied to the soil usually by growing a leguminous, *e.g.* gram, crop on it and while the crop is standing on the soil it is ploughed into the soil. This helps the soil to have nitrate which such plants contain in the nodules of their roots as a result of the ceaseless work of nitrifying bacteria. In more advanced systems of agriculture nitrogen is supplied differently in some mineral form *e.g.* nitrate of soda, sulphate of ammonia, etc. Phosphoric acid is the most important thing of the soil which is exhausted by every kind of crop. It is very necessary that this should be restored to the soil. But unfortunately there is no such practice in wide use in India. Hence experts think that the Indian soil is generally

† Report of the Indian Industrial Commission, pages 59-60.

deficient in phosphorus. This is supplied to the soil of other countries in the form of superphosphates. These may be made from bones, called bone-meal, or from the mineral tricalcic phosphate of lime. Phosphate of lime is very efficacious probably because it gives lime also although its effect is not so immediate as, for example, bonemeal. A deficiency in potassium can be made up by feeding the soil with some variety of the many mineral salts of potassium. Usually kainit is used to supply potash to the soil. There are also various other things which are taken out of the soil by the crops but usually these are in such abundance in the soil or are so easily replenished by natural processes that there is little need for restoring them to the soil by artificial means.

Here it should be noted that desirable results can be obtained only by manuring the soil with the proper proportion of all the necessary constituents of the soil. Hence there is the need of soil analysis in order to find out its deficiencies. Otherwise the quantity of one item may be more than what is necessary, while that of another may not be enough. Just as a proportionately larger amount of capital or labour or land, when combined with an insufficient quantity of the other factors of production would mean that the excessive quantity of the former will remain unutilised to its full extent and thus be partially wasted, so also the want of proper care may lead to such a wastage in applying the manure to the soil if the proper elements are not given in the right proportion. Therefore, the success or failure of any experiment with a particular manure does not prove anything so long as all varieties are not given in the necessary form and amount. Sometimes a manure rich in nitrogen or potassium or phosphorus yields satisfactory results, sometimes it does not. This only shows that in the former case the other constituents existed in the soil, whereas in the latter case they did not. Therefore, to be effective, soil analysis is essential for right manuring. Hence it is desirable that Government, through their agricultural farms, should provide for all facilities for soil analysis throughout the whole country, and find out the deficiencies in the soil in different parts of the country. The results of such analyses should be made available and known to the cultivators in their villages. It is not enough to publish them in scientific books or journals like the Proceedings of the Agricultural Institute or the Agricultural Ledger. Such practical information should be distributed broadcast through pamphlets in the vernacular languages or through peripatetic lecturing bodies who will carry the results of soil analyses and the knowledge of restoring the soil, to the remote villages. At the same time all facilities should be given by which the cultivators will be encouraged to have their soils analysed and avail themselves of the expert knowledge of the Government agricultural farms.

In India most of the cultivated lands are deficient in phosphorus. The reason is not far to seek. The most important manure which is used is dung

of cattle, although only a tithe of the total dung is utilised for this purpose. But of all the chemical substances of the soil, which cattle absorb from the plants eaten by them,—and these latter are rich in those elements of which they rob the soil,—little of phosphorus is found in the dung inasmuch as phosphorus is mostly drawn away as a constituent of the blood and milk. Therefore, the effect is cumulative. The milk deteriorates in quality at the same time that the soil deteriorates in phosphorus, thereby making useless a portion of the nitrogen and potassium with which the soil may be artificially fed. It appears therefore that a good manure in India would consist of dung supplemented by the necessary quantity of phosphorus in some form. One of such forms, although not so effective, is cattle urine which is not utilised now.

Except for its deficiency in phosphorus, dung is the best manure easily available. But unfortunately dung is so widely used in India as fuel that only a small proportion of the total quantity produced is actually used as manure, the rest being burnt as fuel. And this, in spite of the fact that the use of dung as manure is much greater than its use as fuel. This state of things is partly the result of ignorance and habit, but more of the reckless policy of cutting down forests which might otherwise be used for supplying cheap fuel to the rural population. Thus a right policy of re-forestation is vitally connected with the regeneration of agriculture on a scientific basis. Dis-afforestation has injured the lands in another way also. It is well-known that forests and grass lands stem the rushing tide of torrential rains and thus prevent the denudation of the surface silts which contribute so much to the fertilisation of all lands. The ever-increasing amount of arid land in the northern and western parts of the United Provinces of Agra and Oudh, especially the district of Etawah, is attributed to rapid dis-afforestation. Trowseed says: "The forests where the Emperor Babar hunted the rhinoceros are now a waterless tangle of ravines," and "the beautiful country along the Foot Hills is now buried under sand and gravel" †. According to this writer this devastation of the land is due to "fire and axe". By river-bed erosion the Jumna has been lowered fifty feet during the last five hundred years because the torrents are unhampered by the roots of plants and trees which have been indiscriminately destroyed. The result is that in the district of Etawah the desert is rapidly increasing. The rate is calculated to be two hundred and fifty acres per annum. The same is the case in the terai lands of Saharanpur. All this is due to the opening up of ravines by torrents of rain, which are unchecked owing to the policy or want of policy or want of policy in dis-afforestation ‡.

Thus it will be realised that one of the means of preserving our agricul-

† Article in the Indian Forester, August, 1921.

‡ The Agricultural Journal of India : Article on the Afforestation of Etawah by Venskin, page 635.

tural lands as also of releasing dung to be used as manure is to develop our forests. This development for the purpose is not so difficult or costly as is ordinarily imagined. Nor does it take very long time to do so. According to experts *babul*, *shisham*, teak, etc., grow to a height of between twelve and twenty feet in three years †. On the hills the *eucalyptus globulus* grows quickly, and in dry lands *tamarix* is such a tree ‡. All the above trees are specially suitable for use as fuel. Therefore, a proper policy of re-afforestation in the neighbourhood of villages or groups of villages, with the object of supplying cheap fuel to the rural people and grazing lands to their cattle, will help a wider use of cattle dung as manure for agricultural lands.

We would now give some illustrations of the results of experiments carried on in India by agricultural experts. In estimating their practical use to our agricultural system it is necessary to make proper allowance for the great care which is taken by our experts in their experiments and the like of which the ordinary cultivator can never be expected to do. In this direction our cultivators no doubt require to be improved but in spite of all probable improvement they can never afford to be as careful as the agricultural farms under the experts. The following table will show the results of some of the experiments made in India :

Output per acre.	Without manure	With manure.	Percentage increase in output on unmanured crop.
A. Rice ..		100 mds. cowdung per acre.	
§1. Grain	lbs. 1,374	lbs. 3,556	159
Straw	„ 2,172	„ 4,479	106
		3 mds. bone-meal, 30 sers saltpetre	
§2. Grain	„ 1,374	lbs. 4,389	219
Straw	„ 2,174	„ 6,173	184
		2 tons ashes, 8 cwts. bone-meal, 12 tons dung.	
§3. Grain	„ 1,084	lbs. 3,484	220
Straw	„ 840	„ 2,464	193
		1½ cwts. ground-nut, 1½ cwts. bone-meal, 75 lbs. kainit.	
§4. Grain	„ 408	lbs. 1,337	227
Straw	bundles 9	bundles 22	144

† E. A. Symthies, I.F.S., on the Afforestation of Etawah.

‡ R. S. Troup's Silviculture in India.

§ John Kennys Intensive Farming in India. He gives the results of experiments made by many other's. The illustrations quoted give his own results and some of those obtained by Newman, Davis, Dr. Leather and others.

Output per acre.	Without manure	With manure.	Percentage increase in output on unmanured crop.
B. Cotton		4 tons cattle dung.	
§1. Crop	lbs. 50	lbs. 80	60
		1 cwt. nitrate of soda.	
		1 „ super phosphates.	
		1 „ kainit.	
§2. Crop	„ 50	lbs. 150	200
		2 cwts. ground-nut cake.	
		2 „ superphosphates.	
		2 „ kainit.	
§3. Crop	„ 50	lbs. 200	300
		Poundrette or dry human excreta.	
C. Wheat			
§1. Grain	„ 1,083	lbs 1,603	48
		3 mds. saltpetre.	
||2. Grain	„ 820	lbs 1,558	90
		14 tons farmyard manure.	
§3. Grain	„ 900	lbs. 1,980	120
		158 lbs. Chili saltpetre.	
		440 „ superphosphates.	
		158 „ sulphate of potash	
D. Potato			
§1. Crop	bushels 145	bushels 349	150
E. Oats		Green manure and superphosphates.	
§§1. Grain	lbs. 562	lbs. 1,451	140
Straw	„ 1,175	lbs. 2,330	98
		Green manure and superphosphates.	
|||1. 1st year	..	lbs. 960 .. ..	..
2nd „	..	„ 1,560	62
3rd „	..	„ 1,840	91
F. Maize		Green manure and superphosphates.	
|||1. Grain	„ 492	lbs. 1,599	225
§§2. Grain	„ 752	„ 1,458	94
Straw	„ 1,732	„ 2,841	64

N, B.—The numbers indicate different experiments.

§. Jhon Kenne'y Intensive Farming in India He gives the results of experiments made by many others, The illustrations quoted give his own results and some of those obtained by Newmau, Davis, Dr. Leather, and others.

|| T. Basu's article in the Agricultural Ledger, No. 10, 1893.

§§ Proceedings of the Board of Agriculture at Pusa, December 1, 1919.

||| A Study of the Indigo Soils of Bihar by W. A. Davis published by the Agricultural Research Institute Pusa,

It is important to note that the above increase should be realised in terms of the costs of manuring as compared with the value of the increase in the output. The increase in the output should be taken as less on the farmer's own land than on the agricultural farms under the management and supervision of experts. Calculating even without this latter consideration it will be seen from the above table that in many cases the cost of manure is too high in comparison with the increase in output. In some cases the cost is even greater than the increased value obtained. Take, for example, the third experiment under wheat, that is, C. 3. in the table, where the increase in the output is the greatest under wheat. This is 1,080 lbs. or a little more than 13 mds, the price of which will be about Rs. 80. To raise this extra amount 14 tons of farmyard manure was used, the price of which will be more than Rs. 80. On the other hand, take the first experiment under rice, that is, A. 1, where the increased output is 2,182 lbs. or 26½ mds., the price of which will be about R 150. The manure used was 100 mds. of cow dung, the price of which will be about R 50 ; thus leaving the substantial net profit of about R 100 per acre.

It seems that experiments which do not care much for cost are merely academic in their interest, and have little practical importance. Nor does the manure used show any result unless it is known what was the result of soil analysis of the particular land to which the manure has been applied. What is necessary is to find out the maximum efficiency point at which a particular soil with known deficiencies will raise the maximum crop with the minimum manure, or rather the maximum value of crops with the minimum cost of manure used. In many cases this viewpoint is maintained with good practical results. It is necessary now to emphasise this in all cases. For the use of those who want to work out the problem in the above table I give the approximate prices of manures which are widely used in Government agricultural farms in India. For nitrogen, phosphorus, and potash, the manures usually used are respectively superphosphates (Rs 2 per maund), Chili nitrate (Rs. 4-8 per maund), and kainit (Rs. 2 per maund.).

Finally, in attempting improvements of the agricultural system of India, whether by soil improvement or by introducing improved implements and machinery, especially the latter, one caution is necessary, The full significance of that can only be realised by those who are actually handling the problem in its entirety and not one aspect of it merely "In India there is an agricultural practice built up on the traditional custom of years and in which reside, though unexpressed and unexplained, deep scientific principles, the reasons for which can only gradually be elucidated"†. It is necessary to attempt unravelling these mysteries in order to preserve what is best in the present system, so that what is really good may not be

† Mackenna—Agriculture in India.

destroyed by the iconoclastic zeal for improvement on the part of the technical scientist or the lay worker on behalf of the cultivator.

Improvements in Organisation.

Improvements in organisation help improvements of agriculture in two ways. Better organisation can facilitate the improvement of the soil and the increase in the area under cultivation. Secondly, it can bring about a redistribution of the present income from land so as to enable the cultivator to retain more than what he does now.

Under the first head will come all means by which any portion of the 113 million acres of land which is now waste but which is cultivable can be made available for actual cultivation. Some of this land can be brought under cultivation by developing easy means of communication. Information in this behalf and facilities to settle on such land should be organised in order to induce people from more congested parts of the country to migrate to these parts. In this way many places are being developed, *e.g.*, parts of Assam and Burma. By developing such lands by means, for example, of irrigation not only has the output been increased but a greater population has been attracted, *e. g.*, in the Panjab and Sindh,

Again, such organisation is necessary to introduce improvement of the soil. The most important organisation is the co-operative credit society. In India co-operative credit societies are developing rapidly, although their number is yet insignificant in the vast country. But these societies are mostly based on the Raiffeisen principle, the object of which is to protect the cultivators from the exactions of the local usurers. The loans are for short periods only and based on personal credit. Apparently no permanent improvement of the land can be undertaken by means of short-term loans, nor can long-term loans be granted on personal credit only. Therefore, for the improvement of agricultural lands in India, organisations of the type of the German *Landschaften* are needed. These grant long-term loans for permanent agricultural improvements on the security of land itself. Such loans can be given on the understanding that the Society will have the right to see that the money is spent for the purpose for which loans have been sanctioned. The borrower is required to pay interest on the loan, a small charge towards the reserve fund and the cost of maintenance of the Society, and a portion of the principal which is necessary to extinguish the debt at the expiry of the period for which the loan has been granted.

Such organisations are voluntary in Germany but are helped and encouraged by Government. In India ordinary co-operative credit societies depend for their main support upon the Government of the country. The reasons are not far to seek. The people who are benefited by the system are mainly the rural folk who are ignorant about the affairs of such institutions. Moreover, owing to the poor condition of the country it is difficult to find sufficient men with leisure to devote their time and services to such

work. Further, the extreme illiteracy of the people makes it difficult to find men to check and supervise the work of the officials of the Societies. And it is such direct participation in their working which can create an abiding interest in these institutions.

Thus it cannot be expected that new organisations of the type of the German *Landschaften* will be introduced in India without Government initiative and support. It is a mistake to suppose that these can be opened only after the other type has developed in the country. The two types must go together in order that either may be effective. Also such new societies cannot grow at all without at least some legislative help from Government. For landed property to be used as a security for loans in the case of such institutions, certain conditions must be brought about which can exist only by legislation in that behalf. For example, there must be a public register showing the titles to lands as also the existing charges on them. Without this the existing liabilities of any land cannot be definitely ascertained and therefore the amount which can safely be lent against that land remains uncertain. Thus all mortgages or other liabilities on a land, whether anterior or subsequent to the loan, must be compulsorily shown in the register. The claims of the society should have priority over all claims not so entered subsequent to the contraction of the loan from the Society. This can apparently be enforced only by proper legislation to that effect. Again, it is essential for the success of any such organisation that ready and cheap methods should be provided for the recovery of debts as also, in the required cases, for the pledged property of the borrower. Government help is probably necessary for the right valuation of the lands which are accepted as pledges for loans.

Such institutions, if properly organised, can bring about immense improvements of land. The advantages are many and widespread. (1) The cultivator will welcome the system because he is freed from the present contingency of being suddenly asked to repay his debt to the moneylender (such loans are renewed but granted for short periods only and often payable on demand) when he has sunk capital in his land which can repay itself with profit only if he can wait for a long period during which the full effects of the improvements would accrue to him. For example, if he provides for irrigation, drainage, fencing,— or even using improved implements, machinery, or cattle, the return will come to him spread over some time. Therefore, the time for repaying the loan should vary according to the particular way in which he applies the borrowed capital. The society can lend money for such long periods because the land is pledged to it, and, in case of inability on the part of the cultivator to repay, the land can be easily transferred to another before the effects of the improvements are exhausted since transfer of such lands will have been facilitated by law and since the repaymen

is to be by instalments each of which must be paid in due time, failing which the society will take steps towards their collection or towards the transfer of the land to another who can pay regularly. (2) The money-lender or the capitalist will come to such a society because he can never rely on the punctuality of the cultivator † and because he will now have to depend upon the credit not of an individual about whose affairs his knowledge can never be so minute but upon that of an association whose credit will be the joint credit of all its members besides its prestige as being supported by Government. Also the trouble of examining the securities of individuals is obviated by the substitution of the society as his debtor, which will undertake this work with much greater facility if the conditions explained above be brought about by necessary legislation. In such circumstances it is to be expected that, with greater credit and less trouble and risk of loss, the moneylender's charge for interest will also fall. This fall will mainly go to the borrowing cultivators since the society will be of the co-operative credit variety. (3) Thirdly, this will bring many and various benefits to the community at large. The burdens on all lands, particularly the cultivators and the small proprietors of lands, will be considerably reduced at the same time that the improvements adumbrated in the beginning of this lecture will be realised. With the improvement of agricultural lands, their value will naturally increase. This will improve the condition of all proprietors of lands as also that of the non-proprietor cultivators if suitable arrangements are made in tenancy laws which will retain to them the effects of their improvements. Again, the improvements which can be introduced now are only minor and secondary. With the adoption of this system the expenditure on permanent agricultural improvements will be more liberal and to that extent the country will be benefited. The producers will be directly benefited by the increased output and the general body of the people will participate in the advantages in the form of lower prices of agricultural products unless of course there is a proportionately greater increase in the population. Also raw materials in the form of agricultural output will be cheaper. This will stimulate industries dependent on agricultural products. This improved condition of the rural classes will naturally react on another problem, *viz.*, that of the thoughtless immigration from country districts to large towns on the off-chance of earning a living there. The sudden and more or less unexpected release of the rural labourers from all bonds of social ties which exist in the village homes probably in too great an extent but which practically do not exist in the new urban environments has not always been very happy, especially in their moral effects. With greater

† "Landed security is good, but not easily or rapidly realisable; debtors are uneducated and have no idea of business methods or of punctuality in meeting their obligations; and partly in self-protection, the *mahajan* charges a rate of interest which local custom readily tolerates" Report of the Indian Industrial Commission, page 211

premeditation in migration this also may be partially remedied. Further, the prosperity of the rural classes will naturally react upon all classes of the labouring population of the country, and this will make the people better payers of indirect taxes on articles of general consumption. Thus Government revenue will automatically swell with such improvements. Finally, there will be a check, partially at any rate, upon a vicious system which prevails in India, especially in Bengal, Bombay, Bihar, and the United Provinces. Now there is excessive subdivision of agricultural holdings, which often makes profitable cultivation impossible. The reasons are several, the most important being a rigid adherence to the letter of the law of inheritance and the attempt on the part of all to live on land. Another important cause is the extreme indebtedness of the rural classes. This compels them to repay their debts by selling or surrendering a portion of their holdings. The temporary effect is to lighten the burden of their debts, but the more permanent effect is to involve them in greater debts inasmuch as the same family or families must now live on a smaller land. Under the proposed system of developing lands there will be no such pressing debt to be repaid, its amount being earned from the improvements made on land and its repayment with interest being settled on terms of easy instalments.

Another means of introducing such improvements of land, besides the institutions based on the principle of *Landschaften*, is to organise co-operative purchase stores in rural areas. These may be utilised for buying consumption articles. But their work in behalf of land improvements should be to purchase improved agricultural implements, better manure, cattle, seeds, etc. The principle will be co-operative, not necessarily based on the credit system, although the latter will be more effective inasmuch as it will allow the buyers to make payments out of the increased income derived from the use of better implements, cattle, manure, seeds, etc. Such organisations can only be instituted on the initiative and direction of Government for the same reasons for which co-operative societies and *Landschaften* require Government help. Government help should, in the beginning at any rate, be given to them in the form of loans with Government money just as it was given and, in many parts of India, is even now being given.

In this connection it is worthy of note that some Government measures have indirectly retarded the progress of rural areas. In some parts of India, for example in the Punjab, Bundelkhand, Chhota Nagpur, and certain parts of Bombay and the Central Provinces, law forbids the alienation of agricultural lands to non-agricultural classes. Unless this is accompanied by adequate provisions for credit, it merely means a fall in the value of land and creates greater difficulties in finance for the cultivators. Owing to the extraordinary development of the Punjab and Sindh irrigated areas it has not affected these parts so badly but inherently the measure is defective.

Some other means must therefore be devised to prevent the transfer of agricultural lands to the money-lending classes who never intend to cultivate their lands themselves. If that be not practicable the present law should yet be dropped. Another such defective law which undermines both the morality and material prosperity of the borrowers is the Usurious Loans Act of 1918. The courts of justice have the right to determine a fair rate of interest. This is usually accepted as twelve per cent. per annum, rarely more than eighteen per cent. But if the money-lender really runs a risk as he thinks that he does, he evades the law by forcing the borrower to recognise a higher amount as borrowed than the actual amount, so that the court's decree on this higher amount at a lower rate of interest will yield him his lower amount at the higher rate stipulated for. This is not only morally degrading to both the lender and the borrower but inevitably creates difficulties for the borrower who is the weaker party.

The foregoing methods of helping the cultivators by having co-operative societies of various kinds will also help the cultivators in receiving a greater share of agricultural profits. But more direct methods require to be devised to bring about a redistribution of the income from lands, by which the cultivators can get more of it than they do now. At the outset a warning needs to be repeated that the exploitation of the cultivators by the middlemen traders is not so great as is popularly supposed. In most cases the exploitation is more oppressive from the landlords or middlemen holders of agricultural lands above the actual cultivators. Thus improvements in this behalf should proceed along two independent lines. The systems of land tenure and the tenancy laws should be so modified as to help the cultivators out of a substantial portion of the present burden of rents and other dues, which varies according to the capacity of the middlemen tenure holders or the ease with which the law can be dodged. Besides, there are many illegal exactions on the part of the landlords or their officials. Such practical oppressions must be stopped if the cultivators are to be improved in their material condition and moral outlook. It seems that one of the methods of doing so is to amend the tenancy laws in order to give greater proprietary rights in land to the actual cultivators. Insecurity of tenure is an effective weapon to compel the cultivators to submit to illegal exactions for the purpose of keeping their hold on lands which can be transferred from them to others on some pretext or other. On the other hand the danger is that, with the security of tenure, the cultivator tends to develop into a middleman tenure holder by sub-letting his land to others and thus himself becoming a "rent-eater". Thus the change of the law should provide for certain general rights of the actual tiller of the soil, whoever he may be, including the regular workers on land who are now employed by the cultivator himself. This will effectively check such sub-letting inasmuch as the present holder will gain nothing by doing so.

Secondly, there is now an excessive handling of crops by the middlemen traders in moving them from the fields to the ports or the internal distributing centres. There is no doubt that more of the income from lands can be retained by the cultivators with a little organisation. For this purpose the organisation of co-operative sales' associations is imperative. These need not be separate from the co-operative purchase stores. These associations will finance the cultivators till their products can be sold in the best markets. Such bodies will naturally find the customers coming to their doors for making purchases since they will find a large stock from which to choose, and these associations can bargain for much better prices than individual cultivators can ever hope to do with their pressing needs for cash to pay the money-lender, the landlord, and Government, and to find money for their ordinary expenses as also many extravagant expenses often required by social or religious customs.

Another method by which the cultivator can earn more is to market his goods after passing them through some of the minor processes through which they are carried later on and which can be done without much organisation and expense. He "can prepare crops for the market in most profitable form. This includes such operations as fibre and oil extraction, wheat grinding, paddy husking, coffee pulping, tea manufacture, and, most important of all, sugarcane crushing" §. He may also "prepare materials required for agriculture such as bone meal for manure, and crushed or chopped cattle food" §. Such work on the part of the cultivator will increase his income very much without much cost or loss of time. This will also solve the important problem of providing supplementary occupation to him since during certain parts of the year he remains compulsorily idle. Moreover, the transport charges will be reduced inasmuch as the raw things are always heavier and more bulky than the part-manufactured articles. Further, the bye-products which are often of great value to him, e.g., oil cakes, and which now leave him along with the raw things, will be left to him to be utilised for his requirements.

In conclusion it requires to be emphasised again that the above suggestions can be more effectively carried out if attempts be made simultaneously along all the lines instead of being confined to a few only. Piecemeal development is impossible in any department of life. It is especially so when the various branches of economic development are so closely related to and so interdependent upon one another. Therefore, there is the need of organised effort which, in a country like India as probably in all countries, can be successful only if the initiative and the driving force come from the Government of the country.

§ Report of the Indian Industrial Commission, page 59.

AGRICULTURAL *VERSUS* INDUSTRIAL DEVELOPMENT IN INDIA.

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The great economic problem of India is the problem of poverty. India is one of the poorest, if not the poorest, country on the face of the earth. There is no disputing about that fact. The remedies proposed, however, for curing that disease of poverty differ according to the diagnosis of the disease. And they differ to such an extent sometimes as to appear antagonistic. That is why I think it essential to clarify our ideas on this subject of fundamental importance.

For the last twenty years at any rate, if not more, the demand for industrial development in this country has become increasingly vocal and persistent, if not very definite in its details. The Industrial Commission of 1916-18 was an outcome of this demand. The report of that Commission gives a good description of the industrial deficiencies of India. It omits, however, to establish the vital relation between these deficiencies and the chronic poverty of the country. The Fiscal Commission of 1921-22, which was the complement of the Industrial Commission, appears, however, from its report to have had even a less clear idea than the earlier Commission of the vital significance of industrial development in India, for the report merely says: "That the industrial development of India has not been commensurate with the size of the country, its population and its natural resources, and that a considerable development of Indian industries would be very much to the advantage of the country as a whole." The Commission evidently do not believe that the most important remedy for the poverty of the country is industrial development. The latter is simply quite a desirable thing, in the opinion of the Commission. What they mean by "considerable development," or at any rate what the majority of the Commission mean by it, is seen from what they say elsewhere in the same report, *viz.* "India for many years to come is likely to concentrate on the simpler forms of manufactured goods and these are precisely those in which the United Kingdom has the smallest interest."

It is the halting pronouncements of the above two Commissions on which the policy of the State in the matter of industrial development is at present based. But there are people in various camps who have already taken a fright at it. Here is the chairman of the Calcutta Port Commissioners who recently delivered himself of the following before the Tariff Board: "India is predominantly an agricultural country. You have agriculture as your prevailing industry and you have to find a market for a certain amount of surplus agricultural produce. In order that agriculture might flourish in this country there might be a point at which it might be undesirable to

develop manufacturing industries unless that can be done without damaging agriculture. It is hardly fair to agricultural interests to develop those industries at the expense of agriculture. I admit that nobody could object to the natural development of the iron, coal and other industries, but one might object to official aid." The chairman of the Commissioners does not by any means stand alone in this type of advocacy of agricultural interests. There are big landholders, e.g. in the Council of State, who tell us through that council and the Press that the one great need in the economic life of the country to-day is the establishment of land-mortgage banks with a Central National Bank at their back. There are many honest co-operators (in the economic sense) all over the country who cannot at all understand why other people waste their time and energy over fighting battles, say, about fiscal policy when the one thing needful for the economic uplift of this country is the salvation of agriculture by means of co-operation. Then there are people who back up agriculture because they are filled with holy horror at the sight of the slums in some of our industrial cities like Bombay. These people are convinced that industrial development means dark, stuffy factories with chimneys belching out clouds of smoke and surrounded by mean, filthy over-crowded tenements wherein human beings live more or less like worms. Did not Ruskin and Carlyle say so? Does not Parel exemplify it? What if Letchworth and Bournville and Port Sunlight prove exactly the opposite? What if Tatanagar proves in this very country what an industrial town can be like if only things are wisely planned at the right moment? It is amusing to note that these enthusiasts for rural life seem blissfully ignorant of the fact that a vast mass of villages all over the country are simply pocket editions of the slums of industrial towns. They seem equally to ignore another fact, viz., that the older towns of India, entirely unaffected by modern industry, especially the sacred cities of the land, present a spectacle of dark, stuffy, congested houses separated by narrow winding lanes, which can compete successfully with the slums of industrial towns. The whole attack seems to be based equally on an ignorance of what is and of what can be. But enough of this digression. My point is that in the present period of renaissance, when all that is old has temporarily become gold, there are plenty of people opposed to the industrial modernisation of this country.

Now let us examine the statement that India has always been, is and will remain predominantly an agricultural country. In a sense, this statement may be truly made not only of India but of every country on the globe. Why, even in England—by far the most industrialised country in the world—agriculture is the most important single industry even to-day and occupies the largest proportion of the population. The nature of agriculture has changed, radically changed, as compared with the condition of things two centuries ago. Much less wheat is produced than used to be the case or than what could be produced. But it only

means that the land which used to produce wheat now produces beef, mutton, milk, eggs, butter, cheese, pork, ham, potatoes and other vegetables, pears, apples etc. etc. Decrease in indigenous wool production has also occurred because the alternative products above mentioned pay the farmer better. But agriculture in this comprehensive sense, is not only very much alive but is as a matter of fact the industry which employs the largest number of people to-day. In the other industrially advanced countries, agriculture is very much more important than in England. In France, half the population lives by it; in Germany a little more. In the United States, one-third of the population is engaged on the land. Japan, of course, still is as much an agricultural as an industrialised country. In the past, all countries of the world, not merely India, were agricultural. If anything, India was more full of the handicrafts of those days than were the countries that are noted for their industries to-day. History bears ample testimony to that. In the future, as long as food continues to form the most pressing of human wants and as long as it continues to be derived from land, cultivable land even in industrialised countries will naturally be made to yield all that it can of food whatever its form may be. Agriculture cannot but remain the parent industry in every country. There is nothing very peculiar in the very nature of things which distinguishes India for all times as regards the position of agriculture in national economy, as appears to be implied in the statement under review.

Let us make a brief comparative survey of the change which has come over the economic organisation of the industrialised nations of the world and over that of India during the last century or so. Let us start with England. Before the Industrial Revolution, England was a country of small villages engaged in agricultural activities supplemented by handicrafts of the domestic type. There was the hand-spinning of wool as a more or less universal spare-time occupation and the hand-weaving of the yarn by a specialist class of weavers. And there were a number of other handicrafts catering for the needs and conveniences of the people and partly for the luxuries of the lucky few. The industrial revolution spelt the ruin of most of these handicrafts and spare-time occupations and the consequent displacement of large masses of people from the villages and smaller towns and from their ancient occupations. But the industrial revolution meant at the same time the opening of more fields of new kinds of employment than it closed. It meant the opening of coal mines and iron mines, of smelting furnaces and foundries, of rolling mills and factories making the thousand and one requisites of railways, of textile mills and other factories, of machinery-making factories and workshops, etc. As a result of the Industrial Revolution, wooden ship-building of course practically disappeared in England. But a much larger industry of iron and steel ship-building replaced it. Railway transport,

ocean shipping, commerce, insurance, banking opened so many new careers that the disappearance of the old handicrafts appeared as a bagatelle. Agriculture itself came to be re-organised in such a manner as to economise the human factor and to specialise in the most remunerative channels, be they wheat, meat, wool, dairy-produce or market-gardening. The upshot of it all was that a {much smaller proportion of the total population came to be occupied on the land but the per capita income in that as in other industries increased with surprising rapidity. The change in the economic organisation was indeed attended by a large amount of hardship and gave rise to evils which were unexpected because of the suddenness of the change, but many of these evils people have now learnt enough to be able to foresee and forestal if they so desire.

England was the country where the Industrial Revolution came first. The new era was the era of iron and steel, of steam and electricity. England fashioned for herself the tools and implements of the new era, the rails, locomotives, coaches, wagons and other railway stores, the iron and steel plates for ships, the marine engines and other marine stores, the machines for textile and other factories etc. And when England had equipped herself with these new tools and implements, she was not only ready to supply the various goods produced with their help but also similar tools and implements themselves.

Now, the other nations that have successfully modernised their industrial fabric first thought of doing so when their handicrafts of the domestic type began to decay because of the competition of the machine-made goods of England. They started by equipping themselves with the new tools and implements which they first imported ready-made from England. But these countries were shrewd enough to perceive that there would be no real modernisation of their industries until they began to make their own tools and implements i.e. to build their own railways and steamships with their own materials and brains and supply their own mills and factories with machinery and stores made by themselves. The last of the modern nations which deliberately brought about such an industrial revolution in its midst was Japan which accomplished that feat in the course of a single generation.

In all the countries which are considered industrially advanced to-day, the old handicrafts have nearly disappeared, people have had to give up the occupation of agriculture unless they could see a chance of making in it as good a living as they could elsewhere and only those remained on land who could make good business out of it. But the large numbers of people thus displaced from their hereditary occupations were absorbed in the mines, factories, dockyards and a hundred other fields that were opened anew.

Now let us see what happened in India. Here even before the era of railways and steamships, various classes of handicraftsmen had begun to

move on the path of decadence because the things which they used to make and which were taken by their own people in their own ships to other lands for sale were becoming less and less wanted there and what were wanted began to be purchased by the foreigners here and taken away in their own ships. So the first attack was on our external trading and navigation activities and also on the volume of our manufactures sold abroad. The contraction of these activities meant decreased employment for various classes of people. Then came the invasion slow but sure, of the home market by cheaper machine-made goods. The handicrafts of the country put up a tough fight for defence, but it was a losing game. Then came the era of railways and wherever the railway penetrated the doom of the handicrafts, which had supplied the ordinary necessities and conveniences of the mass of the people for unnumbered centuries in the past, was very swiftly sealed. This process was accelerated when steamships began successfully to ply through the Suez Canal and the cost of transport of the machine-made goods even over thousands of miles of water or rail came to be so surprisingly reduced as compared with olden times. All over the country wherever the railway went, the spare-time occupation of spinning of the agriculturists was gone, hand-weaving was threatened, so was the blacksmith, the metal smelter, the glass maker, the oil-presser, etc. The field of employment of all the handicrafts men who supplied the ordinary necessities of life was getting rapidly contracted and the supplementary income of the agriculturists getting extinguished. But why could not these people be absorbed in new fields of employment of a new industrial era as had happened in other countries, as was happening just then in Japan? For the simple reason that the new fields of industrial employment did not open in India as they did elsewhere. Our railways were built for us by imported material and imported brains. We did not like other countries merely get started in this way and then set ourselves to open our own coal and iron mines, smelt our own ores, make our own rails and locomotives, wagons and coaches and other railway stores. Our wooden ships became a back number but we did not replace that industry, by a much bigger iron and steel ship-building industry, we did not build our own marine engines, make our own other marine stores and open out a great navigation industry as well. We did not learn to make our own machinery for textile and other mills and factories. In short, we never learnt to make the tools and implements of the new industrial era, we never grasped its key and so the new industrial era is still coming. We did not, of course, remain altogether devoid of specimens of industry of the modern type. There is a cotton industry of some growth which is the result of indigenous enterprise. There is a much better organised jute industry which is the result of foreign enterprise. Then there are the repairing workshops of the railways and a few coal, iron, manganese and gold mines and latterly there have been established the Tata Iron and Steel Works which are struggling as yet

for their very life.

What development there has been in these matters has taken place mainly during the last twenty years. But it was in the seventies of the last century that the rapid decadence of the handicrafts, employing large numbers of people as they supplied the daily wants of the mass of the population, began to take place, and at that time there were no new fields of employment available wherein these people could be absorbed. Hence they fell back upon agriculture which was the only industry in which machine-made goods did not compete. Even agriculture was affected in so much as the spare-time occupation of spinning was gone. If in the other countries people were taken away from agriculture into new industries thus necessitating the reform of agriculture itself, in India more and more people were thrown back upon agriculture and the result of it was the excessive subdivision and fragmentation of land, the diminutive incomes of agriculturists, the growth of indebtedness, diminishing power of resistance in case of droughts, high death rate and all the melancholy succession of fevers and plagues too well known to need repetition. That is the origin of most of the serious agricultural ills for which we all seek remedies. It is not a matter for pride or congratulation that seventy, eighty or ninety per cent of our people live directly or indirectly on the land. It is a matter for serious anxiety. We know that in those parts of the country like the Punjab where new land for cultivation was made available by irrigation, the first colonists prospered but later with increased pressure of numbers into the agricultural field the same evils of subdivision, fragmentation, growth of indebtedness etc. followed. So the decay of handicrafts brought about the decay of agriculture. The gloom of the situation went on thickening during the last two decades of the nineteenth century. It was not the excessiveness of the land revenue demand but the miserableness of the individual share of the income from land which was and is the cause of all the trouble. Matters would have been worse than they were but for one thing. The same steamships and railways which brought cheap machine-made goods of everyday use from thousands of miles and took them to the nooks and corners of the country were ready to take bulky goods like foodstuffs and raw materials in the other direction, and there was a growing demand for these goods in the industrialised countries of the world. For the first time in the history of the world, voluminous trade in bulky goods of small value became possible and agriculture in India began to respond more and more to this situation. Since the beginning of this century, efforts have begun to be made through the Agricultural and Co-operative Departments of Government to improve the condition of the agriculturists. The development of industries on modern lines has also begun and has made the agricultural population mobile. But neither the Government nor the people seem to be convinced that we have got far too many people engaged in agriculture in this country. There has now emerged a new class of people who are agriculturists for four or six

months of the year and mill-hands for the remainder. Needless to say, they make neither good agriculturists nor good mill-hands. We get twenty families trying to live by tilling twenty acres of land, each with a holding of one acre, not all in one block, but made up of ten scattered strips each of the size of a fraction of an acre. That is the kind of agriculture we have got. We do want all the cultivable soil to be cultivated and to be made to yield the maximum of produce it can, be it foodstuffs or raw materials or whatever it pays best to produce therein. But we want only as many people to be engaged therein as can find a whole-time occupation and can make a decent living out of it. The rest must be provided for in some other occupations. Let those who have temporarily to migrate every year because their holdings are too small be induced permanently to migrate by an improvement in the conditions of life and work in the industrial centres they go to. They will thus do better for themselves and also enable the people that are left in the village to do better than they used to. In short, my thesis is that there has been a terrible overcrowding in agriculture because of the decadence of the handicrafts which used to supply our daily needs. That overcrowding has been the main cause of the many ills that we complain of in agriculture and also of the great poverty of the country. The main remedy, therefore, for the improvement of agriculture is the diversion of perhaps a third of the people, engaged in it, if not more, away from it into other industries. It is not a question merely of application of scientific methods or of co-operative organisation or of the search for subsidiary occupations. These things will not touch the core of the problem. For genuine agricultural development itself, what is wanted is the industrial development of the country on modern lines. The two are complementary rather than antagonistic.

HOUSING OF THE WORKING CLASSES.

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So much has been written and said on the subject that the following few lines are intended merely to afford a few points for discussion.

The housing of the working classes is an important economic problem in all growing cities, especially in those where trade and industries are making rapid progress. Most of the modern cities were allowed to grow without any sort of control or a definite plan, their need not having been felt at the earlier stages of growth. This initial neglect rendered future control and solution of the problem a task of considerable difficulty and cost.

The problem has not been receiving in our country the same amount of attention as in other civilised countries, where the State, the local bodies, and even the employers of labour are making vast strides of progress in the matter of the housing of the working classes. On the other hands in our country the State was for a long time a mere lookeron collecting statistics and figures, while the local bodies did not go further than framing byelaws for regulating the construction of buildings by private owners,

Neither have the employers of labour fully realised how important it is to house the men working under them in sanitary dwellings and how much work would be more than amply repaid by the greater efficiency of the worker and by creating in him an increased interest in his work and higher degree of skill. It is well-known that about 20 p. c. of the men working in our mills are constantly absent on account of illness. Improvement in their housing conditions would not only prevent loss from this cause, but would stabilise labour and create a sense of self-respect among the men.

Nowhere in our country are the housing conditions of the working classes so miserable as in the city of Bombay. The outbreak of plague in 1896, spreading the fell disease from the miserable abodes of the poor into the comfortable houses of the rich, carrying death and devastation before it, opened the eyes of the authorities to the need of improving the housing of the masses. The city of Bombay Improvement Act was passed in 1898 with the object among others, of making provision for the improvement and for the future expansion of the city, by removing or altering insanitary buildings, by constructing new sanitary dwellings for the poorer classes; and by laying out vacant lands. The objects of the Act were, no doubt, commendable, but it placed the destruction of slums first in the programme of work before making any provision for the residence of the dishoused people, with the result that these people

overcrowded the neighbouring dwellings and brought them to the condition of fresh slums in the making. The rents in Bombay began to rise abnormally and the Act became unpopular with the people. This initial mistake was however realised by the authorities, and the Improvement Board thereafter directed its efforts to the work of improving the insanitary buildings by making therein such changes as to admit more light and air. The Board also commenced the construction of new buildings for workmen. In the latter work, however, the Board's operations are limited, inasmuch as the statute requires the Board to house only a portion of the people dishoused by its schemes.

Thus the City Improvement Act was unable to do much in the way of improving the housing conditions of the working classes. In 1913 the Act was amended so as to enable the Improvement Board to construct buildings for the working classes on behalf of any employer of labour on his paying in advance 20 per cent of the cost of the proposed buildings, and undertaking to repay the remaining amount with interest by instalments in the course of 23 years. This scheme, too, did not prove to be attractive to the employers, only one cotton mill having availed itself of the facilities afforded by the Act.

Meanwhile the two Railway Companies, the B.B.&C.I., and the G. I. P., the Bombay Municipality and the Port Trust undertook to house the workmen employed under them and each of the bodies built a number of tenement chawls for them.

All this while the State as such took no part, either direct or indirect, in the housing of the working classes. The Indian Industrial Commission appointed in 1916 by the Government of India recommended in their report issued in 1918 that in view of the peculiar conditions of the city of Bombay the State in co-operation with local authorities should adopt a definite programme of housing the working classes, levying further taxation in such a way as to fall mainly on the employers of labour. This led to the appointment of the Bombay Development Directorate in 1920, which undertook, among other things, the Development of the suburbs and certain parts of the city, as well as the programme of construction of 50,000 rooms for the working classes in Bombay. A special cess on cotton brought into the city is being levied to meet the charges of the schemes undertaken by the Directorate, whose programme of constructing the working class dwellings is making rapid progress.

In the work indicated above regarding the housing of the working classes, it would be difficult to say that it has or is proceeding on right lines. In the first place, the initial mistake made by the City Improvement Act has already been noted. Secondly, all the buildings constructed so far consist of single room tenements, three to four stories high, of the type of pigeon holes, which cannot be termed dwellings in any sense of the term,

affording merely boarding and lodging accommodation for the poor classes. Thirdly, the two Railway Companies should not have been allowed to construct their working class buildings, much less their workshops in the city-proper. They could well have acquired cheap land in Salsette in the proximity of the lines of their route, and constructed small and cheap cottages for the people with pieces of garden around them. Even now these Railway Companies could be made to undertake this course, the chawls already constructed by them in the city being taken over by the Development Directorate as part of its own programme. Fourthly, the Development Directorate should in the first instance have taken in hand the rapid development of the suburbs in Salsette. Such a course would have brought about a diversion of a large number of upper and middle classes to those places, resulting in a fall in the prices of land in the city for the benefit of those of the working classes who cannot be removed far afield from the seat of their work.

The excuse that is generally put forth for constructing one-room tenement chawls is that it would not be an economic proposition to do anything better in the city where land is so very dear. But the question has never been boldly faced ; as to how many of the people could be made to move out into the suburbs to be housed on cheap land in a better class of dwellings.

Life in chawls, especially of one-room tenements, is scarcely worth living, even by the working classes. Privacy is conspicuous by its absence, and it is no wonder that people living in them should shut or cover up the windows in the attempt to secure some privacy even at the cost of light and air. The common services, such as privies and water-tap rooms, are always found to be in the most insanitary condition, for it is nobody's care to maintain them in good condition. They moreover afford frequent cause for quarrel among neighbours. A chawl with a number of storeys is a multiplication of these evils.

The all round construction of one-room tenement chawls several storeys high for the working classes, even in cases where they could be avoided, is a sad mistake which might take ages to rectify. Even two-room tenements in a chawl are bad enough ; and one-room tenements are abominable. It has been found by experience that child mortality is heaviest in one-room tenements. The minimum standard should be two-room tenements in ground floor structures with an open veranda and a small piece of yard for gardening like the few sets of buildings designed by the Port Trust in its Antope Hill Settlement.

The houses of our working classes are merely eating places, not even sleeping places, as many of the people are found to use the open roads for the latter purpose. They are much less the places where self-respect could be preserved, comfort secured, and domestic pleasure enjoyed. The people are crowding together in foul localities possessing no element of health, comfort and decency. The results are inevitable—loss of self-respect, failure of health and premature death especially among the children. Loss of self-respect

brings about crime; failure of health involves frequent interruption of work and loss of income, and the depression brought about thereby is the main cause of drunkenness. It is no wonder therefore that a large number of workmen should seek pleasure and company in the liquor shops. The degradation of the men brings about the degradation of their families. In other words a large section of the community is going down in the scale of humanity.

Increase of salaries of the workmen is the general remedy suggested by many well-wishers of labour against all the ills suffered by them. But a careful observation of the effect of the recent increase in the wages will go to show that the increase must be indirect and not direct. Instead of paying the increment in hard cash, it would be better spent towards the well-being of the people, such as death benefits, and provision for sickness, old-age, child birth and marriage. Payment of amounts on these accounts, and even on a slightly increased scale where the worker himself effects a saving under those heads, would go a long way in inculcating the habits of thrift and providence. With regard to improvements in housing conditions, not only a better class of dwelling should be constructed, but the people themselves must be taught to keep their houses tidy and comfortable. Most of our working classes come from rural areas with no idea of the life to be lived in towns. Unless therefore, they are taught the way of living in a city, such as is calculated to fulfil the requirements of a wholesome and cleanly home all other efforts for the improvement of their housing conditions would be of little avail. Were the working classes taught to shun unwholesome dwellings and to value wholesome and cleanly houses, the demand for the latter would automatically increase, and owners of property would be compelled to improve the character of their dwellings and to construct a better class of dwellings.

Nor can improvements in dwellings be effected by municipal regulations, unless we can succeed in carrying the improvements further into the homes of the people themselves. It is therefore extremely desirable that an effective agency should be created to teach the working classes to value wholesome and cleanly homes as also the habit of thrift and providence calculated to improve their economic condition. Government or Municipal agency is least suited for this purpose. There are several private agencies which would be able to do this kind of work most effectively, such as the Social Service League, the Central Co-operative Institute etc. The Development Directorate and the City Improvement Board, would be well advised to set apart specific sums for such work, and get the work done through the agency of such private bodies. Construction of houses is a part of the programme, and not the only programme of improving the housing conditions of the working classes, and it would remain incomplete till the people are taught the proper use of those houses, by making them healthy homes and the abodes of comfort and happiness.

DISTRIBUTIVE CO-OPERATIVE SOCIETIES IN INDIA

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The Co-operative Movement introduced into India early in this century has, it is well known, progressed at a fairly rapid pace under State patronage and supervision. It is equally well known however that this progress is largely confined to Co-operative Credit and Banking, the non-credit side of the movement not showing any material expansion. Agricultural Organisations on the non-credit side, for the joint purchase of seeds, manure and implements, for the joint marketing of produce such as the sale of cotton, or for the highest stage of joint cultivation, which incidentally offers a very good solution of the problem of uneconomic and fragmented holdings, are but conspicuous by their insignificance in numbers, scale of operations, and the measure of success achieved. Indeed it seems that the problems of agricultural improvement in India cannot be successfully solved without the aid of the Co-operative Movement in all the different operations of the cultivator, merely credit will not and cannot suffice. India besides has numerous cottage industries some of which show great vitality despite the handicaps of the absence of organisation and competition of machine-made goods made at home or imported from abroad. Producers' Co-operation has indeed a vast scope in India and yet we have just but touched upon merely the fringe of co-operative production. Above all, India has a huge population and while every one is not an industrial producer, and while every one is not an agriculturist, every one is certainly a consumer of numerous articles produced by others. The chain of middlemen between the producer and the consumer has grown up here as is inevitable under modern conditions, the cry is often raised against profiteering; the people are poor and yet the millions of consumers are unorganised; Co-operative Distribution has not been undertaken earnestly, the isolated and spasmodic efforts made during the last few years having resulted in failures.

Co-operative distribution seems to me to be a very important department of co-ordinated co-operative effort. The possibilities are great, though the achievements hitherto have been insignificant. The Stores Societies in this Presidency are languishing and gradually disappearing by liquidation and cancellation, and other provinces do not reveal any very more heartening picture. It would be therefore useful to analyse why this Consumers' Movement has failed to progress and to get firmly established in the land where one would expect it to take root and grow.

The failures of several societies have not been without value. They have brought home several valuable points, taught many useful lessons, and have been the means of our gaining very instructive experience. It is true that these failures teach us negative lessons of what not to do, but these nega-

tive lessons suggest the positive counterpart of what to do.

Co-operators know well the famous Rochdale principles of working Store Societies, and try to act upon them, as far as possible. There are the sales at market rates, there are sales on strictly cash terms; there is the annual dividend on purchase, there is the fixed maximum rate of interest to be allowed on share capital. There is little or no advertisement, no window-dressing, no attracting of customers, the theory being that loyalty of members automatically secures custom and spares the expense of advertisement, window-dressing and the like. Faithful to the Rochdale principles, they wait for several retail stores to come into existence and struggle into childhood to take up seriously the starting and building up of a wholesale Society. When therefore the retail stores fail, co-operators wonder and when they analyse the situation, it is customary now to attribute the failure to the absence of loyalty on the part of the members.

The absence of loyalty is doubtless the prime reason for the stores not succeeding in the great majority of cases. But merely deploring this common phenomenon will not take us far. Preaching the need of loyalty on the part of members and regretting its absence will not bring custom and success to the shop. It is not after the failure of the shop that we can force loyalty from members, but it is, I feel imperative that the organisation of a Store Society should be such as to make loyalty the most natural thing in the world for the members. I would go a step further and say that when from the facts submitted by the organisers or promoters of a society there is a grave doubt about the loyalty of its members, the Registrar should make it a point not to register it at all. A Store Society without the members being loyal is a phenomenon that should not be allowed to come into existence at all from the first. To make matters clearer, it is obvious that to make a co-operative venture successful there must be a sufficiently large group of persons having one or more needs in common, and having some tie or bond in common, which may be a further incentive to harmonious and co-operative effort; they must further feel the need, to meet which they start the society, acutely enough to take some trouble and make some sacrifice, and they must be educated or experienced enough to know how to set about to achieve their object. Such a group of persons will necessarily be loyal to their store and ensure its success. Instead of finding out such groups, what is unfortunately but too commonly done is for one or a few enthusiasts to get the shares subscribed by their friends and acquaintances, who from its very inception, have no idea whatsoever of obtaining their requirements from or through the shop but who consent to take a few shares to oblige the organisers or to help a good cause. To ensure loyalty, the members must be largely from one locality, so that convenience and facility may be added to sentiment as a spur to loyalty. In a place like Bombay, for instance, it is no use starting a shop near the Girgaum Portuguese Church,

a good centre in itself, and have your members scattered all over Bombay. It is no use starting a Book Store for College students at Kalbadevi near its junction with the Princess Street, even though that may be a good centre in the vicinity of large bookselling firms. The members must be a group—homogeneous group, residing in the same locality or coming together at least at some place because of common occupation. If other ties exist in addition to these, all the better. Thus, if members of the same caste were to be found staying in the same locality, the chances of success of the society would be firmly strengthened. Loyalty of members to the society is, I firmly believe, largely a matter of organisation of the society and societies must not therefore in general be registered unless this primary consideration is carefully kept in mind.

Premising that loyalty is thus secured more or less, the next consideration that should, I feel, be emphasized is that it must never be forgotten that the store is a business concern aiming at the economic improvement of its members. The aim is primarily, not to cultivate the moral virtues which, though highly important and desirable in themselves, are but the by-products of Co-operation, but to buy at wholesale and therefore cheaper rates and to retail to members at nearly those rates. Of course, instead of selling at practically the wholesale rates or at rates lower than those obtaining in the retail market, the society may adopt the Rochdale plan of distributing bonus on purchases, and thereby promote the habit of saving and thrift. But, any way, the members must get the articles at lower rates. If they cannot, the store fails in its primary idea and deserves to lose the support of its members. The management must hence be such as to ensure them lower prices, on purchases from day to day or at the end of the year. Unfortunately it is too common to declare dividend neither on shares nor on purchases for a year or two, because of some preliminary expenditure or something or other. Most men have a very limited amount of patience, and cannot go on looking forward. In thus waiting for dividends to come, members soon lose their early enthusiasm for their common shop; the circumstances which impelled them to join the society may change and the canker of disloyalty shows itself. In the early stages, preliminary expenditure or heavy cost of establishment or want of experience, does not permit dividend to be declared; later on, the falling off of custom completes the ruin. I am of opinion that the management must somehow keep prices, a little lower than the market prices, for purchases from day to day by members so as to show them in a tangible form from the first purchase, the economic benefit which the store is going to confer, and to declare as soon as possible, at the end of the first six months or year, dividend on capital and also on purchases. If the profits are not enough for this purpose, though in a really well-managed store this cannot and should not be, a little philanthropic assistance even may be welcomed, the idea being to secure the continued confidence of

members in the desire of the stores to fulfil the expectations raised when it started. The organisation securing the loyalty and custom, the prices and dividend retaining the custom so secured, the stores will be well on the road to success.

A reason often assigned for the failure of distributive societies is that accustomed as the people here are to purchases especially of foodstuffs, for which they need not pay there and then, the enforcement of, and strict adherence to, cash sales leads to the falling off of customers. Cash sales being one of the basic ideas of the Rochdale Pioneers, co-operators here adhere to it with disastrous results. Almost all store societies, chiefly those retailing foodstuffs and even some sundries shops, have expressed a desire for permission to sell on credit; and the only concession in this matter allowed generally has been that those desiring to take advantage may open a deposit account at the store against which their subsequent purchases will be debited. This means that a person unwilling to pay for each purchase as he makes it, is asked to pay a pretty large sum in advance to cover subsequent purchases. It is no wonder that this concession is not availed of by many. In some cases, permission is granted to allow credit for a month or so to approved customers. This too means in practice credit to a few friends and acquaintances of the manager or members of the Committee—really cases where persuasion may eliminate the need for credit sales altogether. It appears to one that some way has to be found whereby those who so desire may be able to buy on credit, at a slightly higher rate of course. I think the store organisation should run in close association with a credit society or a few well managed credit societies may be affiliated or recognised by the store. In that case, a member of such a credit society may get a loan which is not paid to him in cash but for which a card is issued to him. On production of this card, the member will be allowed to make his purchases from the store to the amount sanctioned and set forth there. Monthly or quarterly recoveries could be effected, the members getting the desired facility and the stores the desired custom. In the case of a store meant for the employees of a common master, it is possible to secure this advantage even without the help of a credit society. The employer issues the cards and sets forth the limit upto which sales on credit could be made to the member and recoveries could be effected monthly from his pay. Purchases without having to pay for them on the spot have somehow such a fascination that where arrangements as outlined above have been made, almost every one takes advantage of them.

The next consideration that presents itself to us is the management of the shop. A store is after all a business concern and must be run on those lines. All facilities that are given by competing retailers must be afforded by the stores as well, such as sending, in the case of a Grain Stores in Bombay, a man round to the customers periodically to get their orders and to deliver the articles at their own homes. Scientific advertisement must also be resorted to in order to attract non-member customers and thus to extend the

beneficent influences of the stores. All this requires a competent staff which, we often find, the stores cannot afford to engage. The pity is, the stores societies are mostly in a way too large, in a way too small—too large for honorary workers and too small to be able to bear the establishment charges. They commonly adopt therefore the fatal course of employing ill-paid managers or salesman. In a business concern, unless there is someone who, either for love or money, is genuinely interested enough to take a good deal of trouble for it, the venture will not be successful. Leaving love for the institution aside, someone must have a sufficiently high stake in it, and must stand to lose pretty much if it fails. The manager must therefore be preferably a shareholder himself and his remuneration should be partly fixed and partly a percentage of the profits of the society. Anyhow competent management, paid or honorary, must be secured. I am strongly of opinion therefore that at the present stage, one should encourage on the one hand very small societies performing a specific function and having a fairly limited scope, which could easily be run on true co-operative principles, with the help of honorary workers, the heavy establishment charges being practically altogether eliminated. On the other hand a few large societies may also be encouraged with capital and scale of operations vast and varied enough to permit of a highly paid competent staff which could be expected to run the shop on business principles and ensure, as far as may be, the financial success of the undertaking. Gradually one of such big societies could well become the wholesale without which co-operative distribution cannot, I am afraid be placed on a sound and sure footing. Instead of starting a big co-operative venture, it may appear desirable, if and where possible, to buy up a successful store and convert it into a co-operative store in which case the competency of the staff and management being assured, the chances of risk are minimised.

In a large city like Bombay, then, societies performing a specific service like a co-operative hostel, a co-operative bookshop, a co-operative laundry, a co-operative restaurant, could be run with success and on the other hand, a large society run on strict commercial lines would also have chances of success. In smaller cities, a medium store might well do if properly organised and worked, and I do not despair even of having rural stores if a credit society is attached to it or works in close association with it.

The great difficulty about distributive co-operation is that it requires a higher degree of education and training on the part of its members and workers. To start and run a Credit Society is easy enough ; to organise and work a co-operative store is difficult. People have hence to be trained in the aims, ideas and methods of Consumers' Co-operation before much success can be attained. For this purpose, people could be trained up to a full-fledged stores through the intermediate educative steps of a weekly co-operative bazar for a chawl or group of chawls, a buying club or weekly purchases by one of the members by turns on behalf of all, and a store working on an

indent basis. Further as the student of to-day is the citizen of the morrow, co-operative societies, small but educative in their aims and working, may well be fostered and encouraged among them, so that the principles and lessons imbibed during those years may bear fruit later on in life. I should think therefore that efforts of co-operators towards establishing the Consumers' Movement may well be directed towards organising students societies, co-operative bazars, buying clubs and stores working on an indent basis, as potent and effective means of education and training.

The State in India has taken a very active interest in the development of the Co-operative Movement among the people ; but this active interest is yet so far largely confined to Credit Co-operation. No special honorary organisers have been appointed for co-operative production or distribution.

Compulsory and free audit of Consumers' Societies is not introduced. No special concessions have been granted in the matter of railway freights like those granted by the railway companies to societies for their own employees. In fact, enough interest has not been displayed, enough push has not been given by the State officials. Non-official workers are very few, and though organisations like the Central Co-operative Institute have come into existence in most of the provinces and are rapidly expanding and playing an ever-important part in shaping and moulding Co-operative policy in the country, there is still the cry for ever more workers. It is here that teachers and particularly teachers of economics could do a good deal. If they take active interest in the Co-operative Movement, they will not only be very useful themselves to the cause but by enlisting some of their students in the service of co-operation, they will supply the much-needed workers. If the State were to adopt a more vigorous policy and if the non-officials were to second these efforts, I have no doubt that with proper organisation securing loyalty, with efficient management, and with facilities for credit sales, the societies that may come into existence will prosper and the Consumers' Movement will take root in India as it ought to.

THE DAWN OF ECONOMIC SCIENCE.

By MR. C. GOPAL MENON, M.L.C., MADRAS.

The prominent position which the Science of Economics occupies is due to the work of the great minds of the Nineteenth Century, who have contributed their time and energy towards its development. Economics may almost be called a new science, and few have read or tried to understand the progress of this branch of human thought. Like other sciences it has undergone changes. Its history is interesting, its present position is worthy of our careful consideration. Without a clear grasp of the principles of the science, and a correct conception of the circumstances deduced from these principles, many of the problems of the commercial world are incomprehensible. People talk loosely of "supply and demand", "the rate of exchange", "protection", "free trade", "the bounty system", "paper money," "fall of prices", "currency", "international trade", and so on,—but they do not recognise that commerce in "special" and "general" is greatly influenced by these things. Even people engaged in commerce have no precise notions on the subject. W. Bagehot mentions that Political Economy labors under an "inherent difficulty which no other science is subject to. This difficulty is due to the circumstance that those who are 'conversant with its abstractions' are 'usually without a true contact with its facts' and those who are 'in contact with its facts' have little conception of its 'abstractions'. Theorists are not acquainted with business and businessmen do not reason out theories. It would only be a minority who could trace out the remote effects of a new tax upon a commodity. It is, however, essential that a man of business must be able to reason out the formidable problems that beset him in the ever-changing monetary facts of modern life. It shall, therefore, be our object to survey the history of the science, and to race what light it throws upon our struggles for social betterment.

In the dawning years of the development of Political Economy, the subject had been foolishly called the cold-blooded or dismal science, evidently people being incapable of reflecting on the beneficent results accruing from it. Let us, before entering into the history of the science, try to show how and when the so-called 'dismal science' arose. We find that Aristotle had something to say upon economic facts; so had Plato. Sir Thomas More touched upon various points of the social problems that confront us to-day but not until modern conditions began to prevail was the full significance of the science grasped. The *Benevolences* and *Monopolies* granted by James I for the purpose of filling the Royal Treasury, gave an impetus to the study of Economic Science, and to this period of the Stuarts may be traced the origin of the science. It was in the Seventeenth Century, that the term Political Economy was applied to the study of the special groups of facts relative to production and distribution of wealth. Monterethie de

Valteville, a Frenchman, was the first who invented the name Political Economy, and the name has been used by all other writers since. Sometime before the French Revolution broke out, Adam Smith, the Father of Political Economy, gathered up the threads of earlier social speculations, in his work the "Wealth of Nations," which ever since became the corner-stone of the science. He was not the only economist of his time, but in his book were included all the principles advocated by his contemporaries. In the words of an American Economist "the subsequent history of the science is mainly the history of attempts to broaden and deepen the foundations laid by Adam Smith, to build the superstructure higher, and render it more solid."

At the close of the 18th century, the Rev. T. R. Malthus, M.A., F.R.S., sometime Fellow of Jesus College, Cambridge, and Professor of Political Economy in the East India College, brought out an "Essay on the Principle of Population and its Effects on Human Happiness." His writings exhibit an intellectual character and he has contributed much to the progress of Economic Science. He possesses in an eminent degree the faculty of observing particular phenomena, but he is deficient in the power of analytical head and has no claim to the name of Scientist. His name is distinguished for the very important doctrine he has enunciated—a doctrine which is the foundation and centre of most important economic theories—the Malthusian doctrine, that population tends to increase faster than subsistence.

In his "History of Civilization in England," vol. III, chap. v, Buckle thus speaks of the services rendered by Malthus:—

"Scarcely had the Eighteenth Century passed away when it was decisively proved that the reward of labor depends solely on two things: namely, the magnitude of that national fund out of which all labor is paid, and the number of labourers among whom the fund is to be divided. This vast step in our knowledge is due, mainly, though not entirely, to Malthus, whose work on population, besides making an epoch in the history of speculative thought, has already produced considerable practical results, and will probably give rise to others more considerable still. It was published in 1798; so that, Adam Smith, who died in 1790, missed what to him would have been the intense pleasure of seeing how, in it, his own views were expanded rather than corrected. Indeed, it is certain that without Smith there would have been no Malthus; that is, unless Smith had laid the foundation, Malthus could not have raised the superstructure."

A few years after the publication of the "Essay on Population", Ricardo devoted his attention to Political Economy with brilliant success. He corrected the views of Smith concerning the nature and cause of rent, and furnished, in support of his statements, the Malthusian theory that "rent would increase as the necessities of increasing population forced cultivation

to less and less productive lands, or to less and less productive points on the same lands," and thus explaining the rise of rent. His important contributions are the theories of rent and value. "Rent", he says, "is the price paid for the use of the original and indestructible powers of the soil" and the differences of rent for lands are due to differences of these powers.

At the commencement of the 19th century, in the preface to Jean Baptiste Say's *Treatise on Political Economy*, we find the proud announcement of the achievements of the science :

"Everything announces that this beautiful, and, above all, useful science is spreading itself with increased rapidity. Since it has been perceived that it does not rest upon hypotheses, but is founded upon observation and experience, its importance has been felt."

In 1821, Mr. R. Torrens, F.R.S., in an introduction to his essay on the "Production of Wealth," said :

"With respect to Political Economy the period of controversy is passing away, and that of unanimity rapidly approaching. Twenty years hence there will scarcely exist a doubt respecting any of its fundamental principles."

But so far we have not reached the happy state predicted by this writer. In fact when we compare the views of modern economists with those of the earlier, we find that the latter argued that man's character and efficiency are to be regarded as a fixed quantity, whereas the former constantly kept in mind the fact that it is a product of the circumstances in which he has lived.

Contemporaneous with this development of Economic Science in England, the continent was not dormant, but was foremost in taking the broader view of the science. The Theorists of the Austrian School dealt with the very centre of abstract theories. Belgian economists, foremost of them being Emile de Laveleye, represented the science on the broad lines of Sociology.

Great developments commenced to take place at this period, developments that have resulted in a marvellous transformation of industrial conditions. Previously custom prevailed. Men obtained the same remuneration as their forefathers, rents and tithes were not paid in cash, but in produce of the soil ; foreign trade was insignificant, and there were no huge financial undertakings. Colonization had hardly commenced ; there were no great marts and cities. Although there was little money, there was little starvation. Subsequently when England made great advances in wealth and knowledge, some surprising things happened. In the press, on the platform and in Parliament, humanity's utterances for the social betterment were more distinct and earnest than before.

It was under the logical investigations of John Stuart Mill that the old cast iron system began to crumble away, and new movements became

visible. J. S. Mill in his "Principles of Political Economy" followed Ricardo's theories in their entirety, but he contributed no new principles to the main theory. The renown of his work is for the clear exposition and lucid style, in which the subject is treated. He proclaimed that the laws of distribution partake of the character of physical truths and declares distribution to be a matter of human institution solely. Society can subject the distribution of wealth to whatever rules it thinks best.

Profs. Cairnes and Jevons, following the threads left by Mr. Mill, dealt in detail with many of the fallacies of the existing theories. The latter set up a theory of value, which had important influence on the science, the former showed in an ingenious way that the wage fund may be large where capital is scarce, and high wages and high interest accompany each other.

The fact that the science had got into loose ways was evident in 1886. When the 9th edition of the Encyclopædia Britannica was being revised, the article on Political Economy was removed, and a history of the development of Political Economy was substituted on the ground that the science was in a state of transition. The very name Political Economy had disappeared, and the name "Economics" was substituted. The idea of a group of social laws had disappeared from economic works. Political Economy became a branch of history. The writers on this subject followed the path of Humanity's march, gathered facts concerning human activity, especially in business or making, buying and selling. As there are no laws of history, so there are no laws of society. All that the historian or economist can do is to state conditions and describe results, and that result invariably in a very unsatisfactory manner, because the opinion a man expresses depends entirely upon his point of view.

Prof. Powell says that the historian has been too much the ally of the politician. Political Economists admit that they are quasi-historians.

Toynbee says :

"The historical method has revolutionised Political Economy, not by showing its laws to be false, but by proving that they are relative for the most part to a particular stage of civilisation. This destroys their character as eternal laws, and strips them of much of their force and all their sanctity."

According to Dyer, in his Evolution of Industry, "The laws of economics therefore vary according to the circumstances of the times, and the ideals which men may have, and they do not favor one form of industrial organisation more than another, and any political economist who says so proceeds on entirely unscientific lines."

Cunningham views the situation thus :

"The so-called laws of Political Economy in so far as they are universal in form are hypothetical principles which it is convenient to use

as instruments for investigating the complicated phenomena of society; but it is absurd to treat mere instruments of investigation assumed for convenience sake as principles for *practical guidance*."

Prof. Alfred Marshall adds his weight to the historical school. Marshall, who is a recognised authority in England on Economic Science, has taken up a middle position from the views held by Ricardo and Mill. His main contribution to the Economic theory is in the development of the Ricardian principles of rent.

These are, in plain words: if a certain number of labourers work and produce a stuff to-day, they can do so to-morrow if internal and external conditions remain unaltered. As conditions shift through the will of men and on account of external physical conditions, the laws of political economy must change. History and political economy can only state *Conditions of Existence*. What great changes will take place in the future we cannot guess. Who in the beginning of the Eighteenth Century could have predicted the social and economic changes that have happened at the present time, which have been the result of the investigations of but a few men?

The tendency of the study of Economics in Great Britain at the present day is to arrive at exactitude in the theories enunciated by mathematical calculations, giving prominence to monetary aspects and thus making it a financial science.

Another great writer, who has devoted a great deal of his time to the development of Economic Science is Prof. Sidgwick. In his *Principles of Political Economy*, he states his principles are primarily founded on J. S. Mill's treatise. But he was far from leaving Mill's doctrines as he found them. His economic method was mainly analytical, and he made important contributions to the science both on its theoretical and its practical side. He severely criticised every position taken by Mill, and where necessary corrections and limitations were introduced bringing the science up to date. It is often mentioned that Prof. Sidgwick's work is difficult reading. His treatment of the science certainly requires concentrated attention; the science of economics, being in a state of transition, cannot be a simple science, the principles of which can be mastered without systematic study. There is no gainsaying that Prof. Sidgwick's work is one of the few works on Political Economy of first-rate importance published in England since the death of J. S. Mill.

It might be considered dangerous to refer to the names of Carlyle and Ruskin—the two giants of the Nineteenth Century—as masters of Economics. In the voluminous writing of Carlyle he has rambled over a vast field of economics. Political Economists with the doubtful exception of Adam Smith were cordially hated by Ruskin. Nevertheless, they have sometimes owed inspiration to him. Their general principles were never more finely

stated than by Ruskin in the *Political Economy of Art*; and in *Munera Pulveris*, *Unto This Last*, and *Fors Clavigera* he has made many of them more fully aware than before of the limitations of their study. He touches upon real flaws in their arguments as for instance in Mill's contention that demand for goods is not a demand for labour (*Unto This Last*). In *Unto This Last* he anticipates the doctrine of a living wage, if that be a merit. He says that "the final object of Political Economy is to get good method of consumption, and great quantity of consumption, in other words, to use everything, and to use it nobly". And, as he continues, "It is, therefore, the manner and issue of consumption which are the real tests of production. Production does not consist in things laboriously made, but in things serviceably consumable and the question for the nation is not how much labor it employs, but how much life it produces. For as consumption is the end and aim of production, so life is the end and aim of consumption." Here then we have the goal of Ruskin's Political Economy; "There is not Wealth but Life." All his definitions point here: capital is the material for producing happy life; value, its measurement; exchange, its method of distribution; price, its cost. Most economists will agree that the economics of Ruskin are to be read with great reservations; they may be used for examples of life and instruction of manners, but we must not apply them to establish any doctrine.

Another marked tendency in the Economic Studies at the present day, is towards Industrial and Financial history. A thorough knowledge of the *industrial revolution* is necessary for a correct understanding of the great labour movements of the 19th Century. If we turn to any classic work on Political Economy, we find chapters on wealth, capital, rents, interest, value, production, distribution, consumption and international trade; but nowhere can we find an attempt made to arrive at the evolutions of industrial problems. In Cunningham, Toynbee and Ashley's works, we find this desideratum accomplished.

The limit of this paper will not permit me to make any wide reference to the working-class or reform political economy which rests upon a scientific basis. A socialist is distinguished from other politicians by the opinions which he professes with respect to the causes of, and the remedies for, the great evil of poverty. The school of thinkers who preceded the birth of modern scientific socialism are Robert Owen, Saint Simon and Charles Fourier. From the elaborate schemes of future society which they have built up they have been called the Utopists. Of these, Owen was the only one who had the fortune, good or bad, of seeing his schemes tried by experience. Of the socialist thinkers who form a link between the Utopists and the school of the socialism of historical evolution, by far the more noteworthy is Proudhon. The teachings of these earlier socialists afterwards led to a consummation in the full development of Socialist theory, or "Scientific" Socialism in the writings of the late Dr. Karl Marx. He is considered to

be the great exponent of this theory, and the author of the most thorough criticism of the Capitalistic System of production. The most important among his works, besides *Das Kapital*, are *Die Heilige Familie* written in conjunction with his life-long friend Frederic Engels and the *Misere de la Philosophie*. Marx's Capital is an interesting historical book, but it is not, in the opinion of some, the bible which some Socialists think it is, as it has little relation to modern Socialism and less to modern Economics.

To sum up. It is within the bounds of the art of Political Economy that we have to discover how we can make the most of ourselves and the world in which we live. It consists in the application of knowledge to the ordering of the production and distribution of wealth. According to Adam Smith, "Political Economy, considered as a branch of the science of statesman or legislator, proposes two things: first, to provide a plentiful revenue or subsistence for the people or more properly to enable them to provide such a revenue or subsistence for themselves and secondly, to supply the state or commonwealth with a sufficient revenue for the public services". McCulloch tells us "The object of Political Economy is to point out the means by which the necessaries, comforts and enjoyments that constitute wealth may be most easily and cheaply produced; to ascertain the laws which regulate their distribution among the different classes of the community, and the mode in which they may be most advantageously consumed".

THE PROBLEM OF POOR RELIEF IN INDIA.

By MR. K. C. RAMAKRISHNAN, READER IN ECONOMICS, UNIVERSITY
OF MADRAS.

Indian Economics presents a conspicuous contrast to Western in the absence of any literature on the subject of Poor Relief. It has received scant attention at the hands of the enlightened public. The State in India, wedded to the policy of religious neutrality and until recently to that of *laissez faire*, has not concerned itself with the question of relief in normal times, though it recognises its duty in times of famine.

Various reasons may be alleged for this paucity of attention. Let us begin with the reasoning of a former Government of Madras. There is said to be no such enormous inequality in the distribution of Wealth in India as in the West. J. S. Mill declared "The subject of Poor Laws would be of minor importance if diffusion of property was satisfactory, of course, accompanied by prudent and temperate habits of all classes of the population." Maclean, in the Madras Manual of Administration, compiled 30 years ago, applied this formula of Mill bodily to the case of the Madras Presidency and wrote "The diffusion of property is moderately equal among the native population and the great bulk of people are of temperate and prudent habits" and concluded that a Poor Law was not necessary in our country.

This equable distribution of wealth was said to reveal itself most remarkably in the system of land holdings. Peasant proprietors abounded here who were remarkable for their contentment, self-respect, industry, thrift and temperance. The large agricultural population of India, composed mainly of these small landholders—and a few labourers who, according to traditional duty or the universal principle of slavery, were protected through good times and bad by benevolent landlords—were well off under normal conditions and seldom subject to chronic and acute poverty, while the Government intervened to save them in times of famine. This saved India from a pressing pauper problem.

This general diffusion of wealth was really general diffusion of poverty; but there was no revolt against this state of affairs. On the other hand, the masses contentedly accepted poverty and meagre comforts. The standard of comfort was easily reached in ordinary times; for it was surprisingly low, fixed so by climatic conditions, heredity and a steady inculcation of simplicity of life by religion; and it was maintained at that level by the spirit of fatalism which had so long pervaded the Hindu mind.

There were certain communal organizations and voluntary methods of relief which obviated the necessity for State Poor Relief. In olden days, the village community provided for its own indigent and maimed population from out of the common stock. A definite portion of the harvest on the

the village fund was to be collected and taxes on certain articles were to be levied for the purpose. There was, in many villages in South India, the system of *Samudayam* or village land assigned on a common *patta* for meeting common religious and charitable expenses. The understanding was that the sale proceeds of fruit trees on village land held in common or of fish from village tanks were to be devoted to common religious purposes and charity which generally took the shape of feeding the poor and the strangers. Inams or grants of land and revenues on specific portions of land had also been made by Hindu (and even Mohammedan) kings for the maintenance of the village almshouse as well as of the village temple. †

There were the caste and trade guilds which came to the rescue of members of their castes or trades who were afflicted and tried if possible to set them on their feet again. W. W. Hunter wrote "caste takes the place of the Poor Law in India." This *esprit de corps* is still found in a few castes. ‡

The joint family system sheltered from public gaze the old and the diseased, the orphan and the widow and even the drones. Provision was made for the weaker members by the efforts of the abler. Family feeling was so strong that the workers were prepared to sacrifice their comforts if that could help to keep a soul from going out to beg.

But, above all, State Relief has not been seriously thought of, because of the unceasing flow of private charity. India has been to this day a land of extensive charities. Charity is enjoined as a religious duty and the country has been thickly strewn with charitable institutions of all sorts. This alone would make an y State Relief superfluous.

These reasons, if they held good in the past, have lost their force in the face of the great changes that have come over the country. The changes that have already taken place and those that were impending to throw Indian society into worse confusion were set down by a writer in the *Economic Journal* of 1910 § as amounting to a revolution more radical than any in the West. There the changes had been due to causes working from within. Here they were due to influences operating from without. The transition here would be less gradual and attended with more painful incidents. India has been brought into the vortex of international commerce

† John Matthai. "Village Government in British India".

‡ Among the pastoral Gollahs when any was reduced to indigence, others helped him by giving him each a sheep, enabling him to form a fresh flock of his own.

Among the Nattukottai Chetties, the great bankers of Southern India, 'a whip round for a caste-fellow in difficulties is readily responded to'. Their general charities are met by *Mahimi* funds collected at the rate of a pie per rupee of profit.

Among the Vysia Komati merchants, the poor of their caste are specially provided for. Maintenance of poor Komati widows is a first charge on many charitable funds.

§. H. Dodwell: 'India in Transition.'

and she must feel the effect of any universal depression in trade.

India is, again, no longer merely an agricultural country but she has set up machine industries on a large scale. In spite of her predominantly agricultural population, India ranks quite high in the world in the number of her industrial workers. She is recognised as one of the eight countries of 'chief industrial importance' by the League of Nations †

Industrial legislation is almost in its infancy in India, and there must occur a considerable number of accidents in the mines, docks, railways, arsenals and factories, for which even the Workmen's Compensation Act may not provide any or adequate compensation. Besides, there are industrial diseases, which, aided by the filthy environment in which the workers live, sap their vitality gradually and imperceptibly, and against these no satisfactory protection can be afforded by law.

Again, that unemployment is almost an inevitable accompaniment of the modern system of industry "which will not work without some unemployed margin—some reserve of labour" has been emphasised by many economic writers. India which is becoming more industrial must face this necessary evil. Those economists who advocate diversity of industry and discourage too small holdings in India, with a view to mitigate the effects of agricultural famines are not oblivious to the consequence that a series of small famines in the shape of trade depressions and breaking of banks would be inevitable under the new regime, and this would bring poor relief from year's end to year's end as a problem for the consideration of the State.

As McCulloch says, a purely agricultural country may be able to do without a poor law, agricultural employment being comparatively steady; but in a manufacturing country a poor law is indispensable on account of frequent periods of depression which leave a permanent residue of paupers.

But supposing India were only agricultural, would there be no paupers, no need for an organised system of relief?

All is not well with agriculture. The idyllic peasant proprietorship of India is an overdrawn picture. We have in fact its caricature now. We hear, on the one hand, thanks to the Indian laws of inheritance, of the excessive subdivision and fragmentation of agricultural land. Holdings are becoming far too small and uneconomic for any system of cultivation. We learn, on the other hand, from the last Madras Census Report that non-cultivating land owners and cultivating tenants have increased in number while cultivating land owners have gone down. The inference is also drawn that land is passing out of the hands of the man who farmed his own land to those of the non-cultivating money lender to whom he had mortgaged the

† Mining, Industries and Transport employ over 20 millions equivalent to the number of such labourers in U. S. A. and France combined. There are as many Railway workers in India as there are in the United Kingdom and as many coal miners as in France. From the point of view of the number of industrial workers alone, India is overwhelmingly more important than Italy, Belgium, Japan etc. Memorandum submitted to the League of Nations by the India Office, October 1921.

land and now undertakes to cultivate the land for him as a tenant. We have in fact an accession to the ranks of the landless proletariat in the country.

The pressure of population on the means of subsistence is felt in some districts. Villages in fertile tracts are over-populated. Emigration is growing unpopular and after all it takes away only a part of the virile section of the population. The new machine industries cannot absorb all the redundant population. Add to this the decay of many of the rural industries. We have all the evils of unemployment and under-employment or excessive leisure in villages with baneful material and moral influences on the life of the peasant. They provide a soil quite congenial to the growth of pauperism.

Now, with regard to the Indian standard of comfort, contact with a richer and materialistic civilisation has raised it considerably. Increase in earnings has not kept pace with accession in the needs. Western civilisation is also individualistic and as every individual feels that he must satisfy his new higher standard, he has less to spare for others. This desire for increased comfort combined with the new ideas of personal liberty and free competition, of deserved and undeserved wealth is disrupting the joint family system. The harder struggle for existence at the present day is also responsible for the reluctance to maintain dependants. No doubt the joint family system, of all the old institutions, still retains a hold among the richer and middle classes. But let us not imagine that that can be the prop of the aged and infirm among the labouring classes.

The old village communities have practically disappeared. We do not find the vestiges of them in many villages. In some villages that retain the *Samudayam*, the proceeds are shared among the original holders after meeting the expenses of a few important festivals of the village temple. We do not find any organised public provision for the poor, who temporarily or permanently emigrate to urban centres. The feudal protecting spirit of the rich landlords has been replaced by the bargaining and litigious spirit; the caste nexus has generated a calculating attitude.

The caste system has lost its beneficial effects. Caste guilds and similar institutions are fast breaking up. Trade guilds were in old days synonymous with caste guilds but now many trades are taken up by men of various castes; and professional feeling by itself is not yet sufficiently developed to call forth any systematic effort of sectional charity.

Finally, individual private charity, charity in households to fairly well-known persons, has considerably shrunk in villages in these hard days. But charity of the more ostentatious type, doled out to crowds of people at a time and in public places in towns has swelled, as capital is flowing into fewer hands. Now, in a village, amidst a small community, begging which is merely an appeal to a neighbour may not be a bad method of seeking relief. But in larger communities, in urban centres, begging is accom-

panied by fraud and undeserved suffering. Unorganised, indiscriminate charity, besides being inherently unjust in treating all classes of paupers alike, also manufactures paupers. In all countries it has been "the main support and the standing temptation to vagrants". The able-bodied and professional beggars of India are to be counted by lakhs—and the misapplication of charity has a very real bearing on the thriving of this class.

The proper reorganisation of charity has attracted for a few years past the attention of some reformers in India, notably among the Parsees of Bombay. It is necessary for us to know how far the State, in the new work it may have to undertake, *viz.* Poor Relief, may itself get some relief and save the tax-payer's money, by the charity organisations taking up part of that great work which they can more efficiently and humanely discharge.

The State cannot much longer hold aloof from such a necessary work. As Government is becoming more democratic, it will be compelled to pay greater attention to the vital interests of the lower classes. In a country, where general poverty is so great and many are on the verge of destitution, there will grow an insistent demand for sufficient provision being made to save them from the evil day and to protect them if they fall into destitution.

Foreign Poor Laws have generally begun with the suppression of vagrant beggars. Attempts have already been made in Bombay and Bengal to put down mendicancy by legislation. The committees appointed by the local Governments to enquire into the question and formulate detailed proposals have, more than two years back, issued their reports making comprehensive recommendations. No action has been hitherto taken upon them, apparently for want of funds. But it is doubtful if Government can commit itself to carrying out the big schemes suggested, without a more detailed investigation of the several classes of beggars, of the entire cost of their relief, of the help that can be rendered by charitable institutions and the probable reaction the measures may engender. These were, perhaps, not within the scope of the enquiry of the committees. But even if a part of their schemes were carried out either by the Government or the Corporation of Bombay or Calcutta, the cases that might come under investigation of the administration concerned might afford some helpful material for guidance in other cases also. It is up to students of Indian Economics, however, to take up research work in this field, make a close study of several individual cases of paupers and of the kind and degree of relief afforded by charitable institutions. It is then only that general inferences can be drawn with regard to the causes, the immediate remedies and the ultimate cure of pauperism and the most feasible solutions offered of the poor relief problem in India.

SUPPLY OF LABOUR TO THE MADRAS COTTON AND OTHER INDUSTRIES.

BY P. S. LOKANATHAN, READER IN ECONOMICS,
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A study of the conditions of labour supply in the industrial establishments of the Madras Presidency reveals certain features that are of such striking contrast to those of other parts of India, that it may be of interest to a conference like this, representative of the whole of India. I propose to consider the question in three of its aspects: (1) sufficiency of industrial labour, (2) character of the labour supply, (3) method of recruitment.

To take point (1), we must distinguish between two aspects of the question. There is first of all the problem voiced by some of the employers of labour that labour is very scarce and inadequate, that too high wages have to be given to get a decent supply, that even then labour does not stay on, and that emigration ought therefore to be stopped. But an altogether different problem arises with regard to the adequacy of skilled labour. Let us dispose of the latter first.

There is no doubt that there is still considerable difficulty experienced in getting suitable trained labour especially for new industries. Hence those that require a comparatively large supply of trained and efficient labour have of necessity to undertake the task themselves in their own works. From certain points of view this cannot be considered as a serious disadvantage; there is no harm but some good, if industries precede technical training. At the same time it cannot be denied that training involves considerable cost to the employers; apprentices have to be paid salaries even as they are learning; they spoil the material and sometimes even the machinery and at the top of it all, in certain cases it so happens that workers are tempted to leave the factory by an offer of slightly higher wages outside. The matter may be set right; apprentices must be asked to sign a contract binding themselves to work for a certain specified period in the factory.

The large employers of skilled labour—the Railway workshops and some among the private engineering works—have adopted a system of apprenticeship to train young men into efficient and skilled workmen. The Buckingham and Carnatic Mills have a school, now nearly 20 years old, in which technical classes are held and most of the employees of the mills have been trained therein. But the system is still not quite well organised but is rather rudimentary and irregular and in any case has not brought forth such a number of trained workmen who can be relied upon by employers starting new industries. The census figures also speak in the same direction. During the last ten years, the number of skilled workmen increased from 41,141 to only 43,412 by about 5½% although the number employed in the factories increased by over 26%.

To revert to the question of unskilled labour:—That there cannot be any real difficulty experienced with regard to the supply of labour speaking purely from the point of view of numbers is evident from the fact that our agricultural industry supports an enormous population, a good portion of which is superfluous and ready to migrate. Students of rural economics and those who have given some thought to the problems of rural life in South India have come to the conclusion that with the decay of cottage industries there has come about an excessive dependence on agriculture. There is undoubtedly a large amount of emigration from the province and the census of 1921 speaks of 1,731,000 Madrasis enumerated in other parts of India and in countries beyond India.

But the figures do not lend support to the view that emigration has increased or is increasing appreciably during recent years. It is however a fact that the rice factories of Tanjore, the tile factories of Malabar and South Kanara have experienced some difficulty in the matter of their labour. But the real reason for the shortage, if one probes into the matter, is partly their unwillingness to pay the workers sufficient wages to induce them to stay on. There are other considerations too, but that this is the most important reason will be obvious from the fact that the manager of a tile works at Feroke, when subjected by the Industrial Commission to a cross-examination on the matter, admitted that they could get enough labour by paying a higher wage but that it was not *advisable* to raise it. This indeed is the crux of the matter. The tile factories have to pay somewhat high wages because labour round about is attracted by the rubber estates. The same difficulty is experienced by the rice factories in the harvest season and in others when agricultural work is busy; but this is inevitable from the nature of their work. But much can be effected by better organisation. For most of these factories, there are slack times and busy times and it is not impossible to make the slack season of the factories correspond with the busy agricultural work and vice versa. In this way both the employers and the workers may be profited. The truth is that sufficient thought has not been given to such questions by small employers. We may therefore conclude that the supply of ordinary unskilled labour is quite adequate to satisfy the needs of the industries of the Presidency and our argument may be strengthened by the evidence of employers of textile, leather and other industries who have given expression to the fact that they have never felt any difficulty in getting enough supply. Indeed the manager of the Chrome Leather Factory went so far as to concede that the factory could be trebled and even increased further, before any shortage for labour would be felt.

(2) But while the supply of ordinary labour may be adequate from the point of view of numbers it may be extraordinarily fluctuating and hence deficient judged in another sense. The migratory habit of the Indian industrial worker has been so often reiterated that it would be presumption to question the accuracy of a statement of such universal acceptance. Still

I hope it may be pardonable on the part of a student of South Indian economics to have an open mind on the matter. A study of the labour conditions of South India has led me to be a little cautious in accepting that statement now, as applying to Madras at any rate. Now, what exactly do we mean by the migratory character of the workmen? It can have no meaning if applied to those engaged in seasonal industries like cotton ginning, groundnut decorticating and extracting firms and in certain unorganised trades, which are, in their nature, unable to afford employment to the workers for the whole year. These stand midway between the agricultural industry and the manipulative industries and employ labourers largely during the interval between the agricultural seasons. They are industries which afford supplemental earnings to the agricultural workers in their off season and situated, as some of them are, in the agricultural regions they draw the under-employed agricultural population of the Presidency and relieve their sufferings. There cannot, under the circumstances, arise any complaint regarding the workers' migratory habit.

Hence the term will have a definite meaning only when applied to workers in industries that operate throughout the year and call for the continuous employment of a definite body of industrial workers. Under such conditions, if the workers in a factory constantly change at every period or year owing to any reason whatever, it would seriously affect the question of labour supply. To what extent then is this factor present and to what extent does it affect the industrial organisation of South India. The idea that Indian factory labour was fluctuating and migratory was naturally derived from a study of the conditions of the localities which were industrially of great importance. In India, the cotton industry has its home in the Bombay Presidency; Bengal is the home of the jute industry and also of the mining industry. A study of factory labour of Bombay and Bengal was also a study of the whole of Indian labour, and therefore the results thus obtained were applied over the whole of India. Now labour in the Bombay, Bengal and even in the Punjab factories is so extraordinarily migratory, that the personnel of the workers in those mills changes almost completely in about two years or even less on the average. It is supposed that conditions in other parts of India must be the same. But we must enquire. There are 4 textile mills in the city of Madras employing about 12,000 hands. Whatever might have been the state of affairs in these mills 15 or 20 years ago, enquiries of persons competent to speak about it tend to show that here is a body of workmen that do not depend upon agriculture at all and it could almost be said that there has arisen an artisan class as such, that is entirely dependent on and supported by industry, and doing practically no agricultural work. It is true that there is a certain amount of absenteeism in these factories, but the causes thereof must be sought elsewhere. In Madura again, there are over 4,000 persons employed in the cotton mills, who again are a class of artisans

forming a factory population, as it were, and entirely dependent on the industry. In Chrompet near Pallavaram there is an industrial colony being formed which will consist of workers specially engaged in that field of work. The railway workshops of Perambur and Negapatam, for example, employ a large number of workmen and they are not partial agriculturists. Other instances may be cited to prove this point namely, that in Madras, at any rate, as an organized industry settles itself permanently, it could in the course of a few years create artisan class depending on that industry and not dependant on agricultural employments. Indeed this conclusion will not be surprising if we remember that the agricultural industry can well afford to spare quite a good percentage of its population. The temptation to go back to agriculture will be strong only in those negligible cases where the workers are owners of lands. But since almost the whole of the industrial population is a landless class and will have to work only as agricultural labourers earning lower wages, the inducement will almost be absent.

On the other hand, the conditions of labour in Bombay and Bengal are strikingly different. The Bengal jute factories import 90 p.c. of labour from outside the province. Although not quite to the same extent, Bombay also imports a considerable percentage of the labour required from other areas. It is not surprising that the labourers in jute and cotton industries of Bengal and Bombay respectively constantly go back to their homes at the end of two or three years after a sojourn in the congested industrial centres under not very congenial surroundings. This difference in the sources of labour supply between say Bombay and Madras cannot be better illustrated than by a somewhat detailed study of the conditions of labour in the cities of Bombay and Madras. In the city of Bombay, 84 p.c. of the people were persons born elsewhere; there were 16 p.c. in 1921 that were born within the city. It is but natural that with such a big immigrant population the tendency to be constantly moving about operates fairly strongly. On the other hand, we find that 67 p.c. of the people in the city of Madras were native born; and if we remember the further fact that another 12 p.c. were born in the Chingleput district divided from Madras only by an imaginary and artificial boundary and that it is a habit with Indian mothers to go to their parents' home for their confinement, we can easily conclude that the city supports a permanent population of nearly 80 p.c. The population coming from other provinces is negligible. We find the same evidence in other industrial centres as well. In the city of Madras, the people that were born outside the district were less than 18 p.c., in Negapatam it was 11 p.c., in Mangalore 5 p.c., in Coimbatore 8 p.c. and so on. It is certainly not denied that there is immigration to the city of Madras and other centres, it would be strange indeed if there were not. There are many forms of casual and temporary employments that absorb these immigrants that come and go. But labour in the chief organised industries comes to be settled down

permanently and ceases to be partly agricultural and partly industrial. There is nothing in the village life to offer much attraction to them and if notwithstanding this, a few go back to their village, it must be because they have become almost unfit to continue as industrial workers. The conditions of factory life have got a great deal to do with this and these must be improved to ensure a greater permanency among the factory workers. Ordinary absenteeism must not be confounded with the tendency of the worker to go back regularly for agricultural employments.

The supply of labour for the industries of Madras is predominantly local and comes almost entirely from the neighbourhood. In this as has already been pointed out, Madras is quite different from provinces like Bombay, Bengal, the Punjab, etc. Nearly one-third of the factory population of the Punjab comes from Sind, Rajputana, etc. The jute factories and the coal mines of Bengal get the major part of labour from Bihar and Orissa, Madras, etc. Bombay is also an immigrant province receiving far more from other provinces than what she sends out. On the other hand, it is a most remarkable fact that in Madras out of 1,20,996 ordinary unskilled workers employed in the factories, only 425 come from outside the province and only 7,812 from districts far away i.e., not contiguous to the place of employment. Madras is therefore able to supply the whole of her industrial requirements and in addition to send a large number outside. She is thus essentially an emigrant province.

3. In the matter of recruitment of labour for industries Madras again presents a remarkable contrast to other big industrial centres like Bengal and Bombay. There is no elaborate system of recruitment here, in Calcutta for instance labour is recruited by a system of contract, the factories pay the contractors or *sardars* as they are known over there on the basis of a certain quantity of labour supplied to them. This is due to the fact that for its big industries, labour is not readily available locally. The small industries however are able to draw from the neighbourhood and the supply is rendered fairly easy. Conditions in Madras are just the reverse. The organised industries are able to get the labour they require directly without any assistance from, or arrangement with, contractors. It is true that sometimes jobbers in some factories go out and look for men themselves. But this is far from being the general rule. Labour comes direct to the factories and is taken on, on the recommendation of departmental *maistries*. When vacancies occur the friends and relatives of the employees get intimation and are taken on. Sometimes a simple 'Hands Wanted' more than satisfies the purpose.

INDIA'S REAL BALANCE OF TRADE IN 1922-23.

BY G. FINDLAY SHIBRAS, ESQ., DIRECTOR, LABOUR OFFICE, BOMBAY.

Summary Table.

		Figures in lakhs of rupees. †	
		Credit.	Debit.
<i>Exports—</i>			
1. Exports of merchandise and treasure (Visible exports) ... ..	...	342,90	...
2. Funds borrowed in England for interest charges (para 4) (Invisible exports) ... ..	...	13,12	...
<i>Imports—</i>			
1. Imports of merchandise and treasure ... ..	...	...	311,67
2. Allowance for under-valuation of Imports of merchandise and treasure excluding currency notes (5 per cent of Rs. 310,66 lakhs) ... ..	...	...	15,53
3. Visible imports of funds (Net) ... ..	...	...	2,48
4. Invisible imports:—			
i. Expenditure in interest for overseas ca- pital invested in India ... ..	..	...	26,25
ii. Expenditure for shipping services ‡ ... ..	...	...	22,15
iii. Expenditure for commissions ‡ (mainly finan- cial and insurance services) ... ..	...	...	9,00
iv. Net expenditure for other services ... ..	...	...	4,00
<i>Visible Balance of Trade</i> (Net) ... ..	...	13,22	...
<i>Invisible items</i> (Final figure from both sides) ... ..	...	...	17,13
<i>Final Balance</i> (Visible and invisible items)... ..	...	...	3,91

Explanatory Memorandum.

1. The object of the memorandum.
2. Introductory.
3. Visible Exports and Imports.
4. Invisible Imports—Net Expenditure in interest for overseas capital invested.
5. Expenditure for Shipping Services.
6. Finance, Insurance and other Commission Charges.
7. Miscellaneous Items—Invisible Imports.
8. Conclusion.

† Rs. 1 lakh = Rs. 1,00,000 = £ 6,667 (Rs. 15 = £ 1)

‡ See end of para 5

1. *The object of the memorandum.*—The object of the table above and the detailed table appended is to estimate India's real balance of trade for the financial year ended March 1923, and to show how far India was on balance indebted to other countries or the reverse. There are three senses in which the term 'balance of trade' is used. In the first place, it is sometimes, if not frequently, used to mean the difference between exports and imports of merchandise excluding treasure. This is the sense in which the mercantilists used the term, and it is the term not infrequently used in Statistical Abstracts. Another sense of the term (and the one much more widely used) is the difference between all visible imports and exports. This second meaning of the term gives rise to the expressions favourable and unfavourable balances of trade for creditor and debtor country respectively. The third meaning (and the meaning used in this memorandum) is the balance of all visible and invisible exports and imports. In short, it is the balance of international payments. Over a long period, there can, of course, be no balance of payments due from one country to another. The balance is paid by the sale of more commodities or else one country may lend to another a sum equal to that balance. In either case the credit and the debit sides of the account balance. In this sense of the term there can, in the long run, be no favourable or unfavourable balance of trade except for a short time. It is this balance for a short time that is responsible for the fluctuations in Exchange. These fluctuations normally start forces which equalise payments on both sides and thus establish an equilibrium.

It need hardly be pointed out that payments between India and other countries can only be made in (1) goods; (2) bullion; (3) securities; and (4) services. The mere fact that India's visible exports ordinarily exceed her visible imports cannot be taken as proof that India is a creditor country. Any one who watches the constant issues of Indian securities on the London Stock Exchange is aware that a favourable balance, as in the case of Canada, Australia and the Argentine, means, among other things, an import of capital. In other words, in the philosophy of a country's balance of trade there is more than is dreamt of in the official trade statistics, and invisible exports and invisible imports have to be included in a statement of international payments. Invisible imports are met by goods exported abroad for which not a single rupee worth of goods have to be imported. They are in reality not in any sense imports but they are termed so, because the items have to be added to the import or debit side of the account when drawing up a statement of international payments. In the case of the older countries like the United Kingdom, Sweden and Denmark, an excess of invisible imports over invisible exports does not mean that the country concerned is living on its capital. Invisible exports in this case have to be taken into account. Thus on the one hand there are countries which are lending or creditor countries, and on the other hand there are countries which borrow from those countries in the former category. To this latter class India, Canada, Australia, the

Argentine and similar countries belong.

2. *Introductory.*—It is unnecessary to enter a caveat that the balance of trade of a country is never settled within any precise twelve months. A large number of liabilities on account of transactions which have taken place during the year may be carried into the account of the following year. Another caveat is that in calculations of this nature one is never able to be strictly correct, even within crores of rupees, but it is generally possible to make a rough calculation within useful limits. In other words one must not reason too finely in dealing with statistics of the balance of trade. In the trade balance statement of Great Britain, there is a difference in the final balance published by the Board of Trade in its Journal of 29th March 1923, and that published in the *Economist* of 17th February, of no less than £93 millions. The Board of Trade estimated the net income from investments at £175 millions sterling as against £100 millions in the *Economist*; and shipping earnings at £110 millions as against £94 millions in the *Economist's* estimates. In India's balance of trade, it should be remembered that nearly all transactions are in the long run done through London. London is the world's banker and for years London has rightly asserted that the bill on herself was the currency of international trade. The supremacy of the London bill of exchange is great, not merely due to London's supremacy in financial machinery, but to the supremacy of Great Britain's world-wide trade and to her readiness to take goods from all countries. The chief and most important members of the London market are, of course, the banks, bill brokers, discount houses, accepting houses and foreign bankers together with the Bank of England. Again many of the transactions are done through the Secretary of State for India who sells Councils Drafts in London on the Government of India from time to time to meet his Home charges, and with the assistance of the Bank of England he arranges the payment of interest on certain loans as occasion demands.

3. *Visible Exports and Imports.*—The basis of the analysis is the official returns for the Sea-borne Trade of British India for the 12 months ended March 1923. The declarations in the bills of entry for imports, and in the shipping bills for exports, are made by importers and exporters but are checked by Custom House officials. The values are the wholesale market cash prices less trade discount for which goods of like kind and quality are being sold at the time and place of importation and exportation respectively. They do not necessarily represent the actual price receivable by or paid by India for the goods exported or imported. According to section 30 of the Indian Sea Customs Act (VIII of 1878) the values of goods imported or exported represent:—

- (a) the wholesale cash price, less trade discount, for which goods of the like kind and quality are sold or are capable of being sold at the time and place of importation or exportation, as the case

may be, without any abatement or deduction whatever, except (in the case of goods imported) of the amount of the duties payable on the importation thereof ; or

- (b) Where such price is not ascertainable, the cost at which goods of the like kind and quality could be delivered at such place without any abatement or deduction, except as aforesaid.

The values of treasure represent the market values at the time of import or export except in the case of Government of India rupees where the face value is shown in the returns. The practice before April 1921 in respect of the values of treasure was not uniform at all ports. On the whole the Custom authorities do not under-assess because the tariff is for revenue purposes on an *ad valorem* basis. An error, however, of under-assessment by only one per cent. in the case of imports of merchandise during the year under review and an over-estimation to the same extent in the case of exports of merchandise would result in an error of no less than Rs. 5 crores. The exports and imports refer to private trade only, and exclude Government Stores as the latter are paid for by Council Drafts sold in London on the Government of India and from loans, and the value of Government Stores exported is comparatively small. In the year 1922-23 precious stones imported by letter post have for the first time been registered in the trade returns. The trade accounts for March 1923, therefore include diamonds and other precious stones imported while those of previous years do not. As the trade in diamonds was very largely conducted by means of insured letter post imports of previous years must have been short by a considerable number of lakhs of rupees. In the imports of merchandise the value of railway materials imported direct by State Railways working under Company management has been excluded to the extent of Rs. 840 lakhs as this was not paid for in the ordinary way, but through the Secretary of State, and accordingly cannot be taken into account as this would mean their values being counted twice over. The Sea-borne Trade Statistics of non-British India, namely the French Settlements, the Portuguese Settlements, Travancore, and Kathiawar have been included in the statement. It has been exceedingly difficult to arrive at the year's figures, because in all cases returns for the 12 months were not available. The local authorities concerned, however, have been consulted by telegram, and the figures arrived at are the most accurate in the circumstances. The trade statistics of the French Settlements are the most important, because Pondicherry exports ground nuts which are of considerable importance. The Trans-Frontier trade which is carried on over approximately 6,800 miles is only 5 per cent. of the Sea-borne trade of British India. The statistics for the complete 12 months have not yet been received from some outlying portions of the Frontier and an estimate based on the latest figures for 1922-23 has been made. The visible imports and exports of funds pass through the Public Debt Office and,

therefore, their value is readily available. When these statistics of visible imports and exports are set out, the following is the result :—

Visible exports and imports in lakhs of rupees, 1922-23.

Merchandise. Treasure. Funds. Total.

British Seaborne and land frontier							
Exports ... ..	...	...	...	329,29	3,25	2,62	335,16
Imports ... ..	...	...	...	240,51	64,00	5,10	309,61
				<hr/>			
Excess of exports (+)	—	...	—	...	—	...	25,55
Excess of exports of merchandise and treasure for non-British territories (Estimated) (+)				...	...	...	3,20
				<hr/>			
				Total ... + 28,75			
				<hr/>			

The principal "invisible imports" are (1) the expenditure on interest for overseas capital invested in the country: from this amount it may be necessary to deduct payments made by the Secretary of State as these were effected chiefly by loans during the year under review; a further reference to this will be found in paragraph 4; (2) expenditure for shipping services; (3) expenditure for commissions, mainly, financial and insurance services; and (4) expenditure for other services. There are on the other hand a few invisible exports which are also briefly dealt with below.

4. *Invisible Imports*—*Net expenditure in interest for overseas capital invested.*—The degree to which India makes payments annually for overseas capital invested in this country in the form of interest has been arrived at by a detailed examination of the extent to which Great Britain has made foreign investments over a series of years. Estimates of incomes derived from British capital invested abroad are based upon income-tax statistics published by the Commissioners of Inland Revenue, and show the amount of income derived from certain classes of investments which come under the purview of the Income-tax authorities. The income which the Commissioners of Inland Revenue earmark as coming from abroad is that received from Indian, Colonial and foreign Government stocks, municipal securities, and railways, but the Commissioners of Inland Revenue do not ascertain the additional income Great Britain derives from her investments in a vast number of miscellaneous undertakings such as mining, mortgages, banking, tramways, telegraphs, telephones, jute, cotton, oil, rubber and nitrate production and industrial ventures generally. Sir George Paish in papers read before the Royal Statistical Society in 1909 and 1911 arrived at, after a laborious process, the extent of new capital investments in India and Ceylon to be as follows :—

Year.	<i>New issues of Capital investments.</i>		
	India and Ceylon.	Total Overseas Investments during the year.	Percentage of Column 2 to Column 3.
	£	£	
1908	13,469,787	145,878,300	9.2
1909	15,884,581	181,831,646	8.7
1910	14,720,503	189,151,137	7.8
Total ..	<u>44,074,871</u>	<u>516,861,083</u>	<u>8.6</u>

He examined the reports, balance sheets and income statements of several thousand companies—in fact of all the British companies working abroad about which official information could be obtained, and (1) all conversions were carefully excluded so that there was no duplication of capital issue; (2) the amounts were calculated at the price of issue and not at the nominal value of securities; and (3) vendor's shares were omitted in order to arrive as nearly as possible at the exact amount subscribed in the aggregate. As regards the net sum subscribed by British investors, he took credit for only those international loans, including American Railway issues, that had been subscribed for in Great Britain.

With regard to other particulars of the capital provided by investors up to the end of 1907, these were arrived at by capitalising the income which actually paid income tax to the British Exchequer and by examination of reports of British Companies trading abroad. No credit was taken for money lent to defaulting States, as in these instances there was, of course, no incometax paid in respect of coupons. If no coupons were cashed there was no capital against them. The capital sum invested in foreign loans was arrived at by capitalising the coupons that had been cashed. Sir George Paish took the total of investments in other lands to be, allowing for private capital employed in a variety of ways, £3,500,000,000 in 1910. Excluding private capital he arrived at a figure of £3,192,000,000. For India the total capital investments up to and including 1910 but excluding private capital (i.e. capital for which no documentary evidence was readily available) were as follows:—

	(In £ millions)		
Government	179
Railways	137
Tea and Coffee	20
Rubber	—	—	5
Tramways	...	—	4
Mines	—	—	4
Oil	—	—	3
Banks	—	...	3
Others (including Jute &c.)	—	—	10

a total of £ 365 millions. This total may be compared with estimates which I prepared for the Indian Industrial Commission some years ago. My estimates were £447 millions including capital raised in India, and excluding such capital approximately the same figure was arrived at by Sir George Paish. As was pointed out by the latter at the discussion before the Royal Statistical Society the percentage of purely Ceylon capital is a very small part of the total investments and is insignificant. In some ways it is an advantage to have these Ceylon investments, although small, in the total as Ceylon is within the "rupee zone". For recent years the percentage of Indian investments to the total has increased especially in 1922-23. After an examination of these flotations which were published by the Board of Trade in its Journal we are driven to the conclusion that the percentage for 1922-23 should be higher than the average of the three years 1908, 1910 and 1909, taken by Sir George Paish. If his estimated total capital investments for 1910 be taken at £365 and £3192 millions for India and all countries respectively this would give 11 per cent. If an allowance for capital that is repaid be made, the proportion may be taken at 10 per cent. The Board of Trade has estimated that for 1922 the income to Great Britain from investments abroad was £175 millions and this official figure, all things considered, may be accepted. The Board has pointed out in its Journal of 29th March 1923 that the fact that the estimates both of capital values and of income obtained "are subject to a considerable amount of uncertainty cannot be denied. As the flow of income from one source or another varies, the capital value of the investments will also vary. The general basis of capitalisation has, of course, changed since the outbreak of war, and this must be borne in mind in comparing pre-war and post-war totals. The wide range over which the investments are spread probably tends to maintain the income at a reasonably steady rate, since reductions may be offset by expansions to a considerable extent. It is significant that most of the rise in estimated income over the period examined can be accounted for by the produce of new issues placed in this country. While it is true that there are foreign participations in many of these, it is also true that there are British participations in issues made abroad. Loans between Governments during the war have not been taken into account in the foregoing calculations, and the interest payable thereon has also not been considered until payments were actually made. This happened last autumn with regard to the American loan to the United Kingdom and in the near future an annual payment exceeding £80,000,000 a year on this account will be due". The *Economist* estimates for 1922 this amount to be only £ 100 millions and in its issue of April 7, 1923, pointed out that the Board of Trade had taken too optimistic a view and did not take sufficient account of foreign capital sold during the war, apart from the official demobilisation scheme, of the investments lost in

Russia and elsewhere, and of the loss in profits received from abroad through the depression of trade. It seems, however, in the light of the data available that the official figure is, if unduly optimistic, more accurate than the pessimistic figure of £ 100 millions estimated by the *Economist*. Ten per cent. of £ 175 millions is £ 17·5 millions or Rs. 26·25 crores. During 1922 the Secretary of State paid interest on Government and other securities from loans and not from Councils. In this connexion approximately 50 per cent. of the total capital investments is Government securities and 37 per cent. railway securities. The investments in cotton mills (£14 millions) are very largely held by Indians while in jute mills (£11 millions) by Europeans. These latter figures are, however, small as compared with the total Indian investments. Ordinarily the Secretary of State would have paid interest charges out of the proceeds of Councils, and as this method was not actually adopted in the year 1922-23 to the full extent of the Secretary of State's requirements no deduction has been made in this Balance of Trade statement in respect of interest charges relating to Government securities. If these charges are eliminated the total invisible imports in respect of interest on overseas capital will stand at Rs. 13·13 crores in place of the gross figure of Rs. 26·25 crores.

5. *Payments on account of shipping.* With the possible exception of payments for capital invested in India, shipping payments are the most important in our invisible imports. The nature of the information used and the details of calculations made are in many respects defective. Nevertheless it is believed that the broad results are substantially accurate, and various authorities who have been consulted are in general agreement with this view, while reserving their opinion on details.

It was first intended, in order to estimate how much India paid carrying countries engaged in her overseas trade, to estimate the earnings of the mercantile marine (not profits) by calculating what amount would be required to cover expenses on the basis of time charter rates, adding in addition charterers' disbursements for bunker coal and port dues. In other words the mercantile shipping of the countries engaged in the Indian trade might have been regarded as being time chartered for general trade, and an aggregate of the charter money, plus charterers' disbursements for bunkers and port dues, would have been taken as the gross payments for shipping. This information, it was found, was not available. It was, therefore, necessary to devise some other method by which the information could be obtained. A special investigation was made by the Board of Trade of the logs of British ships trading in 1913 for the purpose of ascertaining the distribution of shipping on different routes. These rates were grouped in thirteen main groups of which India was one, and the distribution of British routes on each group together with the general level of freights was ascertained. The Board of Trade selected a representative freight rate for each route and the average annual earnings were obtained. India's share of the total earn-

ings of the United Kingdom shipping was 9 per cent. Taking that proportion for the year 1922, and if the Board of Trade estimate of £110 millions be accepted as near the mark of earnings of the British Mercantile marine in 1922, this would give a figure of Rs. 15 crores as the gross earnings of British shipping during the year. The Board of Trade figure in 1922—£110 millions—should be compared with that of £ 94 millions in the pre-war year. The *Economist* for the year 1922 has taken the same figure as in the pre-war year £ 94 millions. During the year 1922-23 Indian trade although showing a recovery was still in volume much below normal. The volume of exports and imports—based on twelve chief exports, covering (in value) 91 per cent. of the total export trade and twelve chief imports covering (in value) 66 per cent of the total import trade—showed in 1922-23 a decrease in volume of 28 per cent. as against the pre-war year, i.e., in the year under review the volume was approximately $\frac{3}{4}$ of the pre-war year. Freight rates, however, in the same period increased by over one-third. In these circumstances and in order not to err on the side of over-statement the 1913 gross earnings (£ 94 millions) may be taken and 9 p. c. of this would be £ 8.46 millions or Rs. 12.69 crores. In 1922-23 British tonnage (clearances and entries) were 78 per cent. of the total, Japan which carries a very large portion of exports especially of raw cotton to Japan—had a share of 6 per cent. the United States 3 per cent. and other countries 13 per cent. An allowance being made for payments under this head to these countries the total shipping payments for the sea-borne carrying trade for India would be approximately £ 10.8 millions or Rs. 16.2 crores. It is doubtful whether sufficient allowance has been made by the Board of Trade for the Indian coasting trade in which Great Britain had in 1922-23 78.6 per cent. of the total. Foreign countries in 1922 had 11 per cent and native craft the remainder. On an average the difference between the value of imports and exports in the coasting trade is Rs. 7 crores. If 15 per cent of this is payment for finance, insurance and minor transport charges, then this amount (Rs. 1.05 crores) should be deducted from the gross payments for shipping in the coasting trade. This gives Rs. 5.95 crores. Independent enquiries show that in 1922-23 the gross earnings of this trade were about one-third of that of the foreign trade or Rs. 5.4 crores. This generally agrees with the amount of Rs. 5.95 crores computed in this memorandum. As regards the coasting trade, however, it must be noted that not all the gross receipts of the trade should be taken in computing the invisible imports. The greater portion of this is expended in India and what is transferred to England is only the profits of the trade. In this respect then the coasting trade is similar to a firm or an exchange bank doing business in India. This treatment of the coasting trade also gives rise to an interesting corollary. The expenditure in India of shipping companies like the P. & O. say, on buying provisions or for paying its Goanese stewards, must really be deducted from the company's gross receipts

when we are calculating the invisible imports under shipping charges. The total expenditure for shipping services may accordingly be taken at Rs. 22·15 crores. The expenditure for shipping services and commissions has not been included in the balance of Trade Statement in the final computation, because under section 30 of the Indian Sea Customs Act (VIII of 1878) the Indian Import Returns include freights and insurance. An allowance of 5 per cent has been allowed for under imports for the under-valuation of imports including articles consigned to India for sale and articles of which it is difficult to obtain any real wholesale market value. The question of the under-valuation of imports, it is understood, is under the consideration of the Government of India. Indian export charges for shipping are paid by the importing countries, and are, therefore, not included in the final figures.

6. *Finance insurance and other commission charges.*—Another item for which India has to pay foreign countries annually is charges in connexion with finance, insurance and similar services. Sir Robert Giffen wrote in 1882 in dealing with such charges :—“I have already drawn attention to the point that the shipowner is not the only person concerned in the cost of conveyance, of which the aggregate excess of imports in the imports and exports of the world is composed. There are other commissions and charges, of which I have suggested that the English share amounts at least to 16 million pounds; perhaps 20 million pounds would be nearer the mark. The latter sum is only 2¼ per cent. on the total of our imports and exports—about 800 million pounds; and when I point out that insurance cannot be estimated at less than 15 s. per cent and bankers' commission, bill stamps, and minor charges 5 s. per cent. leaving only 1¼ per cent. for all other charges the estimate must be held to be moderate.” With regard to insurance charges Giffen seems to have taken a figure that was a gross charge taking no account of underwriter's losses and some reduction will be required on this account. Careful enquiries made show that for India the percentages are for insurance charges ½ per cent. to 1 per cent. bankers' commission and bill stamps ¼ per cent. and other minor charges ¾ per cent. The total charges in this connexion will, therefore, be from 1¼ to 2 per cent. of the total value of exports and imports. The total value of sea-borne trade—exports and imports—of India during 1922-23 was approximately Rs. 611 crores. 1¼ per cent. of this would be Rs. 9·3 crores and two per cent. would be Rs. 12·2 crores. In order not to over-estimate these charges, Rs. 9 crores seems, after consultation with exchange bankers and others, to be a suitable figure for the year 1922-23.

7. *Miscellaneous Items—Invisible Imports.* In addition to the three main items of invisible imports already considered, there are miscellaneous items such as the payment for management of capital invested in India to London Offices for their expenses. These expenses include the carrying on of business and auditing and legal expenses. It would cover payments to

London agents for managing loans. It also includes profits made by British merchants during the year. In connexion with mercantile profits care must be taken not to count this twice over. Some of the profits earned by Indian branches of British mercantile houses are included in the net expenditure from investments abroad and, therefore, must be allowed for only once in the statement. In this "Miscellaneous" amount would be included the remittances of officers and civil servants to pay for families in England. Another item is in regard to tourists' expenditure and it has been assumed after some investigation that tourists' expenditure in India would be offset by Indian tourists' expenditure in Europe (an invisible export) and no allowance has been made for tourists' expenditure on either side of the account. The figure under this head, it will be seen, is a net figure and an allowance has been made in this connexion for invisible exports, mainly the expenditure for missionary enterprise such as salaries, up-keep of properties etc. which is to be regarded as an invisible export. After careful enquiries it is roughly estimated that these miscellaneous invisible imports in 1922-23, a year in India of comparatively low profits etc. may possibly amount to Rs. 4 crores.

8. *Conclusions.* It will be seen that on balance, India during the year 1922-23 had a final debit balance of approximately Rs. 4 crores. It has not been considered feasible to take into consideration the balance of trade for previous years. During the war years India was unable to obtain payment for her exports in the form of bullion to the extent normally required on account of imperial interests connected with the war, and large favourable balances resulted. Nor has it been possible, in view of the exceptional years following the armistice, to take into consideration the balance of years previous to the year under review. The balance of trade is particularly difficult in the case of India because of the danger of allowing items to be counted twice over, especially those connected with the Secretary of State's transactions. As far as practicable net figures have been taken, and in future years it may be possible to improve the estimates of the items involved in this balance of international payments. Certain items have been purposely omitted to compensate for over-estimates in other items. The estimates are, of course, tentative, and subject to a fair margin of error in either direction. They confirm, however, other evidence that we are now importing a considerable amount of capital, and it is not unlikely, indeed it is probable, that with a revival of trade the import of capital for the further development of the country will considerably increase.

India's Trade Balance for the year ended 31st March 1923.
Detailed Table.

		Figure in lakhs of	
		Rupees †	
		Credit	Debit
IMPORTS.			
A—BRITISH INDIA (SEABORNE)			
1.	Exports of Indian merchandise	298,85	
2.	Exports of foreign merchandise	15,16	
3.	Exports of gold	13	
4.	Exports of silver	2,53	
5.	Exports of currency notes of the Government of India	11	
6.	Exports of money orders and postal orders	<i>nil</i>	
7.	Sterling transfers on London sold in India (" Reserve Councils ")	<i>nil</i>	
8.	Transfers of Government securities through the Public Debt Office	2,62	
9.	Funds borrowed in England for interest charges (Invisible exports)	13,12	
B—NON-BRITISH INDIA (SEABORNE)			
(French and Portuguese Possessions, Travancore and Kathiawar)			
10.	Exports of merchandise and treasure	10,36	
C—LAND FRONTIER TRADE			
11.	Exports of merchandise	15,28	
12.	Exports of treasure	48	
IMPORTS.			
A—BRITISH INDIA (SEABORNE).			
13.	Imports of foreign merchandise		224,19
14.	Imports of gold		41,22
15.	Imports of silver		20,56
16.	Imports of currency notes of the Government of India		1,01

† Rs. 1 lakh = Rs. 1,00,000 = £ 6,667 (Rs. 15 = £ 1).

Detailed Table—Continued.

Figures in lakhs of
Rupees †
Credit Debit

IMPORTS.

A—BRITISH INDIA (SEABORNE)—Contd.

17. Imports of money orders and postal orders ...	1,00
18. Council drafts—bills and telegraphic transfers on the Government of India and paid in India	3,75
19. Transfers of Government securities through the Public Debt Office	—
20. Interest drafts on India in respect of Govern- ment of India securities	25

B—NON-BRITISH INDIA (SEABORNE).

(French and Portuguese Possessions,
Travancore and Kathiawar)

21. Imports of merchandise and treasure ...	7,16
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C—LAND FRONTIER TRADE.

22. Imports of merchandise	16,32
23. Imports of treasure	1,21
24. Allowance for under-valuation of imports of merchandise and treasure excluding cur- rency notes (5 per cent of Rs. 310,66 lakhs)	15,53

INVISIBLE IMPORTS.

25. Expenditure in interest for overseas capital invested in India	26,25
26. Expenditure for financial and insurance services ‡	9,00
27. Expenditure for shipping services ‡... ..	22,15
28. Net expenditure for other services	4,00

VISIBLE BALANCE OF TRADE (Net)... .. 13,22

INVISIBLE ITEMS (Final figure from both sides) 17,13

FINAL BALANCE OF TRADE (visible and
invisible items) 3,91

† Rs. 1 lakh = Rs. 1,00,000 = £ 6,667 (Rs. 15 = £ 1).

‡ See end of para 5.

A COMPARATIVE STUDY OF THE GOLD EXCHANGE STANDARD DURING AND AFTER THE WAR.

BY PROF. B. R. CHATTERJEE, KHALSA COLLEGE, AMRITSAR.

In this short paper I shall outline the history of the Gold Exchange Standard in India and elsewhere during and after the war. The future of the Indian currency system is yet obscure. Neither the Government nor the expert opinion of the country seem to be clear as to the goal of our monetary policy. Eminent Indian Economists believe that the Gold Exchange Standard has proved a failure during and after the War and should be replaced as soon as possible by a full-fledged Gold Standard. A discussion of the questions, whether the Gold Exchange Standard has collapsed hopelessly and whether the Gold Standard has fared better, would not, I hope therefore, be considered irrelevant.

Our currency troubles began when our exports showed too great an excess over our imports. The currency and exchange mechanism could not cope with the extremely one-sided trade that occurred in the recent years. During the War and just after the Armistice the Indian price-level lagged behind the world price-level. There were only two alternatives—either prices in India had to rise to the full extent of the rise abroad or Indian Exchange had to move upwards above the par of normal times. Scarcity of silver and the danger of the paper currency becoming inconvertible stood in the way of a very rapid expansion of the Indian currency. The rise in exchange of the rupee was thus inevitable.

A Gold Standard country like Sweden had to face the same dilemma. India experienced one of the alternatives of a changed ratio between the price-level at home and outside. It was a rise in exchange above the legal par. Sweden experienced the other alternative—too rapid a rise of prices. She ran such a risk of being choked with gold that the free coinage of gold had to be suspended. Thus her Gold Standard collapsed. And we must remember that she was not a belligerent country. The strain of the War was severer on India than on Sweden.

Returning to the history of the Indian exchange—we find more dramatic changes after the War than during the War. After the Armistice, the demand for India's raw materials was stronger than ever as there was a boom of manufacturing activity in England and America. Silver, which was controlled during the War, was decontrolled early in 1919. The price of silver soared higher and higher and after it went the rupee. I believe greater attention has been paid, in explaining India's currency difficulties, to the high price of silver than to the more fundamental cause of the abrupt changes in the ratio between the price-levels at home and abroad which brought about extremely abnormal conditions of foreign trade. This will be clearer as we see the later events.

By an irony of fate the Babington Smith Currency Committee submitted its report when the rising wave of the post-war boom had nearly reached its crest and when a downward movement was imminent. The Committee's decision to push the rupee up in exchange to 2s. gold was probably justified in the light of the circumstances at that time. But its warning, that in case of an abrupt fall in the world price-level this decision was to be reconsidered, was strangely ignored. And this contingency did come about. The boom which was raising prices and cost of production in a vicious circle came to a sudden halt on account of the inability of the consumers to pay higher and higher prices. War-devastated Europe could not stand the strain and an acute trade depression set in. Prices in India however did not come down as quickly as the falling prices brought about by the slump abroad. The balance of trade which was so strong in India's favour now swung violently round the other way. Under such circumstances a high exchange policy was manifestly impossible. It was persisted in however and a heavy loss was incurred by the sale of Reverse Councils at rates much higher than the market conditions justified. Just as the rupee rose in exchange inspite of all attempts to keep it down when the Indian price-level did not rise as rapidly as prices outside, similarly it fell in exchange inspite of all attempts to keep it up when prices in India did not fall *pari passu* with the fall in the world price-level. In the latter part of 1920 exchange was left severely alone by the Government and the rupee sank very soon even below the pre-war level. For some time it seemed as if the rupee, which had become unlinked from gold on account of the collapse of the Reverse Councils machinery, had been linked again with silver from which it had been divorced in 1893. But if the rupee fell in exchange, the gold price of its silver contents soon fell still lower. The fall in the price of silver was as dramatic as its rise and was mainly due to the demand of the East for the precious metals being satisfied by heavy imports of gold which was now available from the U. S. A. In 1922 the decline of the Indian export trade and of the exchange value of the rupee reached the lowest depths. The acute industrial depression had become world-wide and harvests in India had disastrously failed. Exchange slumped to 1s. 3d. sterling in May 1921. Had the import trade also not been severely depressed the fall in exchange would have been much heavier. Towards the latter part of 1922 with the removal of the embargo on the export of food grains, the rupee seemed to rally at last at the par of 1s. 4d. During 1923, with a slow return towards normalcy, exchange also has shown more firmness. The sale of Council Bills which was suspended since January 1921 was resumed exactly three years afterwards. But as only a limited quantity is sold, these sales cannot stop the appreciation of the rupee. Government has not yet made up its mind to maintain exchange at a fixed point. The object of these limited sales of Council Bills is only to remit part of the Home Charges. At present exchange is showing great steadiness at 1s. 5d.

But before we sum up our conclusions as regards India let us have a glance at conditions outside.

Let us first see how those countries have fared which have adopted the Gold Exchange Standard not, as it were, unconsciously but deliberately and under the law of the land. During our last summer vacation I visited Siam, the Straits Settlements, etc. partly in the role of a pilgrim to Buddhist lands and partly with the object of studying on the spot the history of the currency and exchange of these countries in the last five years. A detailed account of these currency studies will soon be published. Here I shall only give very brief sketches of the changes during and after the War.

Siam, an independent Buddhist kingdom, has become modernised within the last 20 years and the history of its Gold Exchange Standard, introduced in 1908, is extremely interesting. The pre-war exchange value of the silver *tical* was 13 *ticals* to the pound sterling i.e. 1 *tical* = 1s. 6½d. a rate which remained stable for more than 12 years—1906 to 1919. It was in 1919 that currency troubles began in Siam. Her export trade, especially in rice, was extremely brisk. *Ticals* were required at Bangkok, the capital of Siam, in larger and larger quantities to finance the rice exports, a considerable portion of which went to Europe. But silver had been decontrolled in that year and its price was soaring higher and higher. The silver *ticals* began to disappear rapidly from circulation because they were now worth more as bullion than as currency. The Siamese Government hesitated at first to raise the rate of exchange. The fineness of the subsidiary silver currency (quarter *ticals*, half *ticals*, etc.) was considerably reduced. No new *ticals* were minted. But these measures did not suffice.

The strong demand for *ticals* and the rising price of silver made it necessary to raise the rate of exchange in September 1919. By the end of the year exchange mounted up to quite a high figure compared with the normal sterling parity. But the *tical* was never raised by more than 2d. at a time. It was also thought that the higher value of the *tical* was somewhat effective in reducing the price-level in Siam.

Meanwhile the Siamese paper currency too underwent considerable modifications. To meet the balance of trade, which was so strongly in favour of Siam, notes were required very urgently especially as silver *ticals* were no longer minted. The invested portion of the Paper Currency Reserve was gradually increased at the expense of the specie portion. One *tical* notes were issued. At last the paper money was declared temporarily inconvertible. The inconvertibility did not prove such a rude shock to public confidence as was feared at first.

The outward rush of rice and the consequent heavy demand for Siamese currency, which now took the form of a demand for notes, continued well on into the spring of 1920. A disastrous failure of the rice crop however completely reversed the position in the summer of 1920. The demand for

Siamese currency died away. As the balance of trade now swung violently round against Siam, there was a strong demand for sterling to meet the requirements of importers.

The *tical* portion of the Gold Standard Fund, which exists to maintain the parity of the *tical*, had to bear a very severe strain as long as there was the unprecedented excess of exports over imports. Exchange Banks during this period were paying foreign currency abroad and were demanding *ticals* in Siam. The Government had to lend the Gold Standard Fund *ticals* out of the Treasury. Since the latter half of 1920 the sterling portion of the Fund had to bear the brunt. The banks now paid *ticals* in Bangkok and demanded sterling abroad. However with the aid of the Treasury which eked out the sterling resources of the Gold Standard Fund—exchange was maintained at the high level to which it had risen by the end of 1919.

With the stoppage of rice exports there took place a great contraction in the note issue. In 1922 the coin reserve in Siam against the note issue was forty four per cent of the value of the notes outstanding. If we include money kept on current account and fixed deposit to be credit of the Siamese paper currency reserves in banks in London and Paris—we reach the very respectable figure of 72 per cent of the total note issue. Convertibility could easily be restored. But as the Siamese Government is waiting for a return to normal conditions to introduce some important changes in the whole currency system, the period of inconvertibility has been extended to January, 1925.

Another outstanding event of 1923 was the lowering of the exchange value of the *tical* by order of the Government in January. It had been kept steady for over three years at the high rate reached at the end of 1919. But a high exchange was felt as a serious drawback by Siamese exporters, especially on account of the depressed condition of Europe. The present rate however is yet higher than the pre-war par. Prices are also coming down from the dangerous heights reached just after the War.

To sum up I may quote what H. H. Prince Bidya told me in the Ministry of Commerce, Bangkok: "Our currency policy has been a fairly successful one. We have passed through critical times and have fared better than most other countries."

I may also add here that it is to the kindness of H. H. the Prince Bidya and Hon'ble Mr. Lyle, the British Consul-General in Siam, that I owe my information on Siamese currency and exchange.

Now let us pass under review the recent experience of the currency system of the Straits Settlements. In 1906 a Gold Exchange Standard was established and the exchange value of the Straits dollar was fixed at 2s. 6d. The dollar is also the standard coin of the Federated Malay States through which I had to pass in my train journey from Singapore to Bangkok. The Straits Settlements, with its great rubber industry, soon felt the effects of the

European War. Here also there was a prodigious demand for local currency to meet the requirements of trade and industry. The paper currency was declared temporarily inconvertible in 1917 and in 1918 new subsidiary coins of reduced fineness were issued. A large number of very small denomination notes (of 10 cents and of 25 cents) also came into circulation at this time. As regards the subsequent history of the Straits currency I shall give here a brief account of my conversation at Singapore with Mr. Talma, the Deputy Treasurer of the Straits Settlements.

In response to the demands of trade and industry the quantity of money in circulation was nearly doubled in the period 1914 to 1918. Then in the year 1919, owing to the great rubber boom, there was such an abnormal expansion that by the end of that year the net circulation of currency was nearly double the net circulation in 1918. The expansion consisted wholly of paper currency. It is my personal belief that such violent fluctuations in the quantity of money in circulation were due to the fact that exchange was kept stable and was prevented from rising when the favourable balance of trade of the Straits Settlements was becoming too favourable. The demand for currency came mostly from American and Japanese business men who were investing heavily in rubber. Such was the intensity of the rubber craze that food crops all over the Malay Peninsula were entirely neglected—almost all available land being given over to rubber plantations. Prices rose very fast with the abnormal expansion of currency but in 1920 rubber slumped down and by 1921 the net circulation of currency had dropped down to 50 per cent. of that in 1919. A drastic change in the price-level followed. This is another example of unstable prices at home when exchange is kept stable though conditions abroad are unstable. The American and Japanese business men are fast leaving country as the rubber industry is for the time practically ruined.

In May 1920 the silver dollar, the monetary unit of the Straits Settlements, had to be reduced in fineness and weight. Also the paper money was declared inconvertible during the period 1917 to 1921. Now that convertibility is restored there is very little demand for silver dollars. I saw only one silver dollar during my stay in the Straits Settlements.

But in spite of all these currency difficulties, exchange was kept stable throughout and the Government takes great pride in the fact. Probably this stability was maintained at the cost of great fluctuations in the price-level. But the Straits Government are firm supporters of a steady exchange and have successfully resisted all proposals to tamper with it.

In this connection it must be noted however that the Straits currency is now on a sterling basis—not on a gold basis. Had the Colonial authorities struck to the gold par of 2s. 4d the dollar would have mounted in 1919 and 1920 to £4 sterling. But the authorities followed sterling and dropped flirting with gold. The currency ordinance which came into force on 1st October 1923 has now legalised this sterling basis.

Now let us turn to the Dutch East Indies as Java is so close to Singapore. I could not go to Java as the time at my disposal was too short, but through the courtesy of P. R. Boger Esq., the Dutch Consul-General at Singapore, I managed to get up-to-date information about the currency system of the Dutch East Indies. It must be remembered that the Gold Exchange Standard was first established as a practical monetary system in Java by the Dutch Government as early as 1877. Thus it is the oldest Gold Exchange Standard country and I am glad to say that the vitality of its currency system has not been impaired by the World War.

There was not much fluctuation in exchange during the War between Holland and Java. Only very recently the Java guilder has gone down just a little in terms of the Dutch florin. Though the paper money had to be declared inconvertible yet gold for making payment abroad could be had from the banks. No currency changes are pending as the system has stood the test of the War fairly well.

As regards the Phillipine Islands, I intended to go there to study on the spot how Kemmerer's great experiment had fared. But as I had to come back from Bangkok, I have to depend on information supplied to me by Mr. Abbrecht—the American Consul-General in the capital of Siam. It is a very interesting history but I can only say here that the authorities made a muddle of everything by ignoring the main principles laid down by Kemmerer. The large reserves were invested in long-time capital loans which could not be recovered when cash was required to meet exchange difficulties. Also an amalgamation of the Paper Currency Reserve and of the Gold Standard Reserve weakened the whole system. The new Currency Act of 1922 attempts to re-establish currency legislation as it stood before the unfortunate changes were made in Kemmerer's system. It is interesting to note that the Phillipine Exchange did not collapse on account of the appreciation of the *peso* during or just after the War. It was the depreciation of the *peso* in 1920 and 1921 which caused the break-down. The Phillipine paper currency however has remained convertible throughout,

Now let us have a hurried survey of other currency systems which are not professedly on the Gold Exchange Standard basis. You all know that in recent years Australia and South Africa have virtually abandoned the gold standard. The currencies of both these gold-producing countries (and we must remember that South Africa is the most important gold-producing country in the world) consist now of paper money. Exchange is maintained with England by means of bank reserves in the Dominions and in the mother country. This is really the Exchange Standard plan. To quote the Editor of the *Economist*:—"The interests of gold producers plainly lie in the earliest possible restoration of gold standards throughout the world. But the fact remains that the idea of an independent return to the gold standard is not so much as mentioned in Australia, while in South Africa it found small support and was deliberately rejected in 1920."

Egypt too has ceased to have a gold currency in circulation. In 1913 Keynes wrote of Egypt as the only country with a Gold Standard where gold currency was not economised by the extensive use of paper money or of bank deposits. The notes of the Egyptian National Bank issued against British Treasury Bills form at present the sole currency of that country and Egyptian exchange with Britain has remained very stable in recent years.

Let us now turn to Europe. During the War gold currency ceased to circulate in all the belligerent countries and found its way into Government Reserves. The old mint pars disappeared and purely conventional pars were established where Governments could arrange to get credit abroad. Certainly all this was a close approximation towards the Gold Exchange Standard.

After the War the same statement holds good of nearly every currency in the world which has not collapsed hopelessly. An attempted transition from an inconvertible paper regime to a real Gold Standard is sure to break down as the international competition to get gold would send up the price of gold too high. We must remember that the world's production of gold in recent years has been considerably below the pre-war output. Gold has to be economised and this can be done by the Gold Exchange Standard. Such is the opinion of the Financial Commission of the Genoa Conference of 1922.

Again a gold standard is no safeguard against an unstable price-level. The Gold Exchange Standard lends itself much better to a scheme like Professor Fisher's for stabilising prices. Prof. Copland in his tract on the Australian currency has made this point quite clear.

After this review of the Gold Exchange Standard in the world let us turn back to the problems facing us at home. Should exchange be stabilised at a fixed point? We seem to have had enough of a fluctuating rate of exchange with its blighting effects on foreign trade. Public opinion of late apparently favoured stabilisation at the old par of 1s. 4d. Currency experts like Professor Jevons and Sir James Wilson also endorsed the same view. But the rupee is already 1s. 5d. and shows remarkable steadiness at that point. Reverting to 1s. 4d. would mean considerable inflation. Then we must remember that the world-wide trade depression has not yet come to an end. It is said by competent authorities that in 1920 the mistake was committed on fixing exchange at the time of a prodigious boom—should we now take the risk of stabilising exchange during a trade slump of unexampled intensity? The English price-level has fallen more rapidly in the last three years than Indian prices. In England a substantial rebound is expected to occur as a reaction after the sudden drop. We should therefore wait and see a little longer till at least England and some of the other countries, which were not hit so badly by the War, recover from the depression. I believe after another year we shall be in a better position to discuss the new par of

exchange. Probably it would be higher than 1s. 4d. The 2s. rate is of course impossibly high.

We have seen that the Gold Exchange Standard has not been such a failure as some are apt to think. It bids fair to oust the gold standard in many important countries. I believe that a gold standard in India would be really only a limping standard which would be decidedly a retrograde step. It would destroy the prestige of the rupee without strengthening our exchange. The prestige of the rupee extends beyond the borders of India in many parts of Central Asia. When we visited Western Tibet on our pilgrimage to Manas Sarowar in 1922, we found to our great surprise that even in the Forbidden Land the Indian rupee was much preferred to the Tibetan silver currency.

We can however perfect our Gold Exchange Standard. We depend here too much on the price of silver. The issue of paper money covered by bills of exchange has already been a success. I think that the quantity of currency notes issued against India Government securities should be replaced by paper money issued against Commercial bills. The "created securities" should go once for all. They are a blot on our currency system. The Gold Standard Reserves should be kept partly in India not only to disarm criticism but to supplement the rupees in the Treasury Balances when Council Bills have to be cashed on a large scale. Lastly the rate of exchange once fixed should not be considered so sacrosanct as not to admit of any change. But no considerable change should be made abruptly. Slowly and tentatively the rate should be accommodated to change in the world outside. The history of the Siamese currency and exchange is a good illustration of this point.

THE GOVERNMENT OF INDIA AND ITS CURRENCY POLICY.

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Speaking at the meeting of the Associated Chambers of Commerce which held a Conference early in December 1923 at Bombay, Sir Basil Blackett undertook what one may regard as an elaborate apology of the currency policy of the Government of India. It is now increasingly recognised by economic thought of all shades that rightly or wrongly our modern economic life has been so intimately interwoven with currency and monetary institutions that every phase of the economic life and the very welfare of society from the point of view of its material needs depend upon the proper working of a currency policy and upon the proper organization of banking and credit. But whilst the West has thus awakened to the need for a sound currency as vital to economic welfare, Indian public opinion seems to be more or less indifferent to the problem, and views with seeming unconcern the reckless experiments with the currency of the country carried on by our foreign rulers, experiments which if they were carried on without a definite policy behind them lay the Government open to the charge of culpable neglect of its duties, and if carried on with such a definite policy imply a deliberate sacrifice of Indian interests of which the Government is the professed guardian.

The policy of the Government of India ever since the first closing of the mints to the free coinage of silver in 1893 has been based upon the fundamentally wrong assumption that the primary want of this country in the matter of currency is the fixity of exchange between the silver rupee made sole legal tender by the East India Company in the early part of the nineteenth century, and the gold pound in which she had and has to settle her foreign commercial transactions. The Chamberlain Commission emphatically asserted that the cardinal feature of the currency policy of the Government of India is "absolute security for the convertibility into sterling of so much of the internal currency as may at any moment be required for the settlement of India's external obligations." Fixity of foreign exchanges was thus regarded as the be-all and end-all of a sound monetary system. Mr. Keynes in his "Indian Currency and Finance" endorses this view: "The currency problem of each country is to secure that they shall run no risk of being unable to put their hands on international currency when they need it, and to waste as small a proportion of their resources on holdings of actual gold as is compatible with this." The only principle that should guide and determine the organisation of a sound monetary system is thus stated to be the possession of adequate quantities of gold to meet an unfavourable balance of trade.

It is this view that receives a fresh official sanction in the speech of Sir Basil Blackett before the Conference of Associated Chambers: "It

follows that before any attempt is made to stabilise exchange we must be very sure that we command the resources which are necessary to make certain that the attempt will be attended with success. I therefore ask myself whether the reserves available to the Government of India in case of need for maintaining the external value of the rupee at sixteen pence are adequate or not. The London *Times* echoes the same opinion in criticising the demand of the Indian Merchants' Chamber of a fixity of exchange, "A rate of exchange between the countries must in the long run react to, and depend upon, variations in their respective price levels. A demand that the rupee shall by official agency be stabilised in sterling or gold necessarily implies that Indian prices shall somehow be made to rise or fall *pari passu* with sterling or gold prices as the case may be. Nothing can be gained by pretending that the problem is any smaller than that. It is conceivable that the forces which have been operating to cause the sterling value of the rupee to rise may, after sundry ups and downs, carry it as far as 1s. 4d. gold or even higher. It is possible that India in due course may achieve stability at that or other level earlier than less fortunate countries. But to make any premature attempt at stabilisation is to invite failure." It is not a little surprising to observe the parallelism between this line of argument and the official defence of the Government of India by Sir Basil Blackett on the question of the currency policy. The sole object of a sound currency for India is assumed to be stabilisation of foreign exchange and the readiness of Indian prices to respond to changes in sterling prices—not the Indian prices as determined by a genuine silver rupee with free coinage and open mints, but Indian prices adjusted to an artificial rupee coined by a Government endowed with the power of regulating the issue and liable to the temptation of over-issue.

In short the whole history of the Indian Currency measures since 1893 has been founded upon the assumption that the soundness of the monetary system in the country is to be judged by the relative stability of a par of exchange between the rupee and the sovereign, a par fixed by legislation at 1s—4d. when the market rate was 1s 1d. and abandoned by legislation in favour of 2s. by considerations not entirely determined by the genuine desire to bring the legal ratio into a parity with the market ratio. But any one who is familiar with the elementary principles of currency knows that a sound system of currency—fulfils certain indispensable objects and satisfies a few basic needs of economic life. It supplies a standard measure of values, and offers a universally accepted medium of exchange; it also offers a standard for deferred payments and serves as a store of values. All these objects can be summarised in the statement that a sound system of currency secures relative stability in the level of prices, or what is the same thing relative stability in the purchasing power of the monetary unit. The history of the currency policy in the West during the last few centuries has been the history

of a series of attempts to secure relative stability of purchasing power by the alternate use of gold and silver as standard units and by isolated experiments at bimetalism, Great Britain adopted a gold standard as early as the first quarter of the 19th century and by the end of the 19th century the rest of the world with the exception of China became converts to a gold standard, reducing the silver coins to tokens or at any rate restricting silver coinage by closing the mints. Then followed the war with its serious consequences; the cost of the war could only be met by the issue of paper money which in a large number of countries has now become inconvertible; America has absorbed enormous quantities of gold which she is not willing to part with; and the best minds of Europe to-day are occupied with the task of evolving a temporary solution which would enable these countries to tide over this crisis to happier times when they could return to the gold standard pure and simple.

The experience gained by the past in the world as a whole endorses a verdict in favour of gold as the only substance to be used for money,—and the abandonment of silver for standard coins. It seems almost surprising to find in a recent handbook on Money (D. H. Robertson in the Cambridge Economic Handbooks) an argument against the use of gold as standard money based on the consideration that its use has not secured absolute stability of purchasing power. Nobody ever seriously suggests that such absolute stability is practicable, however desirable; and one can only understand the drift of the argument when he realises the practical bankruptcy of the Western countries and the frantic demand for gold which has practically disappeared. But this apart, economic thought and economic practice as illustrated by the monetary systems of all civilised countries before the outbreak of war alike recognised the principle that the only satisfactory system of currency is one that rests on a gold basis—in other words an effective gold standard. Such a system involves in the first place that all values are to be measured in terms of a standard unit of gold defined by law, and that all other media of exchange which are simultaneously employed in the shape of token coins, paper money, cheques, bills of exchange and the rest, are ultimately convertible into the standard coin; convertibility of all substitutes into the standard coins, requires free and open mints and a reserve of gold readily available for converting paper into the standard currency for internal purposes and for shipment abroad in case of external liabilities. A gold standard system does not necessarily involve only the use of gold coins for commercial transactions—the use of token coins and commercial paper money has long been familiar, and they have been known to circulate at their face value under wise limitations as to issue. An organised system of banking economises the use of gold for the purposes of internal currency even to a greater extent than token coins and paper money.

Thus after centuries the civilised world has evolved a system of currency resting on ultimate and immediate convertibility of all media of exchange into gold as the only instrument of securing relative stability of values. Thus Mr. Harold Cox writing in the *Edinburgh Review* in 1923 with regard to England observes: "What we aim at is some measure of value which the whole world accepts and which is free from the dangers of political chicanery. Such a measure is provided by gold. In the first place the intrinsic merits of this wonderful metal are appreciated by practically the whole world; in the second place the amount of it available for use cannot be rapidly varied as to alter to any serious extent the world's estimate of its value. The important consideration is that the value of gold can only change very slowly because of the great volume available for use and because of the multitude of varying uses to which gold can be put. Consequently prices measured in gold can only vary slightly over a considerable period of years. This means that for most purposes of business gold prices are effectively stable". So also J. M. Keynes writing in the *Manchester Guardian* Reconstruction number in April 1922 observes. "The foreign exchanges compare in the value the money of one country with that of others. Thus their fluctuations necessarily affect merchants who buy in one place and sell elsewhere. To ensure invariability is the problem of stabilisation. Hitherto only one good solution has been found, a world-wide gold standard. I see no other solution of stabilisation practicable now, except this traditional solution—namely a gold standard in as many countries as possible". Even under the abnormal conditions created by the war with an absolute scarcity of gold for the purposes of internal currency, when economists urge the desirability of gold exchange standard with inconvertible paper for internal purposes, such a proposal is regarded as a temporary expedient to tide over a critical period. Thus "a metallic standard can afford no guarantee of the preservation of a fixed monetary unit. The variation known as the Gold Exchange system, useful inasmuch as it diminishes the volume of gold in current use, is even less able than the unmodified standard to guarantee the constancy of the monetary unit". (S. A. V. Stuart.—*Economic Journal*, 1923, p. 149). So also another of our authorities: "Whatever may be said from a theoretical point of view against gold as a standard of value it seems pretty sure that most countries look forward to the restoration of a gold standard and the resumption of gold payments as the real rescue from the hopeless muddle of the present monetary system. We must reckon with this desire as a matter of fact" (*The World's Monetary Problem*, p. 78, Gustav Cassel). To quote the Cunliffe Committee, "we have found nothing in the experiences of the war to falsify the lessons of previous experience that the adoption of a currency not convertible at will into gold or other exportable coin is likely in practice to lead to over-issue and so to destroy the measure exchangeable value and cause a general rise in all prices and an adverse movement in the foreign exchanges."

In the light of these general principles let us now survey the currency policy of the Government of India. The linking together of the constituent units of the world by ties of international trade has forced upon every country a recognition of the fact that stability of the price-level depends not merely upon the purchasing power of the monetary unit within the country but also upon the rates of exchange between the monetary unit of one country and the units of other countries with which it has commercial relations. India had a gold standard and a gold currency in the past, which was replaced by a silver standard and currency by the East India Company in the first half of the nineteenth century. The violent fluctuations which followed in the purchasing power of silver in the second half of the century led the Government of India in 1893 to close the mints to the free coinage of silver, with the distinct understanding that this was to be temporary measure with a view to finally adopting a gold standard. When after five years in 1898 the exchange rose to 1s-4d as contemplated in 1893, on the recommendations of the Flower Committee the sovereign was made legal tender in India, with the depreciated silver coins in circulation as unlimited legal tender; the Government of India undertook to pay rupees in exchange for gold, but not gold in exchange for rupees. The gold which the country got was exchanged for silver, and the Government taking advantage of the situation began the recoinage of the depreciated silver practically inconvertible fiat money, the profits being accumulated in gold in London as the gold standard reserve. The only logical outcome of the recommendations of the Herschell and Fowler Commissions should have been the utilisation of the gold in India for the building up of a good reserve in the country with a free and open mint for the coinage of sovereigns. The primary function of a sound monetary system is to secure stability in the purchasing power of the monetary unit; silver was abandoned in 1893 with a view to the ultimate introduction of a gold standard. The gold standard requires a mint for the free coinage of gold. Instead of this the Government of India sought and succeeded in introducing an artificial monetary unit whose face value was greater than its intrinsic value, thus reducing at a single stroke the savings of the masses by 40 p. c. and a measure which was intended to secure stability in price-level in reality brought about a violent disturbance in the price-level till it gradually adjusted itself to new conditions after a number of years. The Gold Exchange Standard thus introduced after 1899 was specially intended to secure stability in the rate of exchange. To defend the Government of India policy on any other ground is to admit that the interests of India were intended to be sacrificed to the interests of British merchants and capitalists. But if one fact stands out more saliently than any other in the history of the currency experiments in India it is this that the rate of exchange cannot be stabilised by Government regulations and manipulations.

The only reasonable method of securing relative stability in foreign exchanges is the introduction of a sound monetary unit defined by law,

with an ample reserve of metallic money or bullion to secure convertibility for internal purposes and the flow of metal to and fro in settlement of international obligations. In no other country in the civilised world to-day do we find a deliberate attempt by Government to interfere by legislation and executive measures with the free movement of the precious metals.

Stability in the rate of exchange could have been more easily secured by the introduction of a gold currency leaving banks and financing institutions to look after the settlement of international obligations. Instead of this, the Government of India finding itself in a position to make huge profits on the coinage of silver went on coining huge amounts of a depreciated coin, and building up a gold reserve which it kept in England for the ostensible purpose of stabilising exchange but in reality for building up credit for English enterprise and commercial development. For the last thirty years practically the gold that should have come to India in settlement of the international claims has been artificially prevented from flowing through its channel of trade by the Secretary of State's sale of Council Bills over and above his normal requirements, thus compelling the people of India to accept payment in a depreciated currency.

Two courses were conceivable in 1893 when the Government of India entered upon its currency Policy. India might have retained her silver currency with a fluctuating exchange rate left to itself; this might have meant some disturbances in the purchasing power of the monetary unit and some restriction in the expansion of her foreign trade; but it would have secured an honest currency and as her exports were and are more or less indispensable to the industrialised Western Nations she would have continued to receive in her own honest currency with a low rate of exchange amounts indefinitely larger than she did receive with an artificially propped high rate of exchange. The other and the better alternative was the substitution of a gold standard with a gold mint making the silver coin a token coin and leaving her foreign exchanges to themselves to be settled by banking and finance. The Gold Exchange Standard has created an inconvertible token coin forced into currency by the law, with the temptation to over-issue—and this temptation has been too great to be resisted; the resulting profits instead of being kept in gold in India have been kept in London to finance British commerce and immense sums have been disastrously frittered away by being locked up in securities that depreciated. The war violently shook all calculation of financiers; the solemnly fixed ratio of 1s. 4d. intended to be a guarantee of Government intentions to give a stable measure of international values, was altered to 2 shillings; if this measure could exercise any influence on the price-level it could have meant only a violent disturbance of that level—the very thing that Government professed to avoid by its currency policy. And now on the top of this all we have the recent transfer of the gold in the Paper Currency Reserve from India to London; at a time when every country in the world is

clamouring for gold, India is the only country which is to be forced to part with its gold, because she is supposed to have no use for it and because the foreign rulers have a use for it.

It is this policy in its entirety that Sir Basil Blackett endeavours to defend in the name of sound economic principles. Sir Basil professes to be a whole-hearted admirer of "The Gold Exchange Standard" and contends that India's currency policy is in a line with that which the Western countries are adopting in view of the scarcity of gold. He observes. "The goal towards which we are all working is of course a gold standard. England is doing the same. A gold standard does not by any means necessarily mean a gold currency." This is an exceedingly misleading statement. If all that is meant by this statement is that in countries with a gold standard gold in actual currency should be economised by the use of paper money and cheques and other substitutes, undoubtedly it is true. But India is as far away from it to-day as she was in 1893. But if it is intended to convey that a country can have a gold standard and yet find its internal currency inconvertible, than no economist will ever accept such a system as a gold standard, you might as well call it a copper or a paper standard. The one test of a gold standard is the convertibility of all substitutes into gold; and Sir Basil Blackett himself acknowledges this by calling his system a Gold Exchange Standard. Sir Basil supports his defence of this system by three authorities. The first is that of Plato who in his ideal city is content to have currency notes stamped on leather for internal purposes. The second authority is that of Keynes who also fights against a phantom of his own creation when he suggests that we mean by a gold standard one in which gold is "the important medium of exchange." "The currency problem of each country" says Mr. Keynes is "to insure that they shall run no risk of being unable to put their hands on international currency when they need it, and waste as small a proportion of their resources on holding and actual gold as is compatible with this."

It is evident we are not all of us ideal citizens living under an ideal government; our Rulers we know to have imbibed the traditions of shopkeepers; and we can freely accept a piece of paper only when we are confident of its immediate convertibility into gold. Our rupee is a token coin which we cannot convert into gold; and when the Government coins rupees it is forcing inconvertible paper into circulation. But even assuming Mr. Keynes' contention to be valid, we have two considerations to urge. In the first place, as we have already observed, the Gold Exchange Standard is only a temporary measure to which the European countries are forced to resort after the war to meet an abnormal situation. The Western countries need gold for purchase of raw materials and food; and they may well be forced to justify their inconvertible paper money as a scientific system of currency with a view to using the little gold they possess for settlement of international indebtedness. But why should

a policy which is professedly a temporary measure for starving countries be preached as an ideal for India which on account of its favourable and advantageous position can always compel foreigners to pay her in gold? From year to year India possesses a favourable, balance the industrialised West needs her food stuff and her raw materials; India can insist on being paid in gold under power of self-determination. She can, if she is not prevented by her rulers, have not only gold enough to be solvent in international relations in case of an adverse balance but gold enough for all her internal requirements, with a gold standard and immediate convertibility. A policy avowedly forced upon a reluctant Europe as a *pis aller* is lauded as a scientific system worth imitating for India! But even assuming Mr. Keynes' contention to be correct, are we in India under the present Gold Exchange Standard sure that we are able to put our hands on international currency when we need it? The only way in which this could be effected is to leave the movement of the precious metal alone, or if Government is to help, the only method is to offer gold through the Treasury Offices or the banks for shipment when it is wanted. Instead of this, the gold to which India is entitled by her favourable balance is diverted to London, invested in sterling securities or kept as cash balance to strengthen the gold reserve which ultimately finances English industries and English commerce to the sacrifice of Indian industries.

Sir Basil quotes in his support the resolutions of the Currency Committee of the Genoa Conference. The Gold Standard for the European nations in the immediate future cannot indeed be the gold standard of earlier days.

The European nations have not gold to finance their internal needs; enormous issues of paper money have brought about depreciation of currencies in terms of gold, and even of gold in terms of commodities; fluctuations in foreign exchanges have hampered trade, and a return to the gold standard of old seems out of question for some time to come. If by concerted action on the part of all the nations including the enemies and the dependencies of the Allies as well as of America who is holding aloof the world's stock of gold could be distributed according to the requirements of each country, or an international loan arranged for financing the produce, India could rightly be asked to share in an equitable arrangement of this kind; but when America will not part with her gold, when the enemy countries are strangled to death in the foolish desire to exact reparations, when even the Allies are jealous of one another's aims, to call on India to accede to an arrangement by which her gold could be utilised for English interests and to call this a system which the genius of English Finance Members invented to lull the European World out of its present economic muddle is to add insult to injury so far as India is concerned.

There is nothing so tragic in the entire history of British Rule in India as the light-hearted and reckless manner in which her currency system has been dabbled with by her foreign rulers since 1893. The linking up of India

with foreign countries by ties of commerce undoubtedly laid the level of prices in India before 1893 open to changes to which the rate of exchange was an index. These changes were due to the violent fluctuations in the gold price of silver which was the monetary unit of India; and the only statesmanlike remedy was to bring India into a line with the rest of the civilised world by giving her a Gold Standard. The closing of the mints in 1893 was intended to be the first step towards the adoption of the gold standard; the Act of 1899 declared the sovereign legal tender in India; the Fowler Commission recommended the throwing open of Indian mints to the unrestricted coinage of gold. Fresh rupees were not to be coined until the proportion of gold in the currency was found to exceed the requirements of the public, and profit on the coinage of rupees was to be kept in gold as a special reserve. All these recommendations remained on paper; the proposal to coin sovereigns in India was shelved; the gold reserve arising out of the profits of silver coinage instead of being kept in India to meet the external demands was transferred to London; the gold to which India was entitled year to year in settlement of her export trade was prevented from flowing to India; it was urged that from time immemorial India has continually absorbed the precious metals. If India was entitled to the gold she had every right to do with it what she liked. Nobody disputes the right of any self-governing country to do what it likes with its own precious metals. But the difference between America to-day and India is that the one is independent and able to carry out her national policy, the other is dependent and at the mercy of her British rulers. If the sovereign does not circulate but disappears in India under the British rule it is an index to the fear that it will not be available for use when people part with it in normal exchange. The fact that India will absorb the gold that might otherwise be available for use in London has dictated the currency policy of the British rulers.

There has not been a single instance in the history of the relations between an Imperial Government and her subject dependencies to match with the currency policy of the British rulers of India in which the interests of the dependency have been so deliberately and hopelessly subordinated to the interests of the rulers.

The whole policy of the British rulers in India is, as we have already indicated, based on the assumption that the sole purpose of a currency is to secure stability of foreign exchanges. The immense resources in the shape of gold that India possesses to-day—both in the Gold Standard Reserve and the Paper Currency Reserve—are to be used not for securing the internal convertibility of the rupee in gold, but for stabilising the exchange value of the rupee. Nowhere have we seen it asserted as we do in India by our finance experts that we are to have gold as a standard without an open mint, that our token money is to be inconvertible, and yet unlimited legal tender that Government is to be free to issue as much of this token money as it pleases because it is unlimited legal tender and that a depreciation of this token money for the purposes of internal

commerce is not vital to the well-being of the country, and yet this is just what we are repeatedly told in India. Sir, Basil Blackett throws the statement into our face when he tells us that "the reserve of international currency held by the Government of India and banking reserves as well as currency reserves; that is, they are intended to be a guarantee of solvency in the face of any conceivable balance of indebtedness against us, even if at the same time we had to face an internal banking crisis as well."

It is difficult to realise what economists would have to say if it was proposed that in Great Britain the shilling should be unlimited legal tender, if there was no mint for the coinage of the gold pound, if the reserves of gold instead of being kept in London were kept in Paris or New York, and if such a system was sanctified as an excellent measure intended to stabilise the gold price of the silver shilling and to secure the solvency of Great Britain in the international market! And yet this would be only half as absurd as the present defence of the currency policy of our rulers intended to guarantee the solvency of a country which normally claims gold from year to year from the rest of the world in return for the food and the raw materials that she supplies.

Sir Basil Blackett in a lofty strain urges in defence of the currency policy that "in matters of currency there can be no irreconcilable conflict of interests between nations. The advantage of the whole must also be to advantage of every part. I cannot admit for example that the questions which we have been discussing to-day can be viewed either from an Indian or from an English stand point." All this sounds very philosophic. But when the world's stock of gold is limited, and every country desires to appropriate as great a portion of it as possible, how can one country gain except by another country's loss? If England and India were equal parties in a large federation of nations aiming that an equitable distribution of the world's gold resources, such platitudes as Sir Basil indulged in might be obviously true; but if India is entitled to a claim on the world's stock of gold of which she is indirectly deprived by being given substitutes in the shape of depreciated coins and paper money, it is ridiculous to suggest that there is no conflict of interests between India and her foreign rulers who profit by such manipulations.

Throughout these thirty years the currency policy of the Government of India has been determined by the single idea that the sole object of a sound currency is to secure the stability of the exchange value of the rupee an assumption fundamentally wrong and misleading. Prof. Nicholson rightly raises the question: "Does it follow because the stability of the gold price of the rupee has been established for the purposes of foreign exchange that therefore it may be taken for granted that all other functions of good money are fulfilled by the rupee as so 'managed'?" It might be truly said that in the ardent desire to stabilise foreign exchange the Government of India ignored completely the fundamental object of every sound system of currency namely that of securing stability of the purchasing power of the monetary

unit. Nay it might be even suggested that the country was subjected to violent fluctuations in the internal level of prices as a consequence of this attempt at stabilising the rupee. And with regard to this one object of stabilising the rupee that governed the policy of our rulers in matters of currency, we have already seen how disastrously it has been believed by the erratic course of foreign exchange during critical periods when alone its strength could be put to the test.

And whilst this currency policy after a trial of nearly thirty years has failed to secure the main object for which it was brought into operation, we are further told that this very object stability of foreign exchanges "As an important facility rather than an essential condition" (Babington Smith Committee's Report), even the ardent apologist of the gold exchange standard now concedes this point. Mr. Keynes in March 1923 in reviewing Jevons' "Future of Indian Exchange" observes: "Prof. Jevons over-estimates the advantage of stability in exchange as against stability in internal price level in the case of such a country as India. Stability in the internal price level is so superlatively desirable in such a country as India that the fact of having got through the recent cycle with so small fluctuations of internal prices is a great deal to be set against the inconvenience to merchants engaged in foreign trade from the fluctuations in exchanges."

If Keynes is right, and stability in the internal level of prices is superlatively desirable the only way to secure this stability is to have a gold standard with silver as a token coin, freely convertible into gold. If Sir Basil Blackett is prepared to swear by Keynes, it is surprising that he should at the same time defend a Gold Exchange Standard whose one merit is to secure stability of foreign exchanges.

What is still more surprising is to find an economist of the type of Keynes seriously urging that the internal price level of a country like India, linked to foreign countries by commercialities, should be unaffected by fluctuations in foreign exchanges which are an index of fluctuations in world prices. We can only account for this as a result of a psychological obsession inhibited by the desire to justify the Gold Exchange Standard and the currency manipulations of the Government of India.

The defence of the currency policy of the Government by Sir Basil Blackett plainly indicates that the Government of India has now made up its mind to adhere to the Gold Exchange Standard. Sir Basil observes: "Our aim is to reach a Gold Standard for the rupee, just as England's aim is to restore the old purity of sterling with gold." When Sir Basil Blackett speaks of this as a step towards a "gold currency", he is either unaware of the meaning of the expression that he employs, or he deliberately misleads the Indian public by an ambiguous phrase. Behind this defence, we are afraid, the Government of India may have the object of stabilising the rupee at a higher rate than *1s. 4d.*

Mr. Keynes' acrobatics in the Economic Journal where he criticises Prof. Jevons are evidently intended to defend a policy of watching the foreign

exchanges till a favourably opportunity occurs to stabilise the rupee at a rate more favourable to the importers. Recently the old plea that a higher rate of exchange is favourable to India has been strutted forth in official circles—it is a shadow cast before of coming events. The unwillingness of the Government of India to alter the legal ratio which no one takes seriously also points to the same object of manipulating the currency with a view to stabilising at a higher rate. When finally Sir Basil speaks of reaching “a gold standard for the rupee” he is either using a meaningless phrase and talks in the air—for the rupee is linked to gold ever since 1899 and has already reached 1s. 4d. which was the pre-war legal ratio, and which according to Sir Basil’s own calculations the present reserves are more than sufficient to maintain or he has the clear intention of “reaching” in the near future “gold standards” at a higher rate and maintaining it at that level with all the resources which Government command. And these resources of Government are adequate enough for the purpose—with a favourable balance any rate of exchange can be reached by a Government that can limit the circulation of internal currency and expand it at its own sweet will. We only desire to draw attention to the fact that what is feasible to-day may become impossible of realisation to-morrow; and if the economic welfare of India demands a gold standard with an open mint with a subsidiary silver coin, the present favourable balance, the present price of silver and the world demand for India’s food produce and raw materials and the strength of her various reserves make up a combination of forces which will never recur in the future for realising the objects of a sound monetary system.

But the events of the last few weeks point distinctly to the determination of Government to adhere to their Policy of a “managed” currency and as they succeeded in the period between 1893 and 1899 in pushing up the rate of exchange from 1s 1d which was the natural or market rate of exchange to 1s 4d by limiting the supply of currency, so they now seem determined to push up the exchange value of the rupee still further to 1s 6d or 1s 8d or even 2 shillings by managing the supply of currency. Not that we suggest or advocate a return to the pre-war rate of 1s 4d; what we protest against is a system of artificial and managed currency such as the Government of India has adopted since 1899. The intentions of the Government are evidenced in the first place in the measure recently adopted in connection with the transfer of gold from the Paper Currency Reserve in India to London. At a time when with a favourable balance of trade India should be receiving gold from month to month the country is being denuded of the gold at its disposal, because Government considers it superfluous. Thus the transfer of gold from India serves indirectly to raise the exchange rate. In the second place the old practice of selling Council Bills over and above the requirements of the Secretary of State and investing the proceeds in British securities—the Secretary of State has added in this manner within the period of a fortnight securities worth 6 crores of Rupees—has been resumed with the return of favourable conditions. The sale of Council Bills means a

diminution of the resources of Government to that extent in India which lie with the Imperial Bank and the consequent stringency in the money market—a stringency evidenced by an abnormally high bank rate. Thus at a time when with a favourable balance India ought to overflow with the precious metals, thus helping a credit superstructure to finance trade and industry, we find an actual contraction of credit with all its depressing effects on trade and commerce. We had an Industrial Commission for suggesting measures for the development of Indian industries and a Fiscal Commission to foster and protect nascent Indian enterprise; and a Tariff Board gravely discussing the extent of the protection to be given to key industries; and on the top of it all we have currency manipulations which can only have one effect that of making all industrial development difficult by the contraction of credit. Even in a country with a large credit superstructure the raising of the bank rate by one per cent created a clamour in economic circles; what shall we say about the prospects of industry in a country like India with a banking organisation far behind that of England if amongst other things the currency measures of the Government can within a few weeks compel the banks to raise the bank rate from 4 to 7 p. c. Thus the transfer of gold and the sale of Council Bills are clear indications of a deliberate attempt at persisting in the policy of the past thirty years, which aims at giving the rupee an artificial exchange value, and which has resulted in depriving India of millions of worth of gold which might have flowed into the country, diffusing prosperity and stimulating her industries. A right or wrong policy in matter of currency and exchange vitally effects the entire economic life of a country; and whilst public opinion is concentrated on the question whether the rate of exchange should be 1s 4d or 2 shillings the main issue is apt to be lost sight of. The primary need of India is the adoption of a sound monetary system; this need can be easily met owing to the advantageous position of India in the international market, our rulers instead of meeting this in a statesman like manner have experimented with our currency to the sacrifice of our interest and this experiment is now to be continued in the same reckless manner as in the past and is to be defended in the name of "sound economics". The only way out of this muddle is the adoption of a gold standard and gold currency.

THE GOLD EXCHANGE STANDARD OF INDIA.

(Pre-war period).

BY MR. T. J. KUMARASWAMI.

The term gold exchange standard denotes a standard of currency based upon gold, but composed of substitutes for gold coins for internal circulation both being unlimited legal tender and mutually exchangeable at a rate permanently fixed as gold value of the substitute. Mutual exchangeability and ready convertibility from one to the other are highly indispensable to the successful working of this system. A system providing only for the issue of substitutes for gold but not for that of gold for substitutes provides for no exchange between the two, but only for a transfer of tokens for gold.

The issue of substitutes and their convertibility into gold should be free and easy else there will not be that automatic response on the part of supply to the demand for currency. If the substitute is manufactured from another precious metal which is occasionally subjected to violent fluctuations in value the issue as well as the convertibility of the substitutes will be rendered difficult. Even under ordinary circumstances convertibility will be rendered difficult not only by the usual loss in value that may result by selling the coin as bullion but also by a sudden fall in the price of the metal itself which is likely to occur if a large quantity of it is suddenly thrown upon the market. Inconvertibility during crises means chaos and national bankruptcy. It is highly disastrous to the industrial prosperity of the country.

In a period of rapid industrial progress though the evil effects of inconvertibility may be negated to a good extent by the favourable balance of trade yet it is liable to bring about inflation as the issue of substitute is not regulated by a free mint but by governmental agencies which in busy seasons could increase the tokens but could not provide an outlet for them in slack seasons.

Necessity is the mother of invention. A gold exchange standard was thought of by Ricardo at a time when gold was at a premium. It was not given effect to in England itself as gold became abundant soon after due to the fresh discoveries of gold mines and increased production of that metal.

Countries having large stocks of silver in their currencies and not having a very favourable balance of trade have adopted the standard as a transitional measure as a link between silver mono-metallism and gold mono-metallism, or between bi-metallism and monometallism. A precious metal different from the standard cannot serve as an unlimited legal tender permanently as a substitute for reasons given above. Many of these countries which adopted a gold exchange standard adopted a costly substitute in the form of silver coins. Many of them except India provided for a mutual exchangeability between gold and the substitutes. Mexico when adopting the Standard got the sanction of her legislature to a provision to adopt the pure gold standard itself in case of a rise in the gold price of silver as it was

thought that any other measure as an alteration of the ratios of exchange between the gold coins and the substitutes would result in an exchange debacle and a financial crisis of the worst magnitude.

It is a misnomer to call the Indian standard of the post 1893-98 period as a gold exchange standard. It did not provide for the mutual exchangeability between the standard and the substitutes, i.e. gold and rupees. Rupees were printed on silver and paper. The paper rupees were convertible into silver rupees which curiously enough were continued to be minted on a tola of silver eleven-twelfths fine even though the rupee was made to signify a gold coin representing one-fifteenth of the pure gold contents of a sovereign, i.e. 7.53844 pure grains of gold, according to the Indian coinage and paper currency act of 1899. The Rupees were not convertible into gold. Thus it will be seen that the substitutes printed on paper and silver were inconvertible into the standard money. The so-called convertibility of the paper currency was no convertibility at all. The paper money was like the silver certificates and the rupees printed on silver, were like the silver dollars of U. S. A. in the 19th century, legally on a parity with gold as a legal tender but not convertible into gold. These silver dollars and silver certificates were at a small premium as compared with silver bullion but at a great discount compared with the gold dollars due to the faith of the people in their government and to the fear they entertained about the full, redemption of those substitutes in gold. The faith gave the premium and the fear brought about the discount. That was so even in such a civilised country as U. S. A.

The only point of resemblance between a gold exchange standard and that which went by that name in our country is that substitutes were provided for gold coins. Our system differs fundamentally from the one contemplated by a gold exchange standard as ours does not provide for the mutual exchangeability and for an easy and ready issue and convertibility of the substitutes. Moreover, our substitutes besides being costly are printed on a metal which we have got in such a quantity in our country that any sudden attempt to throw them on the country as bullion is likely to bring down its price seriously.

Another serious defect is that the issue of currency has been left to the Secretary of State who by his sales of Council Bills in busy seasons went on adding to the stock of currency without providing an outlet for it in the slack seasons. The Government revenue is being collected in the busy seasons and it adds to the stringency in the money market, and to the additional demand for currency in those seasons. The Government increases the stock in the slack season by disbursing the rupees during that season. Mr. M. De P. Webb in his book on 'Advance India' states, "without an open mint the manufacture of money depends upon the judgment or upon the idiosyncrasy of some individual or individuals holding office under government and with the result that instead of being automatic in response to the general demands of the public the manufacture, or delay in manufacturing, or the

non-manufacture of money is liable to be inspired by the private or class requirements of a few influential merchants or big money dealers. Thus the foreign exchanges, the current rate of interest and the general level of prices may all be influenced by withholding money when it is badly wanted or issuing it in excessive amounts when there is no real widespread demand for it. The defects and grave abuses inseparable from state management have been so widely recognised that closed state-managed mints have been everywhere abandoned long ago". The state-managed currency has resulted in an inflation even in the pre-war period as may be illustrated by the index numbers of prices ruling for India and other countries in 1912 as compared with the quinquennium 1890-94.

INDEX NUMBERS OF PRICES: BASE 1890-94.

1912.

	India	...	147
	England	...	124
	France	...	120
	Australia	..	120
Tariff ridden	}	U. S. A.	... 128
		Canada	.. 130

During this period the business in the country improved by 369 p. c. (Page 446 Shirras on Indian Currency). Thus it will be seen (1) that the magnitude of the rise in prices is far greater in India than in any other country, (2) that the currency has been increased by such an amount as to not only counteract a fall in prices of 73 p. c. which would have happened with an increase in business by 369 p. c. but also to bring about an inflation of prices by 47 p. c. The cumulative effect of the yearly additions to currency is bound to tell upon the industrial prosperity of the country in spite of such a rapid increase in the business of the country. Our proverbial favourable balances could not prevent the crisis in 1907 and 1908 which were greatly due to such an inflation. And the inflation in the post 1908 period would have also made itself felt but for the conditions brought about by the War which increased the demand for the Indian commodities by leaps and bounds.

Another fact about our system is the ignorance of many about the true significance of the rupee. That a post 1899 rupee represented one-fifteenth of the pure contents of gold in the sovereign, i.e. 7·53344 grains of pure gold has not been understood by many. They took it to be the same old silver coin of 180 grains eleven-twelfths fine. i.e. they confused it with the rupee of pre-1893 days, the days of the free mint for silver. The Government and many of the members who served on the Babington Smith Committee committed the same blunder when they said that they were not in favour of depreciating the silver contents in the rupee, but that they were for raising the gold value of it. Raising the gold value of a standard coin means that a coin has no stability in value and as such cannot pretend to serve as a standard

for deferred payments and that the measure of value is no longer the same. Just as an army cannot be defined as Khaki coats and shorts our rupee of the post 1893-98 period can under no circumstances be taken to mean a silver coin though printed on silver. The fact that silver has no bearing upon our currency question except that it serves as a costly pro-note signifying so many grains of gold has not been properly understood as may be seen by the Secretary of State's raising the gold value of the rupee when silver prices went up. He wanted that rupees should be kept as tokens. He did not consider that the rupees were gold coins.

The alterations in the ratios of exchange during the War and in the post-war years has been detrimental to the industrial progress of this country. The raising of the value of the rupee from 1s 4d. gold to 2s gold is the same thing as levying an export duty of fifty per cent on commodities and giving a premium of 37½% to foreign goods. During the war years the Indian exports did not show any appreciable decline because of the abnormal rise in prices all round. The fall in the value of the rupee during the recent years is due to the fall in the exports from this country and to an increase in our imports brought about by that change in the standard of value. It would not have been possible for any Government to alter the ratios of exchange in countries where pure mono-metallism reigned without also changing the standard of value. Here there has been a change from 1s 4d. gold to 2s. gold, But this is not obvious to many as the gold coin is printed on silver,

Could such a system be the ideal of Ricardo ?

Our salvation lies in the adoption of a pure gold standard without any further Mendalian experiments in the standards of value. First, we must judiciously dispose of the silver (to-day silver sells 12½d. a tola 17-12-23) Secondly we must go back to the old ratio of 1s. 4d. gold. Thirdly, we must restrict the unlimited legal tender value of the rupee. We must limit it. It should not be a legal tender for more than two sovereigns Lastly, we must not be carried away by the disturbances in the sterling rupee exchanges, to raise the gold value of the rupee. The gold value once fixed must be permanent. We must introduce gold coins by purchasing gold from the proceeds of the sales of silver coins and from the gold standard reserves. And if left to herself, India will get her gold through her rapid progress in her industries. By adopting such measures India will not only tide over the present crisis but also become a potent factor in the money markets of the world, as potent as England or America of modern days. A stable currency will stimulate the growth of industries and under such circumstances no one need fear that gold will not be put to its proper use.

EXCISE POLICY IN SOUTH INDIA.

BY DR. JOHN MATTHAI, MADRAS.

The excise policy of the Government of Madras has come in for a great deal of criticism in recent years, mainly on the ground that the revenue derived from liquor has shown a very large increase and is now nearly a third of the total revenues of the presidency. In 1910-11 the total excise revenue was 26.30 lakhs of rupees while in 1920-21 it stood as high as 54.357 lakhs. Advocates of temperance have pointed to this increase as an indication that the drink habit has increased under the present excise policy. Since the introduction of the Reform Scheme of Government, Excise has become a transferred subject and public opinion in consequence is demanding a change of policy with a view to a stricter enforcement of temperance among the population.

In view of the exaggerated and misleading statements which have been made by the more ardent advocates of temperance, it is necessary to point out that the figures while showing a very large increase in revenue do not show any perceptible increase in consumption. With regard to the two chief kinds of drink resorted to in the Madras Presidency, *viz.*, arrack and toddy, the figures of consumption show that the aggregate quantity consumed has remained almost stationary since 1910. The quantity of arrack consumed in 1910-11 was roughly 1.5 million proof gallons while in 1920-21 it was 1.7. If these aggregates are averaged among the total population, the consumption per 100 of population in 1910 will be found to have been 4.0 proof gallons while in 1920-21 it was 4.2. Compared therefore with the increase in revenue there has hardly been any increase in consumption. With regard to toddy there are no figures available which offer direct indication of the amount consumed but the figures with regard to the number of trees tapped, which give a rough indication of consumption, also point to a somewhat stationary consumption. The number of trees tapped in 1910-11 was 2.1 million while in 1920-21 it was 2.2. Since the revenue derived from arrack and toddy constitute practically the whole of the excise revenue of the presidency, it is safe to assume that the statement usually made that the increase of revenue is based on a corresponding increase of consumption is thoroughly misleading. On the other hand, what the figures do show is that the present excise policy has prevented not merely an increase of the drinking habit but also that increase of consumption which would have taken place in consequence of the normal increase of population and the increased purchasing power of considerable sections of the community.

The real charge against the excise policy of the Government is not that it has increased consumption but that it has failed to reduce consumption. The declared policy of the Government with regard to excise is that of maximum revenue and minimum consumption. The actual results, however, show that while the revenue, has pursued an ever increasing maximum, the

consumption has stood at a steady and unchanging minimum. In view of the increasing demand for temperance measures in other countries and the strong and insistent demand which is now made by public opinion in this country in the same direction it is worth while considering whether a change is not called for with regard to the attitude of Government towards the liquor traffic.

The present system of liquor control in the Madras Presidency is what is known as the licensing method. Under the licensing system the chief instruments for controlling the consumption of liquor are (1) the imposition of a sufficiently high rate of taxation, and (2) the enforcement of restrictive regulations with regard to the conditions under which liquor is sold such as the reduction of shops and the regulation of the hours of sale. The taxation which is imposed under the Madras licensing system consists partly of a fixed duty and partly of a variable duty in the shape of fees for the sale of licences. In the case of arrack or country spirit, the fixed duty is levied on each gallon of spirit issued from the distillery while the variable duty is realised by the sale of retail licences by annual auction. With regard to toddy the fixed duty is levied in the shape of a tax upon every tree tapped, while the variable duty, as in the case of arrack, is derived from the sale of retail licences by auction.

It may be noted that the licensing method is also the method which obtains in the United Kingdom. The two chief differences between the licensing method as employed in England and in the Madras Presidency may be stated to be these:—first, in England the fees levied for the right of retail sale are fixed and are not determined by auction as in Madras, and secondly, in England the greater part of the shops for retail sale are under the ownership and control of the manufacturing interests under what is known as the Tied House system, whereas in Madras, a complete separation between retail interests and manufacturing and wholesale interests is insisted upon as an essential part of the Government policy of control.

The auction method which is the characteristic feature of the Madras system has been objected to on various grounds among which may be mentioned the following:—(1) that the speculative bids which are inevitable under the auction method drive licensees to push their sales to the utmost possible extent and at the same time to practise illicit methods of manufacture and sale, (2) that the annual reshuffling of licenses is apt to place the liquor trade in the hands of irresponsible persons over whom effective control would be difficult to exercise, (3) that the only way of avoiding the above evils is to vest large powers of control in the hands of subordinate Government officials, and (4) that the interest of the State in the liquor revenue is likely to be the greater because of the larger share which the State receives of the profits of the liquor business under the auction system,

As against these, it has been often urged: (1) that the rise in retail prices which often accompanies increased bids at successive auctions acts as a deterrent in regard to consumption, (2) that a system of annual auctions

prevents that growth of private vested interests which has placed such enormous difficulties in the path of temperance reform in the United Kingdom, (3) that by leaving the selection of licensees to be determined by auction it takes out of the hands of Government officials a discretion which might easily be abused, and (4) that the increase of profits which under a system of fixed fees might go into the pockets of private dealers is under the auction method largely diverted into the coffers of the State.

From all the controversy which has taken place over this question of *auctions against fixed fees*, two considerations stand out. The first is that under a system of fixed fees there is no necessary influence, apart from direct Government control, which operates to check consumption. The second is that under the auction method while a steadily increasing price might act as a deterrent, the increased interest of the dealer in pushing his sales is apt to operate in the opposite direction.

As possible compromises which would avoid the recognised evils of the two systems have been suggested what are known as the surcharge method and the rationing method. The surcharge method which obtains chiefly in Bengal works on the following lines: Vendors of liquor are selected not by auction but by the district authorities on the advice of Excise Department; the scale of licence fees is fixed every month on the principle that fees are increased if the sales of the previous month show an increase. The seller is allowed a fixed normal profit on the business. What is left over is divided between the Government and the shop-keeper in such a way that the Government share increases with increasing consumption while the vendor's decreases.

There is no doubt that this method will help to eliminate the speculative element from the sale of liquor while at the same time giving a maximum revenue to Government. But it does not avoid two of the recognised evils of the fixed fee method, viz. the selection of sellers at the discretion of Government officials and the possible creation of vested interests. Besides, it is likely to be attended by a serious practical difficulty. Whether Government will get an increasing share of the profits will depend very largely on the extent to which it would be possible to enforce a fixed selling price. The whole principle of the method, viz. that with increasing consumption Government gets an increasing share and the seller a decreasing share of the profits depends necessarily on how far the selling price arranged between the Government and the vendor may be enforced. This enforcement under the conditions of the liquor business in this country is bound to present considerable difficulties.

The rationing method which has been tried in Bombay may be described as follows: The amount of spirit issued to each shop from the distilleries every month is limited to a fixed maximum quantity. The quantity issued is based on the issue of the corresponding month in a selected previous year. A deduction of a fixed percentage is made in the current year on the corresponding month of the previous year. The system aims at a direct

reduction by Government of the quantity consumed instead of leaving the reduction of consumption to the operation of high prices as in the auction method. The chief objection which has been urged against this method—and the objection is one which deserves serious consideration—is that the quantity issued in the corresponding month of the previous year offers no reliable guidance at all with regard to probable consumption during the given month in the current year. The consumption of liquor depends upon various uncertain factors especially in a country exposed to the fluctuations of the seasons and the accidents of epidemics. If there happens therefore to be a greater demand in the current year during the particular month, the supply issued gets exhausted before the month is out and people either resort to illicit practices or in large cities to the purchase of cheap foreign spirits.

One remedy which has been proposed for this particular objection is the adoption of the system of rationing known as the Bratt system in Sweden under which a limit is set to the quantity issued to each person and not merely to the quantity issued to each shop. Every person receives an order book through which he may purchase each month a limited quantity of liquor so that a record is kept as to (1) the persons to whom liquors are sold, (2) how much is sold, and (3) how often sales are made to any one person. The system sounds well in theory; but from all accounts it has hardly been recognised as a success in Sweden since under this system there is nothing to prevent people who are not in the habit of drinking from obtaining cards for the benefit of others who desire to drink more than the allotted maximum.

From the foregoing discussion of the licensing method as practised in Madras and modifications of it which have been tried in other provinces it is fairly clear that if any substantial reduction of consumption is to be achieved it is necessary to consider the employment of other methods. There are three methods besides the licensing method which have been tried in other countries, (1) Monopoly, (2) Prohibition and (3) Local Option.

(1) *Monopoly*. The essence of the monopoly method is that the manufacture and sale of liquor are vested as a monopoly in the hands either of a governmental authority or of an *ad hoc* public body or a philanthropic association. The case of the Vodka monopoly in Russia is an example of the first kind of monopoly. The Carlisle experiment in England during the War by which the Central Control Board assumed the monopoly of the liquor trade in specified areas is an example of the second kind of monopoly. The third is represented by the well-known Gothenburg system in Norway and Sweden. It is doubtful whether any of these forms of monopoly are likely to succeed in India. The closer identification of the State with the liquor business and the possibility of the Government acquiring a vested interest in the profits of the business in a country where new sources of revenue are so difficult to find are serious objections to the adoption of a system of Government monopoly. Besides, a liquor business owned and managed by the State is certain to present enormous opportunities for corruption to the subordinate employees of Government and is not therefore

to be thought of in a country where there has always been peculiar temptation for such corruption. As for a monopoly held by a philanthropic association, the difficulty is the practical one of finding or organizing an association which would combine the necessary public zeal and business aptitude. The suggestion may however be made that it is worth while making an experiment in some provinces of handing over the sale of liquor to one or two co-operative societies of proved efficiency. The story of the Bengal Ganja Co-operative Society would seem to show some possibility of success in this direction.

(2). *Prohibition.* Prohibition is not out of the question at the present stage. The social damage done in India by drink, though increasing, cannot be held to be so great as to call for so drastic a remedy. Criminal offences which are traceable to drink are inconsiderable compared with offences springing from lust and acquisitiveness. Moreover, a non-industrial civilisation does not apparently induce the same appetite for drink or make the same demand for moderation in the use of liquor. The enormous staff that would be required for the enforcement of a prohibition law in a country where, as has been pointed out, "every man can (so to speak) have his own beer tap in his own back garden" and the large and sudden dislocation of public finance which would follow the enforcement of a policy of general prohibition are other considerations which put prohibition for the present out of the range of practical politics.

There is yet another circumstance to be remembered. In a country like the United States of America the introduction of a national prohibition law has been justified by the most authoritative opinion in the country on the ground that it is only by the Government expressing itself in no uncertain terms in favour of prohibition that a sufficiently strong public opinion can be created against the drink habit. In India on the other hand both religious sanction and social usage have regarded the drink habit with strong disfavour, especially among Brahmans and Muhammadans, the two classes whose influence counts for most in the country. It is doubtful if a further strengthening of public opinion by means of State action is required.

(3) *Local Option.* We are thus driven to local option as perhaps the least unsuitable of the remedies open to us. The main arguments for local option are, first, that unlike the licensing method it aims at applying a direct check to consumption and secondly that unlike prohibition it aims at bringing about not a sudden but a gradual elimination of the drink evil. The application of local option is bound to present difficulties in India the main difficulty being with regard to the creation of suitable electorates for the exercise of the option. Two conditions may be regarded as necessary for the effective introduction of local option; first a sufficient degree of intelligence and understanding among the electorate and secondly the inclusion in the electorate not necessarily of every adult individual in the area but of every important class and interest in it. These two conditions are far from being present in the great majority of the urban and rural areas in the

Madras Presidency. But a beginning may be made in some of the larger and more important urban localities where the conditions are likely to be satisfied. Even here however there will be difficulty in enforcing a local verdict once arrived at, with a public opinion which seldom recognises the necessity of assisting positively in the enforcement of its own decisions and with a Government department which is not likely to be over-sympathetic with an experiment the success of which will spell reduced revenues. But these difficulties must be faced because the failure of local option would mean the impossibility of applying any effective remedy for the problem of drink. Put briefly, the case for local option is this. The licensing method has failed to bring about a perceptible reduction in the consumption of alcohol ; the more drastic remedies such as prohibition are obviously impracticable ; and therefore if success can be achieved, it is to local option that we must look for it.

SOME ASPECTS OF INDIGENOUS BANKING IN THE MADRAS PRESIDENCY.

BY MR. T. K. DURAISWAMI AIYAR.

The indigenous Banker fulfils an important role by way of bringing credit facilities within the reach of the people of the Presidency. Besides the Imperial Bank and the Exchange Banks the only Indian joint stock banks functioning on western lines are the Indian Bank and the Central Bank of India. The Imperial Bank has at present 32 branches in the Madras Presidency at important centres and the Indian Bank has only two branches while the Central Bank recently took over the branch of the Tata Bank which was started a few years back in Madras.

The Exchange banks are concerned only with the financing of foreign sea-borne trade and consequently the indigenous banker has to play a large part in financing agriculture, industry, and internal trade.

The Chamberlain Commission tried to find the answer to the question of the relation between the European money market in India and the indigenous money market. It may be said that western or modern methods of banking are making headway in the Presidency though the rate of progress is far from satisfactory. The connection therefore between the indigenous banker and the modern joint stock bank in the Presidency is becoming more and more intimate.

According to English Banking tradition the term banker cannot be applied in the strict sense of the term to the indigenous banker. It was a former Governor of the Bank of England who said that the first thing a banker should know is the distinction between a note and a mortgage, and anybody who lent funds on mortgage is not a banker. Banking on the continent of Europe has not followed the rigid lines of distinction between commercial banking and other kinds of banking business. We need not therefore make any apology for calling the indigenous banker as such, who does much business which a commercial bank will not touch. He finances agriculture as well as trade and commerce. The demand for credit on the part of the peasant arises in connection with the growing of crops, the digging of wells, the buying of cattle, the paying of kist and the performing of ceremonies. The wholesale and the retail traders have to be financed and the movement of produce over the country requires funds. Besides the Marwaris who have their establishments in the big towns of the Madras Presidency and whose *methods* of conducting their business are the same as those their castemen follow in other parts of India, there is a class called the Nattukottai Chetties who are indigenous to the Madras Presidency.

They belong to the Madura and Ramanad districts of the Madras Presidency and they are a very enterprising class. The benefits of settled administration in the Madras Presidency contributed much to their well-being and with the opening up of Burma which constitutes a magnificent field for

their exploitation their prosperity advanced rapidly. As a class they are very pious and they have spent considerable sums in renovating and repairing many a temple in Southern India. They have not yet taken to the joint stock method of banking and there is a prevalent feeling among them that their methods are very profitable and most satisfactory.

Individual fortunes of the magnitude that is the feature of Bombay or Calcutta are conspicuous by their absence in the Madras Presidency which is predominantly agricultural. Let us see what the resources are of a normal Nattukottai banker. Firstly that which is of greatest importance is his own capital. What marks off primarily such a banker from a joint stock bank is the high proportion of his own capital to the total resources which he employs in his business. Second in importance to his capital are the deposits that the banker takes from the public. The public can open current accounts with him. On an examination of the balance sheet of some of the bankers it was found that the deposits in most cases were nearly equal to the capital. The proportion of the deposits to the capital however depends on the standing of the Chetti firm and even in the best of cases the proportion is nothing like that of a joint stock bank. It is the professional classes mainly lawyers, retired officials, and some land-holders who happen to have spare money that keep such deposits. Besides, there are many belonging to the Chetti community, especially women, who have in many cases large funds and who are not in a position to do banking business themselves, and who therefore keep their money with a Chetti firm on current account or on deposit subject to notice. The community whose traditional pursuit is banking does not look with favour on agricultural investment and thus no inconsiderable sums of money belonging to members of the community especially ladies are on deposit with those of them doing banking business.

Thirdly, a large part of the working capital consists of the overdrafts allowed by the joint stock banks primarily the Imperial Bank. With the enlarged resources which the Imperial Bank now has at its disposal this source of working capital has come to be of increasing importance for the Chetti. He discounts Hundis of merchants and traders and these Hundis are rediscounted at the Imperial Bank and thus the Chetti puts himself in possession of funds. In effect the Chetti is a middleman between the joint stock bank and the multitude of small traders and merchants.

A fourth source for the Chetti in Madras is the short loans he raises from some Multani bankers who have settled down in what is called the Mint Street in the city of Madras. The report in Madras is that these Multani bankers have connections all over India unlike the Nattukottai Chetties and they come into possession of larger funds which reach them mainly from the Bombay side. It is only as a last resort that it is said that the Chetti resorts to the Marwari. His standing with the joint stock banks which grants him overdrafts will be prejudicially affected if it is known that he resorts to the Marwaris in addition to utilising the overdrafts at the banks.

It is however a very common event for the Chetti to borrow from the

other Chetties doing banking business. The loans are taken only for short periods and the rate of interest charged is the 'rate current' which will be described below. A Chetti doing banking business will borrow only at the risk of his reputation from a brother Chetti at a rate higher than the 'rate current.'

Having described the way in which the Chetti comes by his working capital, let us see how he employs his funds. The Chetti firms doing banking business are to be found in most of the towns of the Madras Presidency and one of the causes of the success of the Chetti is that he is prepared to open a branch even in a small locality with a population of 6,000 or 7,000 inhabitants provided business of a sort is available. He is in close touch with the agriculturist and since he is prepared to advance money on pronotes without subjecting the borrower to much formality his firm is resorted to in spite of the rate of interest being fairly high. The rate of interest depends on the standing of the borrower and the urgency of his needs. The elasticity of Chetti business forms at once its strength and its weakness. There is not much of formality, no elaborate filling up of forms and not much of publicity; he is prepared to advance loans for short period or a long period, and he takes the risk of advancing money to people of doubtful repaying capacity charging however a very high rate of interest, as much as 35 p. c. in some cases. A Chetti banker if he is a rich and enterprising person has branches in different parts of the Presidency. The accounts are kept in Tamil and the method of keeping accounts is scientific. The success of the class is due to the fact that they are excellent businessmen and that they inspire confidence. The rates that they charge in discounting Hundis and the rates that they pay on current account are determined with reference to what is called the 'rate current.' The 'rate current' as it is called is fixed for each Tamil month on the 16th of that month and is expressed in terms of so many annas 10 annas or 11 annas or 12 annas per Rs. 100 per month as the case may be. The rates current for 1920-21, 1921-22, and 1922-23 are given below:—

			1920-21			1921-22			1922-23.			
			R.	A.	P.	R.	A.	P.	R.	A.	P.	
April	15th to May	15	..	1	0	0	0	15	0	1	0	0
May	„ June	„	...	1	0	0	0	12	6	0	15	0
June	„ July	„	..	0	15	9	0	10	3	0	13	3
July	„ August	„	..	0	12	6	0	8	6	0	11	3
August	„ September	„	...	0	13	6	0	8	3	0	10	3
September	„ October	„	..	0	13	6	0	9	6	0	10	0
October	„ November	„	...	0	14	0	0	9	6	0	9	6
November	„ December	„	..	0	13	6	0	10	6	0	10	6
December	„ January	„	..	0	15	6	0	13	6	0	12	6
January	„ February	„	...	1	0	0	0	15	6	0	15	6
February	„ March	„	..	1	0	0	1	0	0	1	0	0
March	„ April	„	..	1	0	0	1	0	0	1	0	0

Those who keep money on current account are paid 1 anna, or 1 anna 6 pies, or two annas less than the rate current per month on their deposits. The amount of deduction from the 'rate current' depends on the customer, the extent of his deposits and the intimacy of the relations between the customer and the banker. Anybody keeping money on current account will be paid the amount when he wants to withdraw it, and the reputation of a Chetti will disappear if he places obstacles in the way of the depositor. Hundis will be discounted by the Chetties at the rate current or half anna above the rate or one anna above it as the case may be according to the standing of the Hundi. When loans are made to approved borrowers for short terms interest is charged at 2 annas or 4 annas or 6 annas per month more than the 'rate current' for the month. There is considerable variety in the terms on which loans are made to borrowers. Retail traders, rice-mill owners, and owners of cotton ginning presses, are frequent borrowers from Chetties. When agriculturists borrow for short terms or a long term, loans are made at rates varying from 15 p. c. to 24 p. c. or 30 p. c. per annum. Chetties of late have been complaining that their business has ceased to be profitable in the Madras Presidency at present. They ascribe the cause to the decreasing sense of honour and probity of the borrowers. Though it must be confessed that modern conditions in the absence of a widespread and sound system of elementary education have worked havoc in the moral realm in the villages, it must be said that the main cause of the unprofitableness of Chetti banking in various places in the Madras Presidency nowadays is due to the influence of the co-operative societies in having brought down the rate of interest. The bulk of the funds of the Chetties are employed therefore in Burma, Straits Settlements, and Ceylon. Those are the blessed regions of a very high rate of interest. Important Chetti firms have branches in Rangoon, Madras, and other places in the Madras Presidency and Burma. Singapore, that great entrepot of the East contains a number of branches of Chetti firms. In financing the rice trade of Burma, Chetti firms play an important part. From December to May the rate of interest that rules in Madras is very high. That is the period during which the crops have to be moved. The important crops of the Madras Presidency in moving which much funds are employed are rice, groundnut, and cotton. These crops come on the market in January, February, March, and April. The importance of these crops will be realised when it is seen that in 1919-20 11.5 million acres were sown with paddy, 1.1 million acres were under groundnut and 2.3 million acres under cotton. The value involved respectively according to the computation of Dr. Slater was 10.7 crores of rupees, 13.5 crores, and 8.7 crores. It is during the above mentioned months that the land revenue has to be paid in. Madras being much more agricultural than Bombay, Bihar and Orissa, and Bengal, the pressure on the money market during the period is felt more severely. The owners of rice mills of which there are very large number in the districts of Kistna, Guntur, and Tanjore, buy up paddy in the

beginning of the season and store it. The Nattukottai Chettis' funds are employed in financing these purchases. As has already been pointed out the Chetties form in most cases the middlemen between the Imperial Bank and the traders employed in moving the crops. The Imperial Bank directly also makes large loans to these rice mill-owners. The "rate current" of the Chetties often reaches in February, March, and April Re. 1 per month. In this connection it may be mentioned that the Madras Chetti firms have agreed that the fluctuations in their rate current or in other words the "bazar rate" should not go beyond Re. 1 a month or below 8 as. a month. It will thus be seen that the Madras Presidency suffers with the rest of India in that the trade of the country in the busy season is subjected to a handicap of a very high bazar rate. The relation between the bazar rate and the bank rate is a very interesting theme of discussion. Mr. Keynes in his book on Indian Finance and Currency refers to the divergence that sometimes exists between the two rates. Though the divergence is becoming less and less, still it exists occasionally. It is due to the fact that the banking system of the country is not yet well articulated and the various limbs of the money market have not been co-ordinated as, for example, in England. The joint stock banks and especially the Imperial Bank will have to show considerably more enterprise and more branches will have to be opened in the mofussil before the Imperial Bank which is the Bankers' bank in India can dominate the money market in the sense that it fixes the rate of discount for the whole money market. Besides since the Government deposits form a large proportion of the total deposits of the Imperial Bank any pressure like famine or frontier disturbance that induces the Government to withdraw deposits from the Imperial Bank may lead to the putting up of the bank rate when the conditions in the bazar do not justify a high bank rate.

What seems to stand in the way of banking development in the country more than any other factor is the absence of a good system of communications between the villages and the towns and universal instruction in the 3 Rs. These conditions will help forward the development of modern banking and it is only then that the agriculturist and the industrialist in India will be in a position to borrow at cheap rates of interest for productive purposes. The Nattukottai Chetties are in the main money-lenders and that vital characteristic of a commercial bank—the attracting of savings in the shape of deposits is not a conspicuous feature of Chetti banking. It cannot be denied that branches of powerful banks preferably the Imperial Bank working in the centre of a group of villages and manned by a sympathetic staff will be the means of drawing the savings of the peasants, and developing the habits of saving among those who have thus far been strangers to it. The evidence of Sir Bernard Hunter before the Industrial Commission was to the effect that the Madras Presidency Bank was unable to start more branches on account of lack of adequate resources. Such a complaint will no longer exist if the Imperial Bank is in a position to start branch banking

on an adventurous scale. It is often said that branches are very costly to maintain. The argument that is advanced in favour of infant industries being protected holds good in the case of branch banking in India. In course of time deposits will come when the working of branches will be profitable. And more than that, means will be found to finance agriculture, industry and commerce at as low a rate of interest as obtains in the advanced countries of the world. Besides establishment charges will have to be reduced and suitable Indians on a large scale will have to be trained for work in banks. Tears shed over the large import of gold and silver into India will be of no avail unless the leaders of public opinion and the Government co-operate in the matter of creating conditions in which banking development will be a success.

The Nattukottai Chetties are excellent businessmen and are noted for their probity and power of organization. But they have not taken kindly to modern education largely on account of the justifiable feeling that it does not help them to make money which is nearest their heart. It is the experience in other parts of India that partly on account of lack of business habits and a sense of responsibility on the part of directors many banks have failed. If Nattukottai Chetties take the lead in the matters of joint stock banking their business habits and sense of honesty will be an asset by way of making banking development a success. They are great believers in the traditional methods of carrying on business. Those in charge of modern commercial education will be placing the country under a great obligation if they succeed in inducing the boys of the Nattukottai community to take advantage of that education.

Chetti business as has been already pointed out takes on a variety of forms. There is a particular kind of business called 'adathi' which may be illustrated as follows:— X has a firm in Rangoon. Y has one at Singapore. X and Y enter into an agreement under which X should finance Y's firm at Singapore up to a limit. Y is entitled to repay the amount he draws from X at any time he chooses. Y pays X either a commission ranging from 1 to 2 annas on every Rs. 100 of the sum drawn from X or a fixed remuneration exclusive of the interest at the rate current. This is one system of 'adathi'. There is another system under which Y may not have any firm at any place. But he may invest a certain sum in X's firm at Rangoon and ask X to carry on money-lending business in his name at Rangoon. X thus acts as an agent of Y and gets from Y a commission ranging from 2 pies to 6 pies on every rupee of interest accrued according to the scale of the transactions. The 'adathi' firm should furnish monthly accounts to the principal who issues directions to the 'adathi' firm as to the persons to whom loans might be made. The principal may hold the 'adathi' firm responsible for any loss arising from transactions.

Banking evolution in India will perhaps pass through the stages which it has undergone in other advanced countries. Private banking on account

of the lack of publicity which it involves will find its sphere progressively reduced in the competition with joint stock banking. Students of banking are placed under a disadvantage in the matter of collecting banking statistics where private banking flourishes since private bankers are very particular in not disclosing the figures relating to their transactions. It is this absence of publicity on the part of private banks that will ultimately lead to the triumph of joint stock banking.

NEW METHODS IN THE TEACHING OF ECONOMICS AND STIMULATING ECONOMIC RESEARCH.

BY PROF. S. N. PHERWANI, UNIVERSITY OF BOMBAY.
THE EDUCATIONAL PROCESS.

Psychologically, education is the attention-association-action process. Teaching and research in economics is no exception. We choose a particular field of attention, and produce certain associations or general ways of looking at that field, and try to induce certain actions.

PRESENT CONDITION.

Now, the field at present attended to by the economic student, is mainly the written book or spoken lecture, the associations evoked are directed to build up, by arguments, consistent theories about the statements in the books and lectures, and the action usually induced, is storing these in memory for delivery at the examination and often a-forgetting thereafter.

PROPOSED CHANGES.

The new method which is here proposed for adoption, aims at including not only or primarily books and lectures in the field of attention, but rather the actual economic phenomena going on around the student, the economics of his house, the economics of his hostel, the economics of his street, the economics of his college. For *association*, I propose that the common repetitive elements and sequences be established in the minds of students for these phenomena actually observable and observed. The feeling I would like to impart to the student, is that Economics is not a finished science but one yet in the process of formation*, and that in fact all sciences are living and growing bodies of knowledge. That economics deals with man working to satisfy his wants, and in his working alone or together he often wastes his energies by not adopting the best available methods of working alone or together, by failing to refuse his wants, by failing to learn and impart simple ways of enhancing satisfaction. The most important thing, therefore, is to study the economic process for the constant detection and elimination of avoidable waste, which comparative observation reveals everywhere, in various forms. The *feeling* that Economics is a science for the understanding and improvement of the material and service institutions of man is the feeling I would impart. The *action* that I would like to induce is the active transformation of these material and service institutions and methods for the better, so far as it is possible by intelligent individual and collective effort. The passing of examination is only an institutional *ad interim* goal, the real goal being the improvement of human material and service institutions. The educational programme should therefore include a direct observational basis and a practical suggestion basis induced from each student. How is this to be done ?

* See Mukerji's Comparative Economics ; Edie's Principles of New Economics ; Boueke's Critique of Economics.

WASTEFUL WAYS.

We often forget the fundamental truth that all learning leaps up from life, from its needs seeking satisfaction from the available surroundings. Life is thus the perpetual seed bed of learning both for its generation and correction. Therefore learning divorced from life, leaving out the appropriate stimulus in the immediate surroundings of the student, is rather a deadweight than a chart or compass. There is, as I have shown, and should be, no mystery about the fundamental quest of Economics. In its essential production and consumption aspects, as against the price and profit aspects so much stressed, it is really the science of study and reduction of the ratio between human effort and human satisfactions, and these efforts and satisfactions, go on in the life of the student and all around. There is the economics of study, the economics of physical exercise, economic aspect of all things, *i.e.*, fruitful and wasteful ways of doing those things. Similarly there are fruitful and wasteful ways of getting food, clothing and shelter and other satisfactions. The realization that there are such comparatively more fruitful and wasteful ways in all lines of human endeavour is the bedrock of economics. Unless such a realisation is imparted to the student, he has not been started on a living growing science, but on a dead and decaying verbalism and sophistry.

WIDE RANGE OF MODIFIABILITY.

Among the B.A.s in Economics that we get in the Sociology class I have not found the presence of this fundamental realization. It appears to me from what I have seen and heard, that at present we impart information on economic topics, but fail to stimulate investigation, interpretation and inventive suggestiveness for improvement of economic phenomena around us. Our teaching appears to be guided by tradition and memoritar methods rather than by fresh and forward thinking stimulated by our surroundings. Learning with us rises from books and leads to degrees, instead of rising from life and trying ever to improve the conditions and quality of life; We stress too much perhaps the invariability of natural and social phenomena but not the wide range of modifiability of social phenomena specially by wise and well directed intervention. We forget the great law enunciated by Comte, that in the Social sciences, though our powers of prevision are very much circumscribed by the variable nature of all life, our powers of modification are by the self same law greatly enhanced. Approximate prevision and wise and varied modification should therefore be our goal in Economics. And the constant detection, location, elimination of wasteful ways of doing things, and the discovery of more fruitful ways of guiding individual and combining collective effort, should be our method.

INFORMATION AND ENTERPRISE.

To bring about improvement in the material and service institutions around us, what must we do? We must fulfil the conditions of successful improvement. The improvement of the world, as I have written elsewhere,

depends on exact information and courageous enterprise. The ways of finding out exact information and rendering it available for ready reference, are thus immensely useful to humanity. A multiplication of libraries, under expert and scholarly librarians, who will card-index all the available literature on economic topics chapter by chapter and topic by topic would thus be found highly helpful. For it is only when we lay our plans on the basis of exact information and courageously carry them out that our intervention becomes successful. The degree of success attained in converting efforts into desirable results measures our efficiency, in any line. If then we can march from our present large efforts and small results to small efforts and large results, we shall have increased our economic efficiency, which should be the goal of our economic thought and endeavour.

METHOD AND MANAGEMENT.

What shall we do to get the exact information we require in all our intervention? Pursue the scientific method of investigation, is the answer. How shall we attain the reasonably attainable maximum of result from our efforts? Make use of the dicta of Scientific Management or Efficiency as it is briefly called. Scientific Method and Scientific Management, are then the two approaches towards improvement, whether it be in personal, domestic neighbourhood, municipal, provincial or national or even international economics.

THE SCIENTIFIC SPIRIT.

It therefore appears to me to be highly necessary that all our students in Economics, as well as other Social sciences be given a working familiarity with the few fundamental principles of Scientific Method and Scientific Management. Now what is the Scientific Method that is to be used for getting the exact information we want for every enterprise? It is the method set out by Bacon in his *Novum Organum*, the method suggested by Descartes in his "Discourse on Method", the method so notably expounded and used by Comte in his Positive Philosophy and Positive Polity, called by him the Positive Method. In the words of Minto, "The mandate issued to the age of Plato and Aristotle was *Bring your beliefs into harmony with one another*. The mandate of the medieval spirit was, *Bring your beliefs into harmony with dogma*. Then a new spirit was aroused the mandate of which was, *Bring your beliefs into harmony with facts*." This is the spirit of the Scientific Method which I would like to see the students familiarised with, for the impression that has gained on me is that our universities and our students as well as the institutions around us still manifest the medieval spirit of squaring our beliefs with written dogma, instead of with the facts open to our observations around us.

BACON'S PRESENTMENT.

What, in the briefest manner, may we put down as Bacon's presentment of the Scientific Method? Spiller, in his "New System of Scientific Procedure" (p. 42) summarises Bacon's teaching as follows: Bacon bids us turn to facts, and cease drawing conclusions from propositions, which have not been esta-

blished inductively. He insists that all interpretation of nature commences with the senses, and leads from a perception of the senses by a straight, regular and guarded path, to the perception of the understanding. Observation should be virtually exhaustive in regard to variety, so far as classes of relevant facts are concerned we are to observe, we are to move step by step, and not to aim directly at distant conclusions; we are to watch for the presence of a quality (*e. g.* in the example which he takes to illustrate his method "Instances agreeing in the nature of heat") or its absence under certain circumstances (Instances in proximity where the nature of heat is absent); we are to examine the degree of the presence of a quality ("The table of degrees or comparison in heat.") We are systematically to exclude from the three preceding collections what is immaterial to the issue ("Exclusion or rejection of natures from the form of heat") and finally we are to formulate a double conclusion, theoretical and practical (First and second vintage). The purpose of science on the theoretical side, Bacon defines to be "the knowledge of causes, and secret motions of things" (*New Atlantis*); or as he expresses this in another place: the true and lawful "goal of the sciences is none other than this: that human life be endowed with new discoveries and powers" (*Novum Organum*, bk. 81.) The method is as we have seen to collect positive, negative and graded instances, and then draw theoretical and practical conclusions from such relevant material. This involves a comprehensive and cautious survey of facts, and a systematic elimination of everything that is irrelevant to the matter in hand, a procedure quite the opposite of the all too common practice of cursory observation, chance generalisation, and casual verification.

DESCARTE'S RULES.

Let us now take note of Descartes's rules given in his *Discourse on Method* and see how similar they are to the above. He writes that for arriving at the truth "I believed that I would find the following four rules sufficient, provided that I made a firm and constant resolve not once to omit to observe them.

"The first was never to accept anything as true, when I did not recognise it clearly to be so, that is to say, to carefully avoid precipitation and prejudice, and to include in my opinion nothing beyond that which should present itself so clearly and so distinctly to my mind that I might have no occasion to doubt it.

"The second was, to divide each of the difficulties, which I should examine, into as many portions as possible, and as should be required for its better solution.

"The third was to conduct my thoughts in order, by beginning with simple objects, and those most easy to know, so as to mount little by little, as if by steps to the most complex knowledge, and assuming an order among those which do not precede one another.

"And the last was to make everywhere enumerations so complete and surveys so wide, that I should be sure of omitting nothing." *Discourse on*

Method in Scott Library, p. 22.)

COMTE'S CONTRIBUTION.

What in briefest summary is the Positive method of Comte ? It is the employment of the different methods of investigation developed by the exact sciences. Thus the Positive or Scientific method is statistical, axiomatic, deductive, and resorts to indirect measurement of magnitudes as in Mathematics. The Positive method is observational as in Astronomy. It is experimental as in Physics. It resorts to exact nomenclature and notation as in Chemistry. It is comparative and classificatory as in Biology and Psychology. It is historical and evolutionary as in Sociology. It is telic, purposive, and has promotion of human welfare in view as in Ethics. The seven characteristics of all positive ideas are, that they are real, useful, certain, exact, organic, relative, sympathetic. The Positive method further requires that helpful and legitimate use be made of the ascertained laws of all the above seven sciences for each science. Thus Mathematics should expand and be regenerated by Astronomy, Physics, Chemistry, Biology, Psychology, human history, and the ethical attitude of being useful to man and his surroundings. Similarly Economics should take the aid of Mathematics, Physics, Chemistry, Biology, Psychology, and Sociology, its general science, and must be guided by the ethical motive and have a purposive human welfare outlook. It should thus utilise not only the methods, but the ascertained generalisations of the sciences preceding and succeeding it in the above encyclopedic scale.

SCIENTIFIC MANAGEMENT.

Investigation, or collection of exact information, should therefore proceed according to the scientific or positive method as outlined by Bacon, Descartes, Comte. Enterprise to be effective must likewise make use of the principles of Scientific Management or Efficiency. My study of Comte has shown me that he was a pioneer in enunciating the principles of Scientific Management too, though unfortunately he did not live to write his great work the organization of human industry, where he would doubtless have developed these principles in detail. We have however a good first statement of his principles in his essay on scientific works required for the regeneration of society. Fredrick Winslow Taylor, the modern apostle of Scientific Management, has given us a statement of Principles of scientific management, in his work bearing that title. Harrington Emerson has given us an amplified statement of these in his work known as Twelve Principles of Efficiency.

I must content myself with a bare statement of the principles of efficiency enunciated by these great minds, and hope that the earnest enquirer will study first hand in detail the writing of these pioneers in the application for scientific principles in the management of human effort,

COMTE ON REGENERATION.

Comte, bent on regenerating human society, enunciated the scientific operations necessary for that purpose, which, to my mind, constitute a first statement of the principles of scientific management or Efficiency. Thus

he emphasises the efficiency principle of "planning" as being necessary for better performance. As stated by him "Each complete human operation, from the simplest to the most complicated, whether executed by an individual or a multitude is unavoidably composed of two portions; in other words give rise to two kinds of consideration; one theoretical, another practical; one concerning the conception, another the execution. The former necessarily precedes the latter which it is destined to guide. In other words all action presupposes antecedent speculation."

"In the earliest infancy of the human mind, theoretical and practical labours are executed by the same person for all operations; yet this circumstance while rendering the distinction less evident, does not affect its reality. Soon however these two classes of operations begin to disengage themselves, as demanding different, and in some respects, contrasted capacities and training. As the collective and individual intelligence of the human race begins to develop itself, this separation becomes more and more pronounced and general, and constitutes the source of new advances. The degree of a nation's civilization philosophically considered, may be really measured by the extent to which Theory and Practice have been separated and harmonised. For the grand instrument of civilization consists in the Division of Labour and the Combination of Efforts." (Comte's Early Essays, Harison, p. 115.)

The further hints that can be gathered from the same chapter for the effective organisation of human effort are, first the ascertainment of the active aim of a Social system; secondly, finding out the social elements and forces best fitted for carrying out that aim; and thirdly, the necessary redistribution of authority and reform of institutions. Finally he says three series of works are required for the reorganisation of society. "The first series aims at forming a system of historical observations upon the general progress of the human intellect, destined to become the positive basis of politics, thus wholly freeing it from a theological and metaphysical character, and impressing on it a scientific character." (Compare the efficiency principle of Record.)

"The second series seeks to establish a complete system of Positive Education, adapted to a regenerated society constituted with a view to action upon Nature; in other words it aims at perfecting such action, so far as it depends on the faculties of the agent." (Compare the efficiency principle of Training.)

"Lastly, the third series embraces a general exposition of the Collective Action which civilised men in the present state of their knowledge, can exercise upon Nature, so as to modify it for their own advantage, directing their entire forces to this end, and regarding social combinations only as means of attaining it." (Compare the efficiency principle of Co-operation). As will be seen by comparing these with the principles of Scientific Management as laid down by Taylor, or the Efficiency principles of Emerson, these run parallel to their principles, and thus Comte anticipates the modern

Efficiency movement by fully eight decades.

TAYLOR'S PRINCIPLES.

The four great principles of Scientific Management as stated by F. W. Taylor are :—(1) The development of a true science of each and every work or operation. (2) The scientific selection of the workman. (3) His scientific education and development. (4) Intimate and friendly co-operation between management and men.

“As contrasted with the prevailing in methods of doing things managers under the scientific management take new duties on themselves.

1stly. “They develop a science for each element of a man’s work which replaces the old rule of the thumb method. The person actually doing a piece of work, the common labourer does not know the laws that govern the production of the best results from his efforts. He is equally unable to know the science of what he is doing. So the management help him by finding the best, easiest, and quickest, ways of doing the particular thing.

2ndly. “They scientifically select and then teach and train the workman, whereas in the past he chose his own work, and trained himself as best he could.” There is a great deal of waste on account of misfits. The idea seems to be that one man is as good as another in the world of labour, just as that out of the ordinary methods of doing a work, one method is just as good as another. This is a fallacy. We find different capacities, and aptitudes, different qualifications in different men, and we select the best man for the work, *i.e.*, the man best fitted to do the work, looking to his physical constitution and mental make-up. Then we are to train him in the best method of doing that work.

3rdly. “They heartily co-operate with the men so as to ensure all the works being done in accordance with the principles of the science which has been developed.” The management has to provide not only the right sort of training but the right kind of tools, and the right sort of conditions for getting the best results.

4thly. “There is an equal division of works responsibility between the management and workmen. The management take over all the work for which they are better fitted than the worker, while in the past the workman had all the responsibility. All this requires the kindly co-operation of the management and involves a much more elaborate organisation and system than the old fashioned gang system. The organization consist of one set of men, who are engaged in the development of science of labouring through time study, another set of men mostly skilled labourers, who act as teachers and help and guide men in their work; and a third set of tool men who provide the workman with proper implements and keep them in perfect order. Another set who plan the work well in advance, move men with the least loss of time from one place to another, and properly record each man’s working.”

“The co-operation aimed at in this type, aims at helping each man individually, studying his needs and short-comings, teaching him better and

quicker methods, and seeing that all workmen help and co-operate with him, by doing their part of the work right and fast."

EMERSON'S ANALYSIS.

Now, how have the principles of efficiency been stated by another great exponent of efficiency, who has done such remarkable work in popularising this master message? I refer to Harrington Emerson the author of "Home Course in Personal Efficiency". He defines Efficiency, as the mental and physical ability to find and take the best, easiest, and quickest way to the desirable things in life. He has divided his efficiency principles into practical and ethical ones. According to him the practical principles of Efficiency require, that in order to find out and take the best, easiest and quickest way to the desirable things in life, or doing any work, it is necessary that 1. We must make use of immediate, reliable, adequate, and permanent *records*. 2. We must make a definite *plan* for all we desire and want to do. 3. We must make *schedules* based upon standards for employment of our time, materials, equipment and energy. 4. We must make a habit of *despatching* all operations 5. We must make a rule to *standardise the best known conditions*. 6. We must make time and motion studies and *standardise all operations*. 7. We must study and follow *written standard practice instructions*.

The ethical principles of Efficiency according to Emerson are, that in order to find and take the best, easiest and quickest ways to the desirable things of life, 8. We must have clear and definite *ideals* of what those things are. 9. We must measure and test every means used for attaining, achieving or acquiring them, by the standards of *common sense*. 10. We must seek and follow *competent counsel*: 11. We must *discipline* ourselves into active harmony with the principles, laws and rules governing these things. 12. We must demand the *fair deal*. 13. We must eagerly desire, earnestly seek, and insistently demand for ourselves our *efficiency reward*.

Analysing these principles further, we find the practical principles of efficiency really require us to "*Plan our work, and work our plan*." Without a plan man is not able to do his best and utmost work; similarly an institution or a group working without planning or planning and not carrying out the plan, is sure to remain backward. But the plan must be based on accurate investigation of facts, an adequate and reliable records. The plan must be itemised or detailed, else it will not be workable.

The ethical and psychological principles of efficiency require that the ideal or goal must be defined, must be eagerly desired, and that in achieving it, we must be fair to ourselves and others, make the best use of our wits and get help from other people, and then regulate our conduct in conformity with our ideals.

FIRST PROPOSAL.

In the reform of Economic teaching and research my first important and specific proposal, therefore, is that every student be given a working familiarity with fundamental principles of Scientific Methods of investigation,

and Scientific Management of human effort, as tentatively outlined by me above.

SECOND PROPOSAL.

My second specific proposal is that every student be trained in all the three distinctly developed branches of inductive investigation namely 1 what is variously known as Monographic, Individual or Case method of investigation, 2 the survey or group method of investigation, 3 the statistical or mass method of investigation. My experience leads me to believe that our students have only a slight acquaintance with the statistical method, and that most of us, leave apart the students, have a faint and far-off notion of the technique of the Case method as employed by doctors, as stressed by Mary Richmond in her "Social Diagnosis," the monographic method of Leplay, the individual method as set forth by Healy in his excellent study of "The Individual Delinquent." We are also I am afraid little acquainted with the available literature on the technique of Social survey, as set forth in such books as Aronovici's Social Survey, or Elmer's Technique of Social Survey or the Four orders of Survey so much stressed by Prof. Geddes and his special technique of correlation and co-ordination of categories in social investigations, as set forth by him in such books as Coming Polity, or The essentials of Sociology in relation to Economics." It may perhaps be news to some of us that these contrasted and now well developed methods of investigation do much to mutually define the appropriate portions of the field where each of these can be usefully employed and to correct the conclusions arrived at by using only one of them. In such important branches of Social study such as religion and penology these methods of investigation have led to opposing or complementary conclusions. Compare for instance such a book as James's Varieties of Religious Experience, which employs the individual method of investigation with that of Durkheim who in his study of religion employs the intensive survey method, with that again of Spencer who in his study employs the extensive survey method, with that again of Starbuck who in his Religious Psychology makes such use of the statistical method and realize how different portions of the same field are illuminated by these different modes of approach, and how the weaknesses of each method are often corrected or brought to light by the employment of the contrasted form of investigation. Or again in Penology, Dr. Healy has shown the pitfalls of the statistical mode approach, or the classification of crime being made to do duty for classification of criminal, or again, even a classification of criminals itself being misleading as long as along with the mental and physical defects of the criminal we do not take into consideration the environmental differences in each case. It will appear from this how the concurrent use of the individual, monographic or case method, the intensive and extensive survey methods, and the statistical method, mutually correct and confine each within its proper field of applica-

tion. I therefore propose that every student be given a working familiarity with all these three methods of investigation, all of them important and specific developments of the inductive or rather their scientific method.

THIRD PROPOSAL.

My third and final proposal is that practical work should be insisted on in Economics as in every other science, and that the graduating student be made to keep note book of practical or field work embodying his own investigations, interpretation, and suggestions for improvement, with regard to the phenomena investigated. Thus the practicals should include such exercises as the filling up of a few urban and rural family budgets, cost analysis of a complete industrial or business operation or unit, observation, and suggestions on the economic life of an institution, the economic life of one's own street, village, and city. What is needed is to link economic teaching to life, and rendering it readily available for the service of the ordinary situations which the student will frequently meet with as well as the significance of the larger country-wide problems of currency, finance, trade, transport and tariff.

MY METHOD.

Towards this investigative, interpretative, and inventively suggestive mode of field study I believe the following orderly line of approach will be found helpful. The student begins with immediate inspection or Economoscopy of the parts or processes he intends to study. He names them by their popular name, and indicates the time and place and other significant setting of the distinguishable parts and processes he is out to study. From this direct free observation he proceeds to Economometry or measuring and mapping of the parts and processes, as far as they can be measured and mapped. He next compares, classifies, describes and defines the distinguishable parts and processes, and gives a graphic and descriptive report of his survey. This step may be called Economography. The immediate inspection and direct description, will very likely reveal to him vestiges of a persistent past and tendencies indicatives of a future trend. This must naturally lead him to a genetic and teleological study of the parts and processes before him. The investigation of the vestiges, pushes his studies into the past of the phenomena under survey, so that he begins to trace their antecedents in the past and transformations through time as far as he can do so, through present indications and recorded observations of the past. This step may be called Economogenetics. Combining his studies of the past with those of the present, he may now essay to form a forecast of the future, probable and possible. This effort may be called Economotelesis. Next he may exercise his mind as to how to bring about the best possible future for the phenomena under inspection, investigation, and interpretation, and lay down the lines of useful intervention. This step may be called Economotechnics. That completes the natural educational series starting with systematic observation leading on to measurement as far as practicable, and graphic and descriptive report, thence to a peep in its past history, and an effort to foresee its future, and a

thoughtful plan for improving the future. We thus proceed from survey of the present to a study of the past, to a subjective synthesis of the whole towards foreseeing the future and finally plan again in the living present suggesting activity towards making the better future. Training along these lines will show to the student that all his surveys, studies, and interpretations are fruitful only as they lead to a better future, and that effort short of that is very often only wasted effort. This will impress on him the fact, that learning should be continually regenerated from life and should in its turn serve and regenerate life.

INDIAN ECONOMICS.

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Laws of economics are statements of tendencies which are in constant operation but the direct effects of which may be overpowered or modified by other tendencies simultaneously operating. These modifying forces are not necessarily economic. Ordinarily economics studies man as he is placed in modern societies. Hence the assumptions which are made by modern societies in general also form the assumptions of economics. Of these the two most important assumptions are private property and competition. The idea of property involves the right that each man in a modern society has complete and absolute power to do whatever he likes with what is possessed by him so long as he does not interfere with similar rights of others. It is apparent that economic laws deduced from such a society will be modified in their *effects* if they are applied to a society where no private property is allowed.

A similar and, from the point of view of economics, probably more important assumption is that of free competition. As this assumption is very important we shall consider it in some detail in order to avoid any misunderstanding. Competition in economics seeks to give free scope to the economic self-interest of individuals without any checks. These checks are usually considered to be (1) custom which is always so important in the life of man; (2) combination by which producers or sellers or any other members of an economic group may join together in order better to fight with other groups; and (3) legislative interference with free competition.

With private property free competition involves freedom of contract and therefore enforcement of contracts when voluntarily entered into. This competition is a biological essential which can be seen in all spheres of life, vegetable and animal. It is seen in what is called struggle for existence or survival of the fittest. In a sense it includes co-operation. Co-operation is consciously working together for a common end. Its object is none other than that of competition. Both seek self-interest, one individually and the other collectively. If the self-interest of the individual be contradictory to that of the group it cannot be the interest of either the individual or the group to retain such co-operation. Co-operation, therefore, is really group-competition, and, in this, groups may combine into bigger and bigger groups. Thus one State is a unit as against other States, the individual members of which combine for certain purposes, although sub-groups may have partially antagonistic interests. Nor does this competition necessarily imply anything sordid just as competition in biological evolution does not do so.

Because laws of economics normally presume that private property and free competition operate in their working, therefore to the extent that

this does not hold in a community or country, to that extent laws of economics must be modified in their operation in the light of existing facts. Hence it is necessary to ascertain to what extent economic laws as they have been developed and formulated in the west are applicable to India, and along what lines this modification of their operation is to be seen.

The need of such study as also the difficulty consists in the fact that during the last one hundred years the conditions of Indian life have been changing, rapidly in some cases, slowly in others, but changing all the same, by the impact not, as usually imagined, of the western system merely, but more of what we may call "modernism". The railways, posts, telegraphs, etc. have worked more towards this end than the culture of the west, the effect of which is not so direct nor so strong upon the masses of the people. These changes in social life require to be specially studied in order to discover the results of the operation of economic laws upon the old and the new system in India.

A great difficulty in the way of the scientific student is in the paucity of sufficient and reliable data about the facts of Indian life, especially in the villages where more than ninety per cent. of the population live. This is so in spite of the wonderful mass of statistical information collated by Government. This difficulty is further enhanced by the fact that social changes vary in various parts of the country as a result of the difference in temperament, social customs and traditions, and the stage of development of the people. Also the forces of modern applied science have differently affected different areas.

In applying economic laws to India we find that most of the modifications of their operation are the result of want of the same degree of competition as prevails in the west and upon the assumption for which general economic laws have been built up. For example, in social life caste rules prevent mobility of labour both from trade to trade and from place to place. Similarly variation in wages does not always follow variation in the demand and supply of labour but on customary wages which limit competition.

Some people allege that Indian society is based on an entirely different principle from what obtains in the west, this principle being co-operation as contrasted with competition. As already pointed out this view is wrong inasmuch as competition does not exclude co-operation. Competition assumes the operation of the individual's economic self-interest, and co-operation, when voluntary, is only an instrument to further the same. Such co-operation as is found in India is based upon the lines of the community, village, occupation, and nationality. But the principle is the same as in competition, viz., to foster the self-interest of the groups, and the co-operation obtained from individuals must, in normal course, follow the lines of joint and separate interests of individuals. If there be any conflict between the two kinds of the individual's self-interest he adheres to or gives up co-operation according as the total benefit which he derives for himself is or is not greater than his benefit without such co-operation. Thus in essence there is little

difference between competition and co-operation in economics. If by co-operation be meant compulsory association in economic activity against the self-interest of the component individuals as judged by themselves, that is not at all desirable. If that exist in any part of India it is economic tyranny and should not be tolerated.

Such want of competition which acts as a drag on economic development may be born of social customs, religious prejudices, and various other factors. Thus land in India is subdivided into too small fragments which cannot be economically cultivated. This is due to the law of inheritance which prevails among both the Hindus and the Mussalmans. Also love for every plot of ancestral lands generates the desire of having a share in each plot by the descendants, with the result that each person often holds several plots which obviously cannot be economically used whether in the matter of time wasted in going from one plot to another or of wells for irrigation or of fencing and watching or sowing and reaping. Similarly labour is not so mobile because of the limitation of competition by caste rules, love for home, ignorance, and social prejudices.

The above illustrations will make clear the line along which the economist in India must work in attacking its economic problems. This attitude frankly condemns those who are supposed to have inaugurated a new school of Indian Economics instead of a new phase of study only. Those who seek to derive new laws applicable to India alone or to reject economic laws in their operation in India because there are other conditions and different factors toil in vain in their effort to construct a science of Indian Economics as distinct from economic science in general.

THE TREND OF INDIAN THOUGHT IN ECONOMICS.

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Last year Dr. Radhakamal Mukerjee read a paper on "The New Economics and the Eastern Outlook" before a gathering of the members of the Indian Economic Association. In that paper he emphasised the point that India had a contribution to make to the world's Economic Thought. The discussion that was provoked by his paper left an impression upon my mind that even Indian Economists of repute did not believe that India had her part to play in the evolution of Economic Thought. For example, Professor V. G. Kale of the Fergusson College, Poona, who may rightly be looked upon as one of the leading living Indian economists, remarked to me in all seriousness, "Do you also believe with Radhakamal that India has her contribution?" I said "yes", and it is in support of that "yes" that I am writing these lines for the consideration of fellow students.

Although we find discussions of such economic topics as currency, taxation, weights, and measures, in such old texts as Artha-Shastra of Kautilya, or Sukara Niti, English translations of which have been recently published, or in many books relating to the period of Muslim domination in India, most important of which is the Ain-i-Akbari, yet we can say, without any prejudice to the greatness of India's genius in other departments of life, that the science of Economics, as it is understood to-day, is distinctly an offspring of Western Europe, as it has been since the middle of the 17th Century and till the beginning of the Great War. As a social science it could not help being influenced by the Socio-political conditions of those days. And what were the most dominating notes of this era ! (i) Production, and an ever increasing effort to increase production with no thought to its influence on the well-being of Man ; and (ii) development of the spirit of Individualism, expressing itself in such things as (a) the assertion of the rights of an individual against other individuals, and as against the state or any other social group, (b) the assertion of the rights of individual social groups as against each other, and as against the state, and (c) the assertion of the rights of state as against the rights of the individual and the corporation, and (d) in this conflict of individual rights each oblivious of the interests of the whole.

And these have been the principal notes of the science of economics ; (i) Individualism, with its corollary of free and unfettered competition, in a market where every one is acting for himself, (ii) Volume after volume written on Production, Distribution and Exchange—the last two being nothing but further processes to carry the modern system of production to its logical end, and (iii) in this clash for further production and free competition a comparative neglect of Consumption and its ultimate laws—ultimate in more than one sense : ultimate because it is ultimately on them that the so-called laws of Exchange and Distribution very largely depend, and further ultimate in the sense that it is on a thorough and correct understanding of these laws that Production, Distribution and

Exchange will seek their true level not only in the text books of Economics, but also in the din and dust of every-day life, where production means production of finished commodities, and not a discussion of certain theoretical concepts. Now one thing that India has to do and has begun doing it in her own way, is to make people realise that production is only a means towards an end—Human consumption—and not an end in itself as most of us take it to be. Over and over again, since the beginning of the Industrial Revolution in England, and even before that, this aspect of the relation of production to man has been emphasised, and as often man has refused to listen to it. It was the burden of that beautiful song which Lord Krishna gave to humankind in the battlefield of Kurukshetra many a thousand years ago, it was the same which Lord Christ preached in his own days, and which many a prelate has been preaching after him. It was on this that social thinkers of the 19th Century like Ruskin, and Morris, wrote and talked so much, and it is on this again that M. K. Gandhi has been writing and speaking in India in our own days. Then what are the implications of this way of looking at things, and the method of production adopted to produce them? Even so great that a whole chapter could be written on them but we shall confine ourselves here with a few remarks to put intelligent people on the track. Looked at from the point of view of the individual, the individual enterprizer must henceforth realise that production which so far has been to him but a means for selfish gain, is but a means for social well-being and this conscientiously and seriously, and therefore he should judge every movement of his in that direction from its likely results not only on his profits, but also on (i) the health and happiness of his men as man, and not only as an instrument of production, and (ii) on the health and happiness of the world at large. Looked at from the point of view of society the social effort must not be directed in a head-long way to increase production, hailing with unrestrained enthusiasm every single improvement or invention, whether in machinery, or in the processes of production, or in the methods of business organisation, without waiting for a moment to think on its influence on the well-being of Man. The unqualified social sanction that now exists for all additions to National Wealth whether in the quantity of goods of existing variety to satisfy existing wants, or of new varieties of wealth to satisfy new wants, must give place to a qualified sanction of the same where it will be recognised that an increase of wealth in the possession of an individual or for the matter of that in the possession of a social group does not necessarily lead to a *pari passu* increase of welfare. It may or may not.

Although some writers on Economics have been feeling their way towards this point yet one can safely say that even Pigou, whose statement on the relation of increase of wealth or national dividend and the resulting welfare is the latest, does not state it as clearly and in that peculiar form in which we would like to put it.

It was Jevons, the Senior, who probably after being influenced by the writings of Carlyle and Ruskin, first gave serious thought to the study of utility (consumption) and analysed those factors of which utility of a commodity to a man during a period of consumption, is a function. This analysis was carried further by Pantaleoni in his Pure Economics, wherein

he remarks "The usefulness of a *direct commodity to the consumer is a function not only of its own quantity but also that of all other commodities he consumes together with it*, of those he has consumed previously, and even of a part at least, of those he expects to consume later. Indeed the utility of a commodity depends further on the order in which other commodities have been consumed previously. Thus for instance the gratification of a loaf of bread depends not only upon its size and on the appetite of the eater, but also on the other viands, if any he partakes with it, on the fact of his having quenched his thirst or possessing the means of doing so, of his feeling cold or warm, tired or fresh, sad or gay. The order in which dishes are served heightens or detracts from the hedonic effect of a dinner. "And this we may take as the second step in the building up of that argument which we mean to put forward later on in this paper. The third great step has been taken by Pigo in his book *The Economics of Welfare*, part I, chapter IV, page 48, where he after laying down a general proposition in these terms, "Any cause which, without the exercise of compulsion or pressure upon people to make them work more than their wishes and interests dictate, increases productive efficiency and therefore with the average volume of the national dividend provided that it neither injures the distribution nor augments the variability of the country's consumable income, will in general, increase economic welfare," goes on to observe that "this proposition, it will be observed, is purely qualitative in form, and states nothing about the quantitative relation between an expansion of the national dividend and addition to economic welfare. To remedy this deficiency completely is, of course, impossible. It is not impossible, however, to throw some further light on the matter. *To this end we may begin by leaving out of account the reactions that may be produced by the fact of consumption upon capacity for deriving enjoyment from consumption.* When this is done, the familiar law of "Diminishing Utility" instructs us that a given expansion of the national dividend is likely to be accompanied by a less than a proportionate increase in economic welfare."

This is the nearest approach to that statement which the writer of this paper first made, of course in a crude form, in a paper entitled "The Standard of Living or Life in India" in the year 1919, and which he now wishes to re-state in a more mature form. There would have been no necessity of doing so had Pigou worked out the point to its logical limit. He mentions it but with that important provision which is italicised in the above quotation. And one implication of that italicised portion may be that every addition of fresh wants, and of new commodities made to satisfy those wants, reacts upon the capacity of deriving enjoyment of an individual, and helps him to derive enjoyment from further new wants and new commodities. The fact of reaction is not denied. Reaction there is, and more so in a dynamic society, but I may be permitted to submit that it may take one of the two following forms. Either it may increase the capacity of deriving enjoyment, or it may decrease it. To hold the position that it always increases it is as untenable and as unsupported by facts, as would be the position of those who may say that it will always decrease. What seems to be reasonable is that under certain circumstances it will increase, while under others it would decrease the capacity for deriving enjoyment.

Take it for granted that further additions to wealth in the possession of an individual react upon his capacity for deriving pleasure, and always make it greater, even then the question remains: At what rate this increase in capacity takes place? Whether at a proportionate, or more than proportionate or less than proportionate rate? General discussions on this topic have evaded this question so far; but the underlying assumption seems to be that it increases either at a proportionate rate or at an increasing rate. Unless we assume one of these rates, we will have to come to the position that sooner or later the reaction must take the second form, that is, decrease the power of deriving enjoyment. Now is this assumption of increase at a proportionate, or at an increasing rate justified? By no means yes. And why? because there is not a iota of statistical or any other inductive data of any sort to support it, beyond a vague feeling of self-interest that persuades people to think that it must be so, otherwise how can they support their demand of an ever-rising standard of living and ever-rising emoluments to maintain the same. And if the proportionate or increasing rate cannot continue for ever, the diminishing rate must begin to act after some point, and ultimately lead to a point where further additions to wealth, in the possession of a man will cause diminution in his capacity for deriving enjoyment. What are my reason for holding this view? Here as there we have no statistical data to support our statement. But there is this difference that the first assumption is in direct conflict with the full life history of the Law of Diminishing Returns, or the Law of Diminishing Utility as it is called in consumption, and as we find it working in the case of individual commodities; while the second is in full accord with the same. A man A begins by giving to another man B, unit after unit of a commodity X. Now it is recognised by almost all that if the Units of the Commodity X be very small, of course relatively to the capacity of consumption of the individual concerned, then the first few Units will have very little utility for B, in certain cases they may actually have disutility, but as more and more units of X come to B, the utility of Units already in his possession will also rise, and each successive unit will have an increasing utility for him. Not only that each successive unit will go on reacting upon the utility of previous units, and will increase it. But this process will continue only up to a certain point. If however, A continues to give units of X to B, a point will reach after which each successive unit will have a decreasing utility for B, and if the process is continued further, then not only the utility of fresh additions will go on diminishing at a rapid rate, but it will also react upon the utility of the units of X already in the possession of B. This latter point has not been so far well recognised in the discussions of economic theory on utility; although a little reflection would show that it is this assumption which underlies the famous Law of Indifference, which means that in a market one price is paid for all the units of the same commodity. This gives us the full Life History of the Curve of Consumption of a particular individual commodity. What I wish to submit is that probably the same curve is also true in the case of commodities taken collectively. Thus in a society of a very primitive character, where people hardly get bare necessities of life, further additions of new commodities satisfying new wants, would cause a favourable reaction on the capacity for deriving

enjoyments from consumption, with the result that not only each fresh addition of wealth will have an increasing utility but it will also increase the capacity for giving enjoyment of commodities that were already in the use of that society. However when this society will have sufficiently developed, and secured to itself a pretty large number of commodities satisfying its necessities, comforts, and luxuries, then further addition of new commodities satisfying new wants would result in having a diminishing utility for that society, and their reaction will be of the opposite kind. On the capacity to derive enjoyment from consumption would be of the opposite kind. It does not seem to be either logical or fair to assume that in this case there is only one kind of reaction, and that which heightens the capacity of deriving pleasure. This way of reasoning from the general to the particular may seem fantastic to some of my friends, but I may be permitted to add that it is one of the well recognised methods of reasoning in psychology as in physical sciences like chemistry where properties of many an element were successfully prophesied long before the discovery was actually made.

Then again it fits in very well with that view-point which spiritual teachers, socialists, and social thinkers have been asking us to adopt towards material effects of life. All agree that Happiness is the end of Life or Human effort. If reaction of fresh additions to wealth on the capacity of man to derive enjoyment always result in an increase of that capacity, then certainly every man, or for the matter of that every nation should always strive to increase wants, and the number of commodities to satisfy those wants, because in that way you would go on adding indefinitely to the Happiness of Man—the *Summum Bonum* of Human Life. And this is the view of the average man, and the present science of Economics. Either this must be true, and the attitude of the average man towards his worldly possessions correct, or that must be true and the attitude towards worldly possessions that has been off and on recommended to us by spiritual teachers must be correct. Both cannot be true.

I for one believe that the truth lies in the view which is based on the applicability of the Law of Diminishing Utility not only to individual commodities, but also to commodities taken collectively. And this, not only because it fits in so well with the teachings of spiritualists, but also because the fate of individuals, and nations that ran head-long after production and accumulation of wealth in bygone days, as well as in our own, teaches us the same valuable lesson that, after all wealth is not an end in itself.

We may now say that it is time for students of Economics to realise that the tendency to Diminishing Returns, in satisfaction or welfare (which is otherwise called Diminishing Utility in consumption) is found not only in the case of individual commodities consumed or possessed by a man but is also true of commodities taken in a mass whether in the possession of an individual or that of a society. Just as in the case of an individual commodity, when being consumed by an individual during a given period of time, it is quite possible, and this possibility increases as the units of consumption go on getting smaller and smaller, that the resulting utility for each successive unit may begin by rising at first, i.e., by increasing at a more than proportionate rate

but ultimately, if consumption is continued it must end in increasing at a less than proportionate rate. Similarly in the case of total wealth in the possession of an individual or in that of a society it could be said that fresh additions to his or its wealth will increase the total welfare but at a diminishing rate. Of course, all those limitations, which we have discussed in the case of the Law of Diminishing Utility when applied to individual commodities, will be understood to be applicable here.

And this broader application of the Law to the total stock of wealth may be interpreted in two ways; in one of which it is easy to see the working of the Law; while in the other it is not, and it is there that I press for its recognition. Increase in the stock of commodities in the possession of an individual, and for the sake of convenience of reference we may suppose that stock to consist of 6 x, 8 y and 10 z, may take the form of an increase of each individual commodity to 10 x, 12 y, and 15z; and here it is not difficult to see that if the utility of the previous stock to him was 100 then the utility of this new will be something more than 100 but not exactly in proportion to the increase in the stock, because of the fact that the total stock consists of increases in the stocks of each individual components of the group, each of which is subject to the Law of Diminishing Utility. But the increase in stock may take a different form and result in 6x, 8y, 10z, 8w, and 8p, *i. e.* there may come into existence quite new commodities satisfying new wants. In this case general opinion seems to be that further additions of new commodities satisfying new wants, result in augmentation of the national welfare. But I press for the applicability of the Law of Diminishing Utility even to this case, and have given my reasons for it.

If this way of interpreting the Law of Diminishing Utility be correct, then we shall have got an economic Law supporting the statement (that an increase of wealth in the possession of an individual or in the possession of a social group does not necessarily always lead to a *pari-passu* increase of welfare) that has been so far made by spiritual thinkers and social reformers.

This recognition will further lead to a modification of our ideas about the significance of Standard of Living in Economic life. And this we may have to do on very much the same lines as I have done in the paper mentioned above. There I have defined the Standard of Living in that narrow and generally accepted sense where it is used as a collective name for all the necessities, comforts and luxuries of life to which a man or a group of men is accustomed and have pointed out "That the underlying assumption in the discussions, of the English and American economists, on this topic that greater the number of wants of a man, or the higher his Standard of Living, the more efficient (or happy) would he be, and the more civilized does he become, is not correct, and that based on this the equally dogmatic claim of some dominant classes to have unceasing augmentation of their income to maintain their ever rising Standard of Living is equally untrue."

This is one thing that may be India's contribution to the evolution of Economic thought. Not that this method of approach, and its corollaries are a monopoly of the Indian school of thought in Economics, because war and the aftermath of war have succeeded after all in bringing afresh to the fore-front this point of view in the minds of some

western writers also, but *because this peculiar way of approaching towards material possessions is in perfect harmony with the age old Indian ideals and aspirations of spiritual as well as mundane life. It is only the Indian genius, at least so it seems to me, that can, and should insist in the way that this point requires insistence for its acceptance by the world. Hence its place in the Indian outlook on Economics.

But this is not the only point that the Indian School of Economic Thought has to keep as an important item in its programme. We have as yet only one more, and that is a far more subtle and far more difficult idea to be easily accepted by the modern world steeped as it is in Individualism. It consists in that attitude with which an individual approaches his productive or consumptive effort in life. The present socio-economic organisation in the west, (and also, of late, in India due to new methods of production etc.), and science of Economics, which itself is very largely expressed in terms of the former, have been emphasising the Individualistic point of view. The man looks upon everything from the point of view of his own advantage or disadvantage. The same is true of social groups or production groups. The result is that sometimes we have over-production, sometimes under-production, and such other evils as monopolies, trusts, *kartels* and labour strikes on one side, and offensive trade unions, distributive stores, ill-fed and ill-clad labourers with aggressive syndicalism on the other. And all this is due to what? To the want of that social spirit or better still if we call social outlook, which under the name of communalism Dr. Radhakamal Mukerjee of the Lucknow University has sought to inculcate in his book the Principles of Comparative Economics, and which was the characteristic outlook of all economic organisation during the medieval period in Europe, where every one within a manor (which constituted the Economic unit of those days) from the lord down to the meanest artizan and the hardy yeoman, looked upon himself as a part of one indivisible whole, and therefore guided his personal efforts at production, and consumption not from the point of view of his personal advantage but from the point of view of the advantage of the group to which he belonged. And this used to be, and is even now to a certain extent, the characteristic outlook of the individual members of an Indian village community towards each other. Here the individual lives and works for the family, the family for the village, and the village for the state. Or again the individual lives for the family, the family for the caste, the caste for the community, and that in its turn for the state. Each lives and works as they do under individualism but, with this difference that each unit lives and works for the good of something greater than itself.

Perhaps it is this which has led Radhakamal, enthusiastic as he is about the retention of this social outlook, to advocate the retention of the system of caste itself in spite of its so many drawbacks made more noxious than they used to be by the changed conditions and circumstances of life and labour in this land. Whether one may agree with him or not (I for one do not) as to the desirability or the feasibility of maintaining the system of castes in India, it is not possible to differ from him when he advocates the maintenance of that social spirit which animated the production and consumption efforts of one group towards another group in the Indian village organisation, or the maintenance of that spirit

which permeated amongst the members of a caste in their dealings towards each other, or the members of one caste towards the members of other caste in their individual or collective capacity. There are people who honestly believe that it is still possible to maintain and infuse that social spirit which characterised the old socio-economic organisation in India and elsewhere, and which is found to exist in a modified and less dominant way even to-day in India, and some other countries of the East. This is not all, some of us believe that ultimately the world must come to adopt this social spirit as its guiding note, if half of the present troubles of the troubled Humanity are to be got rid off. And here I may add that although this social outlook has not been a monopoly of the Indian people or even of the people of the East, and did once animate the whole socio-economic organisation of the West, and therefore we cannot claim it as an exclusive contribution of the Indian school of thought in Economics, yet we can claim it in so far as it is in the East and specially in India with its organisation of caste existing up to this day, when West and a greater part of the rest of the world is permeated with the spirit of Individualism, that this spirit is somewhat maintained, and in so far as it is in the writings of a set of Indians that it is seeking its fresh expression to counteract the dominant Individualism of the West.

These are some of the peculiar lines of thought that are struggling their way through the expressed and implied thought of the new school of economic thought in India, and as has been in the past with every new expression of thought it is meeting its share of ridicule and unbelief at the hand of people who are confirmed believers in the doctrine and practice of the dominant thought. Given time and opportunities of further development and fuller expression it is bound to gain ground and make itself felt, and it is to that end that some of us, so far in an un-co-ordinated way, are converging our efforts, of course, with full hope of success in the end.

NON-CREDIT AGRICULTURAL CO-OPERATION IN INDIA

BY J. A. MADAN, ESQ., I.C.S., REGISTRAR, CO-OPERATIVE SOCIETIES,
BOMBAY PRESIDENCY.

For more than one reason the progress made by Non-Credit Agricultural Co-operation in India has been very slow. The main object of the movement in this country when it was first started was to free the agriculturist from the money-lender by supplying him with the capital required for agricultural purposes at reasonable rates. The first Act of 1904 confined the operations of co-operative societies to credit. It was only in 1912 when the Act was amended that societies for non-credit purposes were also registered under the Act. Besides, it is always much simpler to run a credit society than to organise and carry on the more complicated work of such non-credit societies as those of Co-operative Purchase and Sale. In rural areas where the population is very backward and good business managers are not usually available, it was natural that non-credit operations even when introduced should make very slow progress, and yet it must be said that co-operative credit alone cannot be as advantageous to the rural classes as it should be, until the non-credit movement has made much better progress than it has done so far. If co-operation is to do real good to the cultivator, it must help him in increasing his production and in securing for him the greatest possible income for his produce. Supply of capital at reasonable rate would do this to some extent by saving to him the difference between such rate and the rate and the other charges which he would otherwise have to pay to the *Sowcar*. Much greater benefit would accrue to him if he were to be in a position to purchase all his requirements at reasonable rates and be sure of the quality and the quantity of the purchases, and also if he were to obtain the highest possible price for the produce of his land. Hence the necessity for societies for Co-operative Sale. In Europe, the development has accordingly been carried on the lines both of supplying credit as well as of Co-operative Purchase and Sale. In Denmark, for instance, co-operation has built up societies embracing almost every branch of agricultural work including the supply of credit. In France, Co-operative Purchase has made very large strides while in America, the Co-operative Marketing of produce is being done on a very large scale. Owing to the absence of any rapid development of non-credit work, the agriculturist in this country has only derived a small part of the advantages which can accrue to him from the movement. It might also be stated that progress of the non-credit work will greatly strengthen the credit part of the movement. Facile credit is not without risk. The formation of non-credit societies secures better control over the proper utilisation and

recovery of loans while on the other hand schemes of land improvement will require funds which can be supplied at least partly by Credit Societies and Central Banks.

Non-Credit societies can help the agriculturist mainly in increasing his production through agricultural and land improvement, in increasing his net profits by co-operative purchase of his requisites and by co-operative sale of his produce. It would perhaps not be irrelevant to describe here briefly what work has been done on these lines in this Presidency and to note the drawbacks and the difficulties. Other lines on which work has also been done are the formation of Cattle-breeding and Cattle Insurance Societies but these have not so far become very important.

In this Presidency, while the number of agricultural credit societies is 2710, the number of non-credit societies is only 159. The working capital of the former amounts to over Rs. 1,70,00,000 while that of the latter is only a little over 5 lakhs. The progress made as regards co-operative purchase has been extremely slow. Most of the work done has been by the shops managed by Branches of the Provincial Bank and these are situated in tracts irrigated by canals. Last year they sold manure worth about 5 lakhs. The Bank takes no risk but only acts as agent. This arrangement has worked successfully from the business point of view, but the drawback is that though the shops are run in the interests of the members they are not under their control. On the other hand the success of the several co-operative manure societies started in other areas has been varied. Societies which purchased manure worth several thousands and were thus in a position to purchase directly from the outside wholesale markets have on the whole been successful. Smaller societies, however, which buy locally can usually offer no very great advantage and often tend to become mere credit societies, giving credit in manure instead of in cash. Small co-operative societies for purchase cannot be expected to run successfully, unless at least, they are joined together into some central organisation which can make the purchases for them in common. The same remark applies to Implement Societies.

In dry tracts where the only manure used is generally farmyard manure, the loans usually taken from the credit societies are for seed, bullocks and maintenance. Several seed societies have been started and some are doing good work by purchasing good seed at harvest time and distributing it amongst members when required. But the real work in this connection has been done by Cotton Sale Societies which themselves provide for the supply of good cotton seed to their members.

Societies for the co-operative sale of agricultural produce are one of the most powerful means of securing to the cultivator a fair share of profit. At present the interest of the cultivator suffers as his produce passes through the hands of several middlemen. While it would be impracticable in most

cases to eliminate all middlemen and bring the producer directly in touch with the consumer, it is quite possible by co-operation to reduce the number of such middlemen and thereby increase the share of the profit which goes to the cultivator. For him mere increase in production is not enough, he must also get the best possible price for his article. Co-operative marketing will help him to obtain it, but it must also be remembered that it is also perhaps the most difficult branch of agricultural co-operation, especially in this country where the cultivator is illiterate and suspicious and business managers efficient and above board are not always to be found.

We have at present 33 sale societies out of which 18 are for cotton sale. Only about 20 of these societies can, however, be said to be doing really good work. The cotton sale societies did business to the extent of over 23 lakhs last year. The largest turnover was in the case of the Gadag Cotton Sale Society which sold cotton worth 9½ lakhs. This, however, represented only 11 per cent of the cotton brought into the market. In other cases the percentage was still smaller. The societies in the Southern Division sell unginned cotton. Each cultivator's cotton is sold separately. One great advantage which these societies have at present and which is also one of the main reasons of their success is that the cotton brought to the societies for sale is graded by officers of the Agricultural Department.

The other class of sale societies has been formed in Gujarat. Both here and in the Southern Division sale societies undertake the distribution of good seed, but in Gujarat the societies deal with cotton lint. Members' produce is collected together and ginned by the society. The produce of the members grown from the same class of seed is pooled together and a uniform price based on realisations during the year paid at the end of the season. Members are, if necessary, paid a certain percentage of the probable price as an advance at the time they bring in their produce. Under this system the societies are able to sell their produce by sample and get into direct touch with the market in Bombay.

Besides cotton, sale societies have dealt with molasses, areca and groundnut, chillies and miscellaneous agricultural produce. The shops connected with the branches of the Provincial Bank sold molasses worth nearly 8 lakhs on commission. The total sale by all the co-operative sale societies amounted to nearly 35 lakhs.

The experience in this Presidency confirms the lessons already learnt in other countries regarding co-operative marketing. They may be briefly summarised as follows :—

1. The society should be for the commodity and not for the area ; and wherever possible a central organisation for dealing with the same commodity should be started. The bigger the organisation the greater are the chances of success.

2. The society should be able to command a considerable percentage of the commodity brought into the market. For this purchase in some countries societies enter into a contract with their members binding the latter to bring their produce to the society for sale and the societies have legally the right to get the contract enforced through Courts, or if that be not possible they can secure damages. The time is not ripe in India to get such legislation passed, but several of the credit societies in this Presidency have made a rule making it compulsory for members who are given a loan for cultivation of say cotton, to take the produce to the local sale society. Such a rule, however, is not always enforceable in practice.

3. Arrangements must be made for the adequate financing of the producers. If the members are financed by an ordinary money-lender, it is usually likely that the borrower will take his produce to him for sale, as often the moneylender is also the dealer in that commodity. Sale societies can, however, advance only on the security of the goods brought to it for sale. Financing prior to the production of such goods should be done by the local credit societies. It is very risky for sale societies to undertake such finance.

4. It is very desirable to get the produce inspected and graded by a competent staff.

5. They should have sound business management which will naturally have to be well paid.

Another important direction in which non-credit work can be developed is by the establishment of societies for carrying out work of agricultural and land improvement. Three kinds of societies which have been or are about to be started in this Presidency may be mentioned. We have registered four societies for fencing against the ravages of wild pigs. These have proved successful and are not only advantageous for land already being cultivated but also for bringing back under cultivation land which had been abandoned on account of damage done by wild animals. Two Joint Cultivation Societies have been registered, one of these in a tract liable to famine, where an oil engine has been set up to irrigate part of the land taken up by the society. The third class of societies for which proposals are now being considered are irrigation societies in which oil engines are to be set up on big wells or tanks, to irrigate the land under their command. Besides this there are bigger projects, like dams across *nalas*, series of embankments in certain villages, which are to be carried out on a co-operative basis. These naturally require being inquired into by an expert. The local Government has recently sanctioned the appointment of an Agricultural Engineer who will examine these schemes and it is hoped that after this appointment more rapid progress will be effected. It is obvious that in the case of societies

for agricultural and land improvement the advice and guidance of officers of the Agricultural Department is very desirable and necessary. The question of financing such works has to a great extent been solved by the fact that the local Government have for the last two years been placing a grant out of its tagavi grant at the disposal of the co-operative movement for long term loans for land improvements.

For the further development of the non-credit movement, intensive propaganda work is necessary in selected tracts and it is desirable that such propaganda work should generally be undertaken in areas where credit operations have already been successful and the ordinary principles of co-operation have been understood. It is also necessary to have a paid staff to carry on the work of propaganda, organisation and supervision. Honorary workers will help but as the work is difficult and requires continual attention and technical knowledge for guiding, a paid agency is necessary. It is also essential to have close co-ordination between the two departments of Co-operation and Agriculture. In this Presidency such co-ordination has been secured to a great extent by the formation of the Joint Board of the Registrar and the Director of Agriculture, with Divisional Boards under them formed of officials of both the departments and non-officials taking interest in co-operation and agriculture. The starting of Taluka Associations with a Government subsidy for the spread of agricultural improvements through co-operative societies has also the same end in view. The successful working of these associations will, it is hoped, give a great stimulus to the development of non-credit work in this Presidency.

THE POPULATION PROBLEM IN INDIA.

BY PROF. C. J. HAMILTON, M.A., PATNA.

In a great country such as India, inhabited by people of widely different stages of civilisation, who speak many different languages, profess a number of religions that have little in common, and observe social and ethical rules so various that there is hardly any conduct that is not at once condemned by some section while approved by another, there is presented a series of problems of profound interest to the student of social evolution all of which are in one aspect problems of population. For even in a country so conservative as India, where travel is often almost impossible for very large sections of the people and where the different social and ethnological groups are hedged about by laws and customs that tend to preserve each in a water tight compartment there is still at work the process of competition and social selection that slowly modifies the structure of society and leads to the extinction, the modification or the survival of different types.

But it is not as a student of ethnology or of comparative religion that I propose here to consider the problem of population. The problem of chief importance to the economist is that which has earned the name of the "Population Problem," namely the relation of the population to the means of subsistence. In the light of such information as is available from the Census of 1921, I want to attempt an answer to the question "Is India Overpopulated?"

Whether modern states are in danger of overpopulation and, if so, under what conditions, is a question that has been fiercely discussed by a large number of publicists in many countries. At the present time the destruction of capital and breakdown of economic organisation resulting from the war has brought much suffering in its train. It has served to bring into renewed prominence the question whether numbers are not pressing too hardly upon the means of subsistence. "The most interesting question in the world" says Mr. J. M. Keynes, "(of those at least to which time will bring us an answer) is whether, after a short interval of recovery, material progress will be resumed, or whether, on the other hand, the magnificent episode of the nineteenth century is over." (Introduction to "Population", by Harold Wright) To this query, Sir William Beveridge has recently replied in the following words: "Such examination as I have been able to make of economic tendencies before the war yields no ground for alarm as to the immediate future of mankind, no justification for Malthusian panic." (Presidential address to the Economic Section of the British Association 1923). And yet even Sir William Beveridge appears to admit that in some sense a "population problem" remains, for he says in the same address,

“Nothing that I have said discredit the fundamental principle of Malthus, reinforced as it can be by the teachings of modern science.” It would seem, therefore, that the problem of population can be stated in at least two ways and that the answer to the problem will depend on the way in which it is stated. It will, in fact, be found that the controversy on the subject has often turned on a failure to agree as to the nature of the issue at stake. It is important to make this issue clear at the outset.

THE DEFINITION OF OVERPOPULATION.

The essential distinction consists in differentiating between overpopulation as a state and overpopulation as a tendency. But overpopulation regarded as a state may be conceived in two ways. The first may be defined as final overpopulation or saturation. It would exist in complete degree supposing that the material resources necessary for man's economic well-being, the cultivable land, the coal, the metallic ores and so forth, had been so far exhausted that they everywhere yielded a diminishing return to man's labour. The food supplies are here of primary importance, for whatever may be the resources in other directions they will not eventually make up for a defect in food materials. It is to this aspect of the case that Sir William Beveridge has chiefly addressed himself and to which he has declined to give a pessimistic answer. He believes that statistics show an increasing return to man's labour and that there are large undeveloped resources which give promise of a continued increase. He asks that his view may be confirmed by an investigation into the potential agricultural resources of the world. Mr. Keynes, on the other hand, is not so confident and thinks that statistical evidence suggests that even before the war the effects of the laws of diminishing returns had begun to make themselves generally felt.

Overpopulation defined as a state may, however, be conceived as relative rather than final. At any given moment there is a certain volume of capital available for productive use, there is a certain stage of scientific knowledge applied to production, there is a certain degree of human efficiency dependent on education and social organisation. It may not be denied that in time these limitations may be overcome and that the result will bring an increasing return to man's labour. But relative to existing economic circumstances the numbers of the people may be such as to press upon the means of subsistence and so may be said to result in overpopulation.

NOTE.—The phrase “pressing upon the means of subsistence” is capable of varying interpretations. It certainly does not connote “death from starvation” in the bald sense. It does not even imply that considerable sections of the people are living at the lowest possible standard of consumption that is compatible with existence. But it does imply that the death-rate, particularly the infantile death-rate is directly swollen by reason of poverty and that this poverty is due to excess of numbers. Sometimes the state of relative overpopulation is defined as relative to an optimum population. At any given time relative to the existing resources of produc-

tion and the methods of economic organization there will be a certain number of the people which will give the highest return in respect of income per head. This is the optimum number and overpopulation may be said to exist when this number is exceeded, just as underpopulation exists when this number is not reached. This mode of conceiving the question of overpopulation is prominent among recent writers. Referring to the question whether India is or is not at present overpopulated, Mr. Carr-Saunders says: "What we want to know in the case of India is whether the real income per head is increasing or not with the increase of population." (The Population Problem, page 275).

In my opinion this method of formulating the issue is not satisfactory. I do not deny that it is in itself a very important question; possibly the most important question relative to population. But there is another question of at least very great importance. It is whether population is being actually restrained from a more rapid increase by the effects of poverty rather than as the result of a rational limitation of numbers. Poverty may be an effective determinant of the death-rate while the average income per head is rising. It would be sufficient to bring this about if the consumption of conventional necessaries were increasing while the effective check upon the growth of numbers continued to be a deficiency in the consumption of necessaries. This suggests another mode of defining overpopulation.

In contrast with the two ways of regarding the subject just explained there is another way of conceiving it. The primary fact may be thought of as the existence of a tendency on the part of human beings to reproduce their kind at a rate faster than the rate at which they are increasing the material means of subsistence. If this tendency is in *effective* operation the results must follow. It can only be a matter of time before the state of final overpopulation comes about. But, much more immediately important, the state of relative overpopulation must be present, probably exhibited in the oscillatory form suggested by Malthus. The important issue is thus shifted. It is not so much a question of examining the existing undeveloped resources, or of ascertaining whether the law of diminishing returns is actively at work, as of investigating the nature of the checks upon the tendency to human increase. It is presumably of overpopulation regarded as a tendency that Sir William Beveridge was thinking when he said that the fundamental principle of Malthus remained undiscredited. This is the aspect of the subject that appears to me by far the most important and requires to be put in the front place rather than, as is customary, to be concerned mainly with the question of the existence of surplus lands and reserves of minerals.

We may formulate the problem of overpopulation, therefore, under two main heads:

- (a) Is the existence of the tendency towards overpopulation a potent fact and what is the nature of checks which keep the tendency to increase of numbers within bounds?
- (b) Has the tendency now produced in India an economic condition that may be fairly described as one of relative overpopulation?

To this latter question one recent writer at least has given a tentative answer: "In India the population has been increasing with disquieting rapidity owing to the removal by British rule of many of the checks to population which formerly prevailed; and it is probable that the recurrence of famines in that country is partly attributable to this increase." (Population, by Harold Wright, page 66.) I should like to point out that this passage seems to me to indicate a misconception of the real character of the problem. As a step on the way towards final overpopulation the large increase in the Indian population may indeed be described as disquieting. This, however, is a distant prospect at present. Apart from this, what does the large increase imply? Merely that the economic resources of India have been largely increased making possible the expression of the tendency to overpopulation in a growth of numbers. For the time the checks have been less severe. There is nothing to suggest that the standard of living of the people has been lowered as a result. In fact the increase really leaves the problem where it was before, for it does not in itself afford any indication of the nature of the checks by which the Indian population was restrained before the advent of British rule or now. This, however, is the essential problem.

THE MALTHUSIAN DOCTRINE AND POPULAR THEORY.

I have distinguished the conceptions of overpopulation defined as a fact and as a tendency. Before considering how far overpopulation regarded from either of these standpoints may be predicated of India it may be worth while briefly to refer to certain popular refutations of the so-called "Malthusian bogey". The Malthusian doctrine, stated in its essential form and put in such a way as to avoid the inaccuracy of the "arithmetico-geometrical law," depends on the following propositions:—

- (a) The fecundity of the human race is such that the people, unless subject to certain checks, will multiply in number at a rapid rate.
- (b) The means of subsistence cannot be increased at nearly such a rapid rate.
- (c) Therefore, unless the people restrain their procreative instincts, the population will multiply up to a point at which the death-rate arising from certain positive checks will prevent further increase. These positive checks were chiefly the forces of disease and a high death-rate due to poverty.
- (d) The only alternative to the operation of this positive check on the growth of population, a check which, in the words of Malthus, made itself felt through the forces of misery and vice, was to substitute the preventive check of self-restraint.

As Mr. Carr-Saunders has remarked "the whole theory is one of the comparative (potential) rapidity of the increase of population and of the (potential) increase of food." (The Population Problem, page 198.)

Undoubtedly the practical significance of Malthus' discussion lay in the fact that he was unable to offer any hope that the majority of the people would exercise self-restraint. Hence it appeared inevitable that a large section of the people should be condemned to what economists have more recently described as a state of primary poverty. "This natural inequality of the two powers of population, and of production in the earth, and that great law of our nature which must constantly keep their effects equal, form the great difficulty that to me appears insurmountable in the way to perfectibility of society." (Essay on Population, 1st edition, Chapter I.) Malthus indeed defended himself from the charge of teaching that poverty was inevitable. He pointed out that the preventive check of prudence was actually operative. "A foresight of the difficulties attending the rearing of a family acts as a preventive check." "The preventive check appears to operate in some degree through all the ranks of society in England." But he believed that this preventive check of prudence was not resorted to with sufficient generality to prevent the pressure of population on the bounds of subsistence. "The positive check to population, by which I mean, the check which represses an increase which is already begun, is confined chiefly, though perhaps not solely to the lowest order of society." Unless these orders could also be made amenable to the dictate of prudence there remained no escape from their poverty. There is a further point to notice in the Malthusian theory. Abstention from marriage was commonly found to lead to the vice of prostitution. Hence he coupled the misery of poverty with vice as the two evils arising from the tendency to overpopulation. Mere prudence therefore was not a complete remedy. The only effective remedy according to Malthus lay in the practice of "moral restraint."

It is clear that the Malthusian theory is primarily an insistence upon a tendency rather than the predication of a fact. This, at least, is so if we accept the form of his theory as expressed in the later editions of his work. He spoke in the first edition of the difficulty presented by the disparate rates of increase of population and food as "insurmountable". In the later edition he emphasised the possibility of escape by means of the preventive check. It follows from his theory, however, that unless the preventive check is operative through large sections of society the state of overpopulation can only be a matter of time. Even if we suppose the utmost scope given to economic discovery and full use of all the unoccupied spaces of the earth it is yet true, as Mr. Harold Cox has recently put it, that "As any growing thing increases in size its rate of growth must decline; for otherwise an impossible figure would quickly be reached." (The Problem of Popula-

tion, Harold Cox, page 31). As an illustration of the actual possibilities he shows that if the population of the United Kingdom continued to increase at its present rate for the comparatively short space of 360 years not a long time in the history of a nation it would far exceed the present population of the whole world. Such is the potentiality even in a country with a low birth-rate such as prevails in the United Kingdom. What would be the case if human fecundity were given anything like full play. Some idea of the maximum birth-rate may be reached by such a calculation as the following:—

Suppose that the women of child-bearing age in a community are one-fifth of the population. That is approximately the number in all countries. If all the women were healthy, married and produced a child once every two years, it would lead to a birth-rate of 100 per mille or more than four times the rate for England and Wales at the present time. In the light of these facts there is no possibility of criticism regarding the Malthusian theory to be found in questioning the potential fecundity of the human race.

While it is true that the Malthusian theory is primarily a statement of tendency it is none the less true that Malthus believed it to be the explanation of a fact, the fact of poverty. The check upon the potential growth of numbers has always to be effective and since he saw no sign of the preventive check becoming effective he saw no immediate escape from the fact of poverty as a positive check. It will be found that in considerable sections of the people in every state and in the vast proportion of the people in many states the preventive check is to-day inoperative. It is probable, if the Malthusian theory is true, that poverty is to-day largely the result of excessive numbers and that relative overpopulation is a fact.

We may now briefly consider the chief popular objections levelled against the Malthusian teaching.

Those who have attacked Malthus have usually taken the course of denying his conclusion by denying the truth of his second premise, namely that the produce of land cannot be made to increase as fast as population increases. Or, they have remained content with such arguments as that overpopulation is impossible so long as there is spare uncultivated land of good quality. They then point to the existence of such land in proof that overpopulation does not exist. Or, again, they assert that there cannot be overpopulation since population is increasing at the same time that the general level of the standard of comfort is rising. Another line of argument is not, properly speaking, a refutation of the Malthusian theory although it is often advanced as if it were. It denies the inevitability of poverty by maintaining that when the people are freed from the condition of poverty they will maintain their higher standard of comfort by the exercise of the restraints necessary for the limitation of numbers. Thus it is argued that the condition which brings about the unrestrained reproduction of children

is the state of poverty and the sufficient cure is the relief of poverty. Hence this belief merely resolves itself into a theory of the manner in which the preventive check can be brought into operation.

In discussing these objections to the Malthusian doctrine a word may be said as to the effect of the distribution of wealth on overpopulation. Even though the law of diminishing returns were everywhere in operation and even supposing that there were no preventive check upon the growth of numbers it would not follow that population would have reached saturation point and that a country could not be made to hold any more people without death from starvation resulting. In every country the system of the distribution of wealth enables considerable sections of the people to live above the condition of poverty without the exercise of the preventive check. The two great agencies whereby the more prosperous sections of society are maintained are the ownership of property and the division of income according to efficiency. If this latter principle is observed it follows that, however close to the minimum income the lowest grade of workers may be, if the needs of industry give scope for the exercise of efficiency, then those with double the efficiency will earn double the minimum income. If in consequence of the relaxation of pressure among the better paid workers they multiply beyond the requirements of the more difficult branches of work the level of their efficiency wages will fall but it will not be likely to fall to the level of the lowest grade of workers since that wage is likely to be less than sufficient to give a standard of living compatible with the higher level of efficiency. Rather there is likely to be a constant overflow from the higher levels of population into the lower. The application of this distributional effect in preventing the appearance of general poverty is likely to be greater in industrial than in agricultural countries. Not only is there much more scope in the former for the employment of differential ability in the higher spheres of organisation, but in the ranks of the workers the same principle holds good. It is to this cause that much of the seemingly greater prosperity of industrial countries is to be traced. Yet the depths of poverty are probably nowhere greater than in sections of the population of great industrial centres.

Not only will the existence of the tendency to overpopulation imply no necessary saturation, but it will not even necessarily imply that the effective check upon numbers is a high death-rate resulting from poverty. It is conceivable that ignorance of the laws of health and the presence of unhealthy conditions may so increase the death-rate that it permanently holds the birth-rate in check even in a community where the level of wealth is far above the minimum. This is, however, a very unlikely condition, if we regard a country as a whole, wherever the practices of the people have risen above a very low level of civilisation. Migration will take

place to healthier regions and the power of nature to give immunity from disease to which, the body is constantly subjected diminishes its effects. Where, therefore, the tendency to overpopulation exists there is likely in an old settled country to be primary poverty over a large class of society. Even in a new country it is likely to be present in some degree.

It is necessary to say a word as to the meaning of overpopulation regarded as an existing fact. In the more usual meaning of the term it implies that in certain sections of the community numbers are positively checked by a death-rate which is in part at least due to poverty. It implies the presence of the tendency to overpopulation and at the same time the existence of a barrier in the way of access to new means of subsistence. These barriers may not be felt everywhere in the community. Overpopulation may be local rather than universal. Where they are present there will be primary poverty. But the term overpopulation may be applied so as not necessarily to connote a death-rate due to poverty. It may be regarded as relative to a given standard of comfort. Thus, numbers may have reached a point at which it is impossible to maintain a given standard of comfort even though they do not entail such a pressure upon subsistence as to cause primary poverty. Finally, it is important to avoid the error of supposing that all death from poverty is due to overpopulation. There will always be the waste products of society, the unfortunate, the maimed, the decadent who will be unable of their own effort to obtain the means of subsistence. In the absence of any adequate system of provision for those who fall within this category there will be extreme poverty due to individual failing rather than to excess of numbers. It is not always very easy to determine which of these two causes of poverty is the real one. They are generally present together. Speaking of the positive check Malthus remarks: "This check is not so obvious to common view as the other I have mentioned." "The different modes which nature takes to prevent or redress a redundant population, do not appear, indeed, to us so certain and regular; but though we cannot always predict the mode, we may with certainty predict the fact."

We come now to the chief objection that has been advanced to the Malthusian theory: the virtual denial of the law of diminishing returns. This law was not formulated when Malthus wrote. It was brought into prominence by Ricardo very shortly after. But it is implied in the arithmetico-geometrical law. Professor Cannan has criticised Malthus by arguing that "when it was seen that this principle of arithmetic increase did not strictly hold good of agricultural produce, 'The Essay on the Principle of Population' falls to the ground as an argument, and remains only a chaos of facts collected to illustrate the effect of laws which do not exist. Beyond the arithmetical ratio theory there is nothing whatever in the Essay to show why subsistence

for man should not increase as fast as an 'unchecked population'." This is caustic, but it is unfair to Malthus. The formal accuracy of his argument may have failed, but its substantial accuracy was founded in long experience of agricultural life. No subsequent experience has seriously invalidated the practical application of the law. "With every mouth" says Cannan, "God sends a pair of hands, so why should not the larger population be able to maintain itself as well as the former." (Theories of Production and Distribution, Chapter V.) The answer is that experience affords no ground for thinking that improvements in agriculture will enable produce to be increased at as fast a rate as population can increase. Under any form of cultivation hitherto practised it is an established commonplace that the point is soon reached when it does not pay to increase the capital and labour working on the land. It is true that in many countries the productive power of the land is far below what it should be as the result of poor cultivation. This is abundantly true of India. But if good methods were everywhere applied and the yield of the land increased threefold, while allowing of a great increase in the standard of comfort supposing that population remained the same, the point would then be reached when, unless fresh discoveries in scientific agriculture were made, it would not be possible to employ more people on the land without lowering the standard of comfort.

The denial of the law of diminishing returns sometimes takes the form of admitting its application in agriculture while pointing to the operation of increasing returns in manufacture. The latter, it is suggested, will balance the former. This, I think, is the argument of Ranade in his essay, "Twenty years' review of the Census statistics." Having examined the statistics of population in the Presidency of Bombay he came to the conclusion that the density was such in the majority of areas and the uncultivated land so scanty that there was little room for expansion of the people in agriculture. "The only escape from this danger lies in the direction of the gradual transformation of the means of subsistence of our livelihood, and the growth of an urban and industrial population, in other words the rise of towns and cities." It does not seem to have occurred to him to ask whether, the tendency to overpopulation remaining, this would indeed provide an escape. The recent Fiscal Commission also emphasised the advantages of industrial development as a means of relieving the land of its surplus population. From what, we may ask, did Mr. Ranade suppose that a growth of industries would provide an escape? It might enable India to increase its total population. It might enable some of those in the overpopulated agricultural districts to get a better living in manufacture. It might enable India to increase its wealth per head by increasing the opportunities for differential employment. But so long as the tendency of population to outrun the means of subsistence continues there will be no escape from the central fact of the poverty of the mass of the Indian people. Ranade's argument

suffers from the essential defect in the reasoning of those who think of the population problem as a momentary fact rather than as a persisting tendency. The law of increasing returns in manufacture means no more than this. Man wants more than food alone. He divides his time between growing his food and making his clothes. If he can reduce the time taken in making his clothes he can give more to growing his food. But, in the first place, the amount of time now spent in making his clothes, if we take the Indian agriculturist as the typical man, is so small that he can hope for very little economy in this direction. In the second place so long as the preventive check to the increase of population is not operative this relief will at best be only temporary. The only manner in which the increasing returns of manufacture might solve the problem of overpopulation would be if the temporary improvement of economic condition led to an enhanced standard of comfort among the people which in turn caused the practice of the preventive check as a means to protect the enhanced comfort.

An escape from the law of diminishing returns is sometimes found in reliance upon future discoveries and improvements. Scientists sometimes delight us with calculations as to the marvellous results that may some day be derived from the fixation of atmospheric nitrogen or from the application of electricity to the growth of crops. It is within the bounds of possibility that the world will be able to hold a much larger population than at present as the result of such discoveries. But until they are brought within the bounds of realised achievement it would be idle to make them the basis of our economic conduct. For the present the law of diminishing returns is an important fact.

As Mr. Venn has remarked : "While there was in the past unanimity in regard to the prevalence of this law, latterly certain economists have pinned their faith to the belief that 'science' if it cannot already do so, will in the near future be able to surmount these difficulties, or in other words that the chemist will evolve some process by which at a relatively small outlay the soil will be forced to give almost uniform returns. If such were ever accomplished, then indeed the law would be a thing to ignore, but the last sixty years, although prolific in discovery, have given no indication of the birth of any revolution in agricultural practice." (Foundations of Agricultural Economics, Venn, page 377.)

Another refutation of the fact of overpopulation is commonly advanced in the form of pointing to unoccupied fertile land. Risley in his report on the Census for 1901 remarks that nearly two-thirds of the people of India occupy only a quarter of the whole area of India, while the remaining third is scattered over three-quarters of the area which is still sparsely populated. The implication is that there is still plenty of room for the expansion of the

population. This argument from density is, by itself, almost meaningless. A desert may be unpopulated but it does not afford scope for the growth of population. And yet the argument from density is often popularly accepted as a sufficient disproof of overpopulation. Those who take delight in trying to show that the poverty of India is due to the selfish or wicked administration of the East India Company, or of the British Government, are naturally anxious to prove that the poverty of India is not due to overpopulation. Thus Digby in his "Prosperous British India" examines the question whether the people of India are suffering because of overpopulation. He contents himself with quoting the words of an American missionary Sunderland, who had written: "A very little study of India shows that the population is not so dense as in a number of the states of Europe which are prosperous, have no difficulty in supporting their people, and in which famines are never heard of." He goes on to make a positive misstatement, for he continues, "Nor is the birth-rate high in India." But we need not insist on such obvious marks of ignorance. It is a sufficient condemnation that he relies on a mere comparison of densities. It might be said that Mr. Sunderland's sole qualifications for writing on the subject appears to be his "little study of the facts". And yet this passage from Sunderland is accepted by others besides the irresponsible Digby. It is relied on for the same purpose by Mr. Lajpat Rai in his book "England's Debt to India." It is to be hoped that public opinion is sufficiently instructed to value such arguments and the writings of those who use them at their proper worth.

But is there no significance attaching to the demonstration that there is spare land that will repay cultivation? To this question the answer is simple. Its significance is that it proves that there is a temporary safety valve which may be made use of. It does not in the least disprove the existence of overpopulation as a tendency, nor does it disprove its existence as a fact. For there may be cultivable land that is lying waste and at the same time there may be many districts in which the people have less than economic holdings and where the population is only kept down by the high death-rate due directly or indirectly to poverty. It must be remembered that excess population cannot flow to vacant land as water flows to a lower level. Not only is there the inertia due to ignorance, or love of native locality, but there are the real economic barriers in the shape of the capital investment to be made or the waiting to be endured before the vacant land can yield a return. Where the people are very poor and where there is no capitalist willing to develop the land this may effectively prevent its cultivation. In any case where a population is accustomed to a minimum standard of living they may be willing to continue in that state rather than put forth any special exertion in order to improve it. The existence of spare land is no disproof either of overpopulation defined as a tendency, or of the fact of overpopulation as a present cause of poverty.

Reference has been made to another criticism of the classical doctrine of population; namely, the theory that poverty is the cause of overpopulation. This doctrine, which holds a prominent place in socialistic literature, teaches that if, for example, by a better distribution of wealth, the poverty of the poor is relieved the necessary habits of restraint, the operation of the preventive check, will be generally developed, so that the higher standard of comfort may be perpetuated. It appears to me to be a very imperfect generalisation from a particular and limited experience. Undoubtedly the poor are improvident. And, undoubtedly growth in the standard of comfort among the working classes of England and countries similarly situated has led to the adoption of habits which have greatly reduced the birth-rate. It is very far from following that removal of primary poverty will drive out improvidence or cause a universal recourse to the use of preventive checks. Much depends on the manner in which the relief from poverty comes about. Nevertheless this much may be admitted that the theory referred to contains an important element of truth even if it in no way invalidates the ordinary theory of population.

With this somewhat long introductory reference to the theory of the subject, I will turn to the more immediate question: To what extent is India now suffering from overpopulation? This problem involves two enquiries: To what extent is the tendency to overpopulation present in India? To what extent is overpopulation an existing fact? I shall largely confine my attention to the first of these questions.

POPULATION AND THE MARRIAGE RATE.

The answer to the first question leads to an examination of the marriage-rate, the birth-rate and the checks upon it, and of the death-rate and the causes to which it is due. Specially important is the direction in which these rates are tending.

The outstanding fact with regard to marriage in India is the very high proportion of the population that enter the married state. The following table shows that while there is considerable provincial variation the marriage-rate is in all cases very high:—

PROPORTION OF MARRIED PERSONS PER 1,000 OF EACH SEX.

PROVINCE.	AGE	MALES.			FEMALES.		
		1921	1911	1901	1921	1911	1901
Bengal ..	{ 15—19	228	274	..	881	896	...
	{ 20—39	795	817	...	784	792	...
Bihar and Orissa	{ 15—19	450	479	...	792	828	...
	{ 20—39	807	830	...	824	841	...

PROVINCE	AGE	MALES.			FEMALES.		
		1921	1914	1901	1921	1911	1901
Punjab ...	15—19	263	275	290	753	773	755
	20—39	660	661	695	890	882	896
United Provinces	15—19	459	475	495	870	886	878
	20—39	743	758	775	862	868	862
Bombay ...	15—19	328	349	348	831	851	796
	20—39	746	770	764	819	840	818

These figures reveal important provincial variation in respect of very youthful marriages among boys. Bengal and the Punjab having about half as many married lads under twenty years of age as Bihar and the United Provinces. The variation in the case of girls is also important. Thus Bihar and Orissa and the Punjab have a considerably smaller proportion of married girls under twenty than either Bengal or the United Provinces. That this is not explained by the difference in the number of widows is shown by the following table giving the number of unmarried females in the respective provinces :—

AGE.	UNMARRIED FEMALES PER 1,000 FEMALES, 1921.						
	Bengal.	Bihar.	United Provinces.	Punjab.	Bombay.		
10—15	459	535	488	744	486		
15—20	55	162	95	227	125		

It is not easy to account for this variation, but it may be due in the case of Bihar and Orissa in part to the presence of a large aboriginal population and in part to the greater prevalence of the custom of women working in the fields which induces their parents to keep them unmarried for the sake of the economic value which they may contribute.

It is still true that the very large proportion of the population at the reproductive ages of life is married. The contrast of the state of things in India and in England is suggested by the following comparison :—

AGE.	UNMARRIED PERSONS PER MILLE.					
	BENGAL, 1921.				ENGLAND AND WALES, 1911.	
	Males.	Females.			Males.	Females.
15—20	766	55			998	988
20—25	410	20			857	757

At 25 more than three-quarters of the girls in England are still unmarried. In Bengal they are less than two per cent. The potential effect of this great disparity in the marriage rate upon the relative growth of the population in the two countries is obvious.

A further fact that is apparent from the foregoing tables is the gradual rise that is taking place in the age at marriage.

The following tables brings out this fact clearly for the combined provinces of Bengal, Bihar and Orissa :—

YEAR.	Number unmarried per mille, males aged—		Number unmarried per mille, females aged—	
	10—15	15—20	5—10	10—15
1921	868	665	891	494
1911	842	626	851	422
1901	837	608	836	402
1891	826	594	827	372
1881	809	572	...	313

The recent tendency for the postponement of marriage among young girls in Bengal is very marked. In the age group 10—15 there were 459 per mille unmarried in 1921 as against 377 in 1911. There is a marked tendency to postpone marriage, but there is also to be seen a similar tendency at the earlier productive ages and it is a combined result of education and reaction to economic circumstance.

From the point of view of a study of population the high Indian marriage rate is complicated by the uncertain significance to be attached to marriage.

It is well-known that in India marriage in the full sense usually implies three stages : the civil marriage, known by different terms such as *nikah*, *shadi*, or *biyah* ; the home coming of the bride to the bridegroom, known as *ruksat*, or *vida*, or *muklawa* ; and the actual consummation of the marriage. It is the latter alone that is significant. It is a problem of importance to discover how far this last step is postponed on account of economic circumstance. The obligation to marriage in Indian society, more especially in the case of the girl, is so strong that postponement beyond the age of puberty is only practised with the greatest reluctance. Every economic resource will be taken advantage of rather than put off the duty of marrying a female at the recognised age. But the social obligation refers to the civil marriage and, according to the Punjab Census Report, the consummation may not take place until many years later (Report, page 250). There are certain ceremonial rules which govern the practices of cohabitation that have some effect in reducing the rate of procreation. In Bihar these rules are said virtually to prevent women in the educated classes from having children oftener than once in three years. But

It appears to be true that in the vast majority of marriages, more particularly among the labouring classes, the consummation takes place at the time of puberty. By the age of fifteen a very large proportion of the girls have been married. In Bengal the average age at marriage is stated to be $12\frac{1}{2}$ years. Thus it is abundantly clear that very little restraint upon the increase of population is effected through the practice of abstaining from marriage. Marriage is well nigh universal and economic condition only appears to affect it, except in a very small degree, in the shape of short period fluctuations. Good harvest leads to a boom in marriages, just as marriage usually takes place at that season of the year when the cost of entertainment is cheap. Over a period of years there is only a very gradual tendency towards the reduction of the marriage rate.

We may now turn to examine the birth-rate as expressive of a tendency towards overpopulation.

POPULATION AND THE BIRTH RATE.

The fact of primary importance which has to be established with regard to the birth-rate is whether there is evidence of general practice of controlling the procreation of children within the limits of economic means of support, or whether procreation goes on substantially unchecked, leading to the post-natal check of a high death-rate.

It is well-known that among primitive races there are two practices which have an important bearing on the actual fertility of their women. These are pre-puberty intercourse and prolonged lactation. The former reduces child-bearing capacity by the injuries which it inflicts, or the disease which it engenders, among women. The latter appears to have a double effect. It in some measure reduces the conceptivity rate among women and it is accompanied by the practice of abstention from intercourse to a greater or smaller degree during lactation.

In India pre-puberty intercourse is not very common although it is far from unknown, but cohabitation at or soon after, puberty has similar effects if in less degree. It tends to reduce population partly by lowering the fertility of the women and partly by increasing the death-rate of young wives. In Bihar the proportion of females to males at the age period 10—15 falls below the ratio 850 per 1000 in the north of the province where child-marriage is most prevalent and this is attributed "to the fact that immature girl wives amongst whom the death-rate is high are included in this period." (Census Report, 1921, page 170.)

It has been shown in an earlier table that the marriage age is younger in Bengal than in Bihar in the case of girls and that this leads to an excessive death-rate among young wives is suggested by the fact that the excess of the female death-rate over the male death-rate between the ages 17 to 20 is more marked in Bengal than in Bihar. It is true that the conclusions from

the age statistics of the Indian census must be received with caution. "The very great drop in the proportion of females in the ages 10 to 15 is due to the understatement of the age of unmarried girls and the overstatement of their ages as soon as they have reached puberty." (Census Report for Bengal, 1921, page 251.)

This is, however, not the sole cause and the variation in the defect in the different parts of Bihar and Orissa, closely agreeing with the known variation in respect of early marriage, corroborates the view that the defect is largely due to the relatively high death-rate of girls at that age period. The study of the variation of the number of children per family in the Punjab according to the age of the wife at marriage admits the "conclusion that the marriages in which the woman is below 15 or above 30 are relatively infertile." (Punjab Census Report, 1921, page 253.) The Census Superintendent for Baroda for 1901 remarked that numbers of child wives "march from the nuptial bed to the funeral pile. Nervous debility, consumption and uterine diseases create havoc among them."

It cannot be doubted that the practice of very early marriage, so injurious to the health and happiness of young women in India, will gradually give way to higher conceptions of right conduct, but such a change will increase rather than diminish the tendency towards an excessive birth-rate and will emphasise the need for restraint.

The two-fold effect of lactation in restricting the birth-rate has been referred to. In India it is the rule for women to suckle their children for two years or even longer. If the result was to prevent the birth of children more frequently than once in three years it would obviously reduce the fertility of women. Enquiry in the Punjab suggests that during the earlier years of married life a child is born every third year and that then the rate gradually declines (Census Report for the Punjab, 1921, page 256). According to the same enquiry the normal size of the family in the Punjab shows that for every "completed" marriage there were 3.99 children alive and that 5.68 children have been born.

An enquiry into fertility in Bengal suggests that fecundity is but little affected during the first twenty years of married life in the case of completed marriages among the middle classes and that in the case of families where both parents are still alive 24 children are produced annually by every 100 married couples. That the duration of lactation has an effect in limiting the birth-rate among the aboriginal tribes of Chota Nagpur is suggested by the fact that, as I am informed, if a woman finds herself an expectant mother within two years of the birth of her last child she is apt to procure an abortion for fear lest she is suspected of adultery. The conclusion seems to be clear that in India the combined effects of youthful marriage and of prolonged lactation are to reduce the birth-rate to a considerable extent. There seems no evidence that abortion has an important influence in lowering the birth-

rate. Although practised to some extent, as, it is alleged among the widows of Orissa, it is so far, exceptional as to be excluded from the important factors controlling the increase of population.

A brief discussion is now necessary of the question how far acute poverty itself acts as a powerful factor in limiting the birth-rate. In the Census of India Report for 1901 it is said: "The relation between the rise and fall of prices and the fluctuations of the birth-rate is known to be very regular and intimate, and there are physiological reasons for believing that the reproductive functions are first to be affected by any marked reduction or deterioration of diet."

It is perhaps hardly necessary to insist upon the merely statistical difficulties that stand in the way of accurate deduction from vital statistics in India. The crude birth-rate is calculated upon a fixed population for a period of ten years, namely, the census population. In a time of famine the deaths of potential mothers will increase and this will have the effect to some extent of reducing the published birth-rate quite apart from any effect of poverty on reproductive functions. Again, it is well-known that the reporting agency for vital occurrences, at all times defective, is likely to be more than usually so at time of famine. This also will give the appearance of a reduced birth-rate at such times. There is a further important factor in birth-rate fluctuations that is very commonly disregarded in the Indian Census Report, namely, the variation in the age constitution of the population. An exceptional death-rate among children, occurring at a given time, will reduce the women of marriageable age after the lapse of twelve or thirteen years to an extent sufficient to affect the birth appreciably. It is thus difficult to argue confidently from the facts of the published crude birth-rate. It is, nevertheless, commonly held that these statistics point to a marked decline of fertility at a time of severe economic depression. Sir Charles Elliott declares in the Report on the Census of 1911: "When scarcity begins to threaten conception diminishes, the birth-rate of the famine years is consequently lower than the normal, though not so much lower as the birth-rate of the year succeeding the famine is." This would of course follow from the greatest reduction in the conceptivity rate occurring when the famine was at the highest and leading to a low birth-rate some nine months later. In the Census Report for 1901 there is recorded a special investigation which supports Sir Charles Elliott's contention. "During the Madras Famine of 1897 a medical officer examined about 15,000 women of child-bearing age in the famine camps and relief works of the Nellore district and found that only 2.5 per cent. or one-ninth of the normal number were pregnant." But such an investigation is not conclusive. It may be explained as due to the separation of husbands and wives since it is well-known that prior to entry on famine relief works the men are apt to wander away from their families in search of work.

The subject of poverty in relation to conceptivity was touched upon in a discussion before the Statistical Society recently when Sir Bernard Mallet explained a decline in the birth-rate in Germany during the war as partly due to famine. But Dr. Brownlee pointed out that the physiology of the matter was not simple and, in his opinion, malnutrition could not necessarily be adduced as a cause of lower birth-rate in Germany. An extended application of the theory that conceptivity is reduced by poverty is made by Dr. Bentley, the Director of Public Health in Bengal, in his Annual Report for 1921. Finding a marked seasonal variation in the birth-rate in Bengal he explains it by the fact that the points of low conceptivity coincide with periods of the year just before the *kharif* harvest in November, reach high level after the *kharif* harvest in January, and attain their maximum in June after the *rabi* harvest is gathered. (Fifty-fourth Annual Report, page 6.)

His theory is that when food is scarce just before the harvest conceptivity is reduced. But he does not apparently take into account the fact that there are well-known marriage seasons when the vast proportion of marriages take place. In Bengal and Bihar the great majority of marriages among the well-to-do occur in January and February while those of the poorer classes occur about June. This would also have the effect which Dr. Bentley attributes to poverty, if we assume that in a sufficient number of cases marriage season coincides with the commencement of co-habitation. Lieut.-Colonel Ross, the Director of Public Health for Bihar and Orissa, in his report for 1922, remarks that in his province the maximum birth-rate occurs in the three months, August, September, October, which would give maximum conceptivity in November, December, January. "This" he declares, "is a reflex of climatic conditions." In other words conceptivity, in his opinion, varies according to the greater or less invigorating season of the year. There is clearly an important field for investigation in this direction, but for my own part I am not yet convinced that the pressure of poverty actually checks conceptivity in the close manner that is suggested by Dr. Bentley. Yet that there is a causal relation between economic condition and the birth-rate there is no doubt. The corrected birth-rate is not so constant as unchecked procreation and a constant conceptivity would give. A comparison between the movement of the birth-rate and of prices in the province of Bombay for the last thirty years shows a definite low inverse correlation. (Bombay Census Report, 1921, Appendix X). It may be remarked that this seems to show an opposite tendency to that in Bengal. Dr. Bentley says: "In Bengal there is a very marked correlation between prices and mortality; but contrary to what is generally believed this correlation is a negative and not a positive one. Thus high prices of food-grains are associated with low death-rates and low prices with a high death-rate." (Report on Public Health for Bengal, 1921, page 14.) While, therefore, high prices seem to argue a rise of prosperity on

the whole in Bengal, they appear to produce a fall of prosperity in Bombay. To some extent the seeming contradiction in these statistical results may be explained by the different economic position of the people in the two provinces. It is well-known that among cultivators producing for the market a rise of price may give increased prosperity provided that there is a fair harvest. For landless labourers or those with very little saleable surplus the reverse would be the case. An important consideration is the fact that practically all cultivating holders of land are in debt and a rise of prices is good for debtors.

There is one further very important influence at work bearing upon the infant birth-rate to which attention must be called. It is accepted that malaria affects in special degree woman at the reproductive ages and it appears that in districts specially liable to malaria the birth-rate is below the average. Thus in Purnea in Bihar which is malarious the highest birth-rate of the last decade was 36.95 per mille whereas in the healthier part of the province the birth-rate frequently rises to 46 per mille and even higher.

The general conclusions that may be drawn from the brief consideration of the birth-rate that I have been able here to give seem to be that while there are important involuntary forces which reduce the rate below the maximum, of which the effects of disease, early marriage, extreme poverty, and prolonged lactation are the chief, and while there are the forces of convention, such as the rules of purification, which govern cohabitation, and the custom of hypergamy which also tend to reduce the birth-rate, yet there is comparatively little evidence that voluntary measures are taken by any but a small section of the people to restrict the birth-rate so as to improve economic condition or to preserve economic equilibrium. The outstanding feature of the Indian birth-rate is its height despite the involuntary forces referred to which make for its restraint. Allowing for defective recording it would seem that the normal birth-rate is at least 45 per mille and it often rises above this level under favourable circumstances to rates of over 60 per mille. Moreover the birth-rate is on the whole remarkably constant showing that it is on the main the result of a force unrestrained by varying economic condition. There is nothing comparable to the reduction which has brought down the birth-rate in England and Wales from 35.4 per thousand in 1880 to 25.4 per thousand in 1920. In India there seems to be no tendency for the birth-rate to fall, except among such small section of the community that no appreciable effect results upon the population as a whole. The conclusion is inevitable that the tendency towards overpopulation in India is powerfully at work and that it is only kept in check by the force of poverty and disease. Moreover there is much effort directed towards a reduction in the strength of the checks upon the birth-rate. There is the movement in favour of the remarriage of widows. Female infanticide will continue to grow less. Medical science is striving to overcome the effects of disease. Administrative effort is reducing the dangers of famine. All these influences favour

an increase of the birth-rate. Are these greatly needed reforms merely to result in increasing pressure upon the means of subsistence? Are they to lead to a higher infantile death-rate from other causes. Or can the present universal desire for early marriage coupled with the unrestrained procreation of children be made compatible with a rising standard of comfort by means of improved cultivation and more rapid industrial development? Can the condition of the poor in India be permanently bettered by a reduction of the land revenue, or of other taxation, or by a wholesale wiping out of indebtedness by such drastic measures as have been recently suggested by Mr. Shah in his "Sixty Years of Indian Finance," or would these measures merely create a vacuum to be rapidly filled up by the high birth-rate temporarily unchecked by the high death-rate? To my mind it is an elementary truth that whatever improvement may be wrought in the economic welfare of India by better methods of cultivation, by irrigation, by relief from indebtedness, by improved transport, or by industrial expansion a large proportion of the people will be condemned to a state of poverty so long as the tendency for the population to expand at the present rate continues. This is very far from equivalent to an assertion that the several economic reforms that I have mentioned would be worthless. On the contrary they would greatly benefit the country, but they would not serve to remove the fact of widespread primary poverty. At present the tendency to excess in numbers is held in check by poverty and disease. These checks will remain unless the tendency to increase is itself diminished.

THE INDIAN DEATH-RATE.

It is a well-known fact that despite the high birth-rate the population of India has in recent times grown at a comparatively slow rate. Allowing for alterations in the area under enumeration and for improvements in enumeration the rate of growth of the Indian population during the successive census periods has been as follows. The rate of increase in the case of England and Wales is given for comparison:—

	PERIOD				
	1872-81.	1881-91.	1891-01.	1901-11.	1911-21.
India	1.5 p.c.	9.6 p.c.	1.4 p.c.	6.4 p.c.	1.2 p.c.
England and Wales ..	14.4 p.c.	11.6 p.c.	12.2 p.c.	10.9 p.c.	4.9 p.c.

Thus with a much higher birth-rate the increase in India has been much slower than in England by reason of her high death-rate. It would be a mistake to suppose however that in India the high death-rate is always due to poverty. The same thing may be expressed in a different way by saying that population in India is not everywhere pressing upon the bounds of subsistence. There are, broadly, four kinds of district in India: There is the healthy district with a fairly reliable rainfall; the unhealthy district with a reliable rainfall; and the healthy and unhealthy districts with an unreliable rainfall. The density of population in the

main varies accordingly. In many districts there is comparatively little or even no pressure of population on the land where the numbers are kept down by disease. But in areas where conditions are healthy and the rainfall is satisfactory the pressure upon the cultivable land is so great that in almost all cases sub division of holdings has resulted in many cultivators having less than economic holdings upon which they can only eke out an impoverished existence by means of supplementary earnings on the part of relatives in the coal-mines or the mills or by themselves devoting part of their time to labouring for other cultivators. The unwillingness of the Indian people to move to a locality which is known to be unhealthy is well established so that in close proximity one may find places densely populated up to the margin and others where the population is comparatively scanty. Even in the healthy areas it is, of course, far from true that the high death-rate is directly due to poverty. The high infantile mortality is largely attributable to the evil customs that prevail at child-birth. "After delivery the mother is given various nauseous messes, which are often selected mainly for their supposed efficacy in scaring demons; she is kept confined for days in a dark, ill-ventilated room in which a fire is kept smouldering and incense is sometimes burnt and she gets no proper nursing and no special nourishment." (Census Report for 1911). (This manner of treating the mother often reacts on the health of the child. In Bengal in 1921 it is estimated that some "30,000 infants perished from tetanus, the result of the filthy methods adopted of treating the umbilical cord." (Report of the Director of Public Health, page 10.)

It is pertinent to ask whether, if by means of education in the care of mothers and infants a large reduction in infantile mortality from these causes was secured, the result would be to increase mortality in some other direction so as to keep population at the same level relative to the means of subsistence. To this question Sir Frederick Whyte is recently reported in the press to have replied that there was no such danger since India was not overpopulated. There seems to me to be no warrant for such a statement if the saving of life resulting proved considerable. It is true that there is often an unsatisfied demand for labour in coal-mines and elsewhere but the unsatisfied demand for labour is not large and any great reduction in the infantile mortality rate would cause an increase in population which would with difficulty be absorbed without presupposing a much greater mobility than at present exists. The conclusion seems to be that probably other causes of death would tend to maintain the proportion between birth and death-rates. This, however, is not a valid argument against every effort to abolish insanitary habits. Partly it is true that the very educative means chosen for this end will tend to bring about in the long run the greater prudence which will lead to a reduction in the birth-rate, while it is partly true that better sanitation will increase the productivity of the people.

The suggestion is sometimes put forward that the fact that India is not overpopulated is shown by the increase in numbers which takes place in the absence of severe epidemics of disease. For example it is calculated that if the Census in Bihar and Orissa had been taken in March 1918 the population would have been a million and a half more than it was in 1921. The very small increase shown in the decade was due to the influenza epidemic of 1918. Although the influenza scourge had no direct relation with poverty or overpopulation it should be borne in mind that the very heavy toll of life taken was itself in no small degree the result of the low resisting power of the people which in turn was due to poor physique consequent upon the low standard of life prevailing. It is not denied that in favourable years there is a margin for expansion and the fact that rapid expansion occurs at such times is a proof that population multiplies up to the limit set by a very low standard of economic comfort. This low standard is, given the present modes of economic life and production, imposed by stress of numbers from which it follows that bad harvests or unhealthy seasons quickly lead to a sharp advance in the death-rates. It thus comes about that while the birth rates are on the whole stable from year to year, the chief variations being due to imperfect methods of calculating the crude rate, the death-rates show wide fluctuations as between healthy or unhealthy years and as between good and bad agricultural seasons. The excess of population is shown by the rapid reaction of the death-rate upon unfavourable circumstance.

I will sum up my conclusion to which, as it seems to me, the study of the facts inevitably leads. The question of overpopulation may be studied as a fact of the moment or as a tendency arising from the birth-rate being so high that normal economic growth cannot provide for the increase which, in consequence, leads to a high death rate and a short expectation of life. If the state of overpopulation exists in the latter sense there can be no escape from extreme poverty on the part of large numbers of the people mitigated by the fact of exceptionally high death-rate due to disease. The lesson seems to me to be simple. India can only look forward to an advance to a state of reasonable comfort among her people as the result of a drastic change in her marriage customs and in the unchecked procreation of children which at present prevail. To achieve this reform no rapidly acting panacea is available, but the first step must be a general education of the people. For without this foundation no change of social custom or economic habit appears possible. There are many modifications in the economic life of the country which would help towards the desired end but it can be no part of this paper to discuss them. The one paramount consideration is to lead Indian opinion to realise the dangers of the existing tendency of population and to endeavour to shape economic policy in the light of this outstanding fact.

DISCUSSIONS ON THE PAPERS.

Tuesday, 22nd January 1924.

The Conference reassembled after lunch at 2-30 p. m., when the different papers that were submitted were considered and discussed. The papers, not having been previously circulated among the members, could not be taken as read. The writers were accordingly requested by the President to present a summary of their papers, giving the main points they wished to make, so as to make proper discussion possible.

1. British Imperial Economic Relations

(PAGES 1-8).

By PROF. A. J. SAUNDERS OF MADURA

MR. J. A. WADIA of Bombay:—Prof. Saunders has given us in a few words what his paper is meant to convey, namely *Imperial Preference*.

Before we can talk of Imperial Preference, we must have *fiscal freedom*. Unless we can get fiscal freedom no other question as to the brotherhood of nations and all belonging to the same Empire matters. To the Indians it is a question which cannot be considered because though we belong to the Empire, the Empire does not belong to us (laughter). England had her protection and I do not think there is anything like free trade in India. I do not think for my part England too ever had free trade. She found one-fifth of humanity under her thumb and she compelled them to trade on her terms. That is not free trade. It is false trade (continued cheers). In spite of coal, in spite of industry, we in India have not progressed as rapidly as we ought to have done because the chief partner compelled us to trade on his own terms. In the last speech I read of the Prime Minister, Mr. Baldwin, he says "we must go in for protection for the simple reason that India is going for protection". We get no sympathy, no support. Before we can talk of Imperial Preference we must have therefore fiscal freedom. I can understand my friend as an Englishman. I am not at all here to consider Imperial Preference. In the guise of protection for others England wants to protect herself. The one thing we want is fiscal freedom, free from the restraining influence of England. I admit that England has done well by India in many ways. I am a great believer in British rule in India but I do not like cant.

MR. KANUNGO of Indore:—I have one observation to make. According to this paper India would get preference in articles in which she does not want preference, and she does not get preference for the very articles in which she does want it. In encouraging the export of raw materials and in encouraging

the imports of manufactures we do not advance industrial progress. What we want is to discourage such exports. We would much prefer a sort of tax which will discourage exports of raw materials and not try Prof. Saunders' proposition. We do not want jute and cotton given preference. What we want is to put a sort of handicap to this preference. I do not think the policy of Imperial Preference can do any good to India ; on the contrary it is likely to do harm.

SIR IBRAHIM RAHIMTULLA :—This is a question which has been discussed at considerable length elsewhere too and I think I will make only a few remarks. There is one aspect of the question of Imperial Preference which India has to consider very carefully before she proceeds any further. The Dominions are the children of the mother country. In 1908, when I was in England I was present at a pageant where the members of the family of John Bull were giving reception to Madam France with whom an entente had been recently concluded. There were present: Miss England, Miss Scotland, Miss Ireland, and Miss Wales. The sons of England had also migrated there. Mr. Canada, Mr. Australia, Mr. South Africa and Mr. New Zealand were there engaged in watching the development of other nations. But there was no place for India in this reception. That illustrates the position of India in regard to Imperial Preference. If you examine it from the historical point of view the position was that after their emigration the sons of England had attained their majority and had been given full domestic freedom. It was only after they had acquired full dominion status that the Dominions responded to the appeal of the mother country by granting her Imperial Preference. India has only just been started on the road to political freedom and unless India reaches the stage of full dominion status there can be no question of Imperial Preference on the same analogy as that of the Dominions. Some of the members of the Fiscal Commission in pointing this out said they were prepared to recommend recognition of the principle of Imperial Preference on the distinct understanding that non-official members of the Imperial Legislative Assembly should have the power, unrestricted and uncontrolled, of initiating, granting, varying and withdrawing preference. This power was vested in the Dominions and ought to be vested in the non-official members of the Imperial Legislature. Except on that basis, no question of Imperial Preference can possibly be considered by India. The very fundamental basis of preference ought to be mutual, reciprocal and beneficial exchange of trade. One of the witnesses, a very able representative of the Bombay commercial community, the late Sir Vithaldas Thackersey, in giving his evidence before the Fiscal Commission said, he was in favour of the principle of Imperial Preference, preference which can be given and received on the basis of mutual and reciprocal gain. He was against any question of Imperial Preference if it meant that in the political conditions now prevailing in India, England would shake the very important

position of Indians. If that be the preference we would have none of it. But it must be as is done in the Dominions, that the non-official representatives of the people of India must be satisfied that a particular sort of preferential trade is in the interest of India as well as of England. On that basis I do not think there will be any differences of opinion. But the question of Imperial Preference presupposed those for which Mr. Wadia fought. Imperial preference is practically out of question till India obtains fiscal freedom and is able to regulate her fiscal matters uncontrolled at the instance and on the initiative of her own representatives. If you put India on the same basis even in the present political condition of the country with the power of initiating, granting, increasing or withdrawing preference vested in the representatives of the people of this country, then and then alone, I hold, the question of Imperial Preference can become a matter of practical politics.

DR. JOHN MATTHAI of Madras :—Is it possible for us by adopting some kind of Imperial Preference scheme to replace to some extent the markets we have lost on the Continent by developing new markets within the Empire. That is why I urge a reconsideration of the problem, in view of the fact that India has lost many of her markets in the Continent of Europe on account of the great war and that they have to be recaptured or replaced.

MR. C. S. DEOLE of Bombay :—We have listened to a new point of view from the last speaker. First of all we must understand Imperial Preference as demanded by the reader of the paper. His point of view is quite different. He says that England following free trade alone cannot stand against the competition of the world. Why does it want Imperial Preference? Why does it want to follow an Imperial protectionist policy? Not because India has lost her markets as the last speaker has tried to make out, but because England now cannot stand this protectionist world. England must protect her industries against foreign competition. So this paper advocates a policy of protection for the Empire. The point, therefore, that is made by the last speaker is quite different from the point that has been made out in the paper. Sufficient replies have been given so far as its advocacy is concerned. Though this is an economic conference still the question of preference is more a political issue than an economic issue. When we consider this problem we always bear in mind politics. If we bear in mind the political point of view, we shall find that so far as our trade policy is concerned we have more trade clearly with England than with other countries. If this fact is borne in mind once for all, I think it is clear that the talk of preference is futile. Our representative, I mean the representative who represented the Government of India at the last Imperial Conference, said that the Government of India still held the view which she held in 1919, that India had nothing to gain but everything to lose by the policy of Imperial Preference. So far as

the question is placed by our friend here, well I think the question is not before us. The reader of the paper has not suggested whether we have now to raise another question and consider whether for the sake of India and for the supply of markets we should have a policy of Imperial Preference. I see there is not much in that point either. I doubt very much whether the policy of preference will find such markets for Indian products as suggested by Dr. Matthai.

MR. K. SUBRAMANI IYER:—It is necessary to develop industries of the country and in that way to create home markets. We should develop our industries by a policy of taxation and when our industries are sufficiently protected, we would be able to create new markets abroad and regain the lost ones.

PROF. R. M. JOSHI:—Dr. Matthai has raised the point that it would be worth our while to consider whether, in view of her loss of the continental markets, India might not herself benefit by the adoption of Imperial Preference which might open out to her more widely the markets within the Empire. Now let us briefly see how far that is possible. Our principal exports are still the same as they were before the War, viz, raw materials and food stuffs. Most of these are admitted free of duty by all countries whether within or without the Empire, so that the question of granting us preference does not arise. Let us take one or two instances to see what has got to be done to widen the markets for our goods. Our cotton was purchased on the Continent in large quantities before the War. If the English market is to take the place of those lost to us, it cannot happen with the kind of cotton we put up for sale, viz. 7/8ths of an inch staple. We must improve the staple to, say, 1½th inches. When we do that, we won't have to be for preference by granting preference ourselves to English goods. Purchasers will run after us as they now run after the American staple. Besides our own mills will buy as much more cotton of the improved staple as we can produce, for the market for the yarn and cloth they can make out of it lies in the country itself.

Take another instance, that of hides. Our hides are not cared for much in England because they are smaller in size and weight, are carelessly rent and torn in flaying and therefore compare unfavourably with the American hides. If the quality of our hides improves, we won't have to ask anybody for preference to get them sold. But, by the way, are we so anxious to get the hides sold in the raw state? Won't we prefer to tan them ourselves and sell the leather? Won't we still more prefer to make the leather goods ourselves which at present we import? Our jute and rice need no preference, nor does our tea. In short, Imperial Preference can help us precious little to make up the loss of our continental

markets. The war has not changed the nature of our problem in this respect as Dr. Matthai seems to think. That is why Sir Charles Innes (then Mr. Innes) representing the Government of India at the Imperial Economic Conference last year said that the conclusion which the Government had arrived at on the subject in 1903 was equally applicable to the conditions of to-day *viz.* that from the economic point of view India had little to gain by a policy of Imperial Preference and a good deal to lose or risk.

REPLY BY MR. SAUNDERS :—I think there was good discussion. In my paper I have discussed the question from the economic point of view. As far as I can see, fiscal autonomy for India is a foregone conclusion and in a short time we shall have full fiscal autonomy. Now the question is, will India be prepared to adopt a policy of Imperial Preference just as the other Dominions of the Empire are showing willingness to do to-day? It seems to me that we have a splendid opportunity to get together and work together economically and we can have a well-defined economic policy just as well as we can have a well-defined political policy, and adopt Imperial Preference for mutual benefit.

2. The Tariff Board and Indian States

(PAGES 8-11).

BY SIRDAR M. V. KIBE OF INDORE

In the absence of the Sirdar, the paper was presented for discussion by Prof. H. L. Kaji of Bombay.

PROF. IYENGAR :—What I have to point out is that Indian States have at present to pay a double tax. The goods that pass to the Indian States are only in transit and they obviously should have a right to ask for a refund of the duties charged at the port.

MR. C. S. DEOLE :—We have not got information enough to say anything on this question. It is a question of duties between different Native States and the Government of India.

The Native States claim, one of the speakers said, that they are independent countries and that they should be treated as foreign countries and that they can certainly claim a share in the customs duties and other revenues. But, as a matter of fact, though in theory they may be independent countries, they are not independent countries; they are treated as subordinate countries.

If India were to be brought under one rule, the Native States would occupy the position of provinces not that of independent countries. If this is the position, no Indian State can claim a share of the profits in the revenue derived from the customs duties. I can quote instances, however, to

show that these States were treated as foreign territories. Take the question of Viramgam. Duties were levied. A hue and cry was raised by the people against these duties. It was really a terrible thing and several of us saw the hardships and iniquitousness of the whole thing. Next year the Ahmebabad Congress was held and a resolution was brought forward, which I had the honour to second, that the tariff should be abolished. Of course, though not only as a consequence of the resolution moved, an agitation was going on for a good many years till the customs barrier at Viramgam was removed. There is no doubt that the question raised by Sirdar Kibe deserved careful consideration.

MR. J. A. WADIA maintained that the Native States could not bring forward any plea for a share in the customs revenue of the Government of India. They did not share in the expenses for the army and the navy and could not share in the receipts from customs.

The Conference then adjourned to 11-30 a.m. on Wednesday the 23rd January.

A visit to welfare institutions was arranged in the evening and a party of about fifty went to the Fazulbhoy Mills at DeLisle Road, Parel. They were shown round the various departments of the Mill as also the *creche* where the babies of the women operatives were taken care of by a competent staff of nurses. They then visited the Sir Currimbhoy Ebrahim Workmen's Institute where the Superintendent, Mr. S. B. Kulkarni, gave a clear idea of the welfare work done for the Currimbhoy group of Mills, through the Social Service League. The party was then taken to the Bombay Workingmen's Institute where Mr. N. M. Joshi, M.L.A., of the Social Service League, explained the very useful purpose served by the numerous activities undertaken by the League for the welfare of the workingmen of Industrial Bombay.

Wednesday, the 23rd January 1924.

The Conference met again on Wednesday at 11-30 a.m. in the University Convocation Hall, Sir M. Visvesvaraya presiding.

The morning session was taken up in considering currency questions and the papers thereon were presented by the writers. The discussion that ensued was interesting and took up also part of the afternoon.

3. The Government of India and its Currency Policy
(PAGES 90-102).

BY PROFS. P. A. WADIA AND G. N. JOSHI OF BOMBAY.

4 The Gold Exchange Standard during and after the War
(PAGES 82-89).

BY PROF. B. R. CHATTERJI OF AMRITSAR.

5. The Gold Exchange Standard of India (Pre-war Period)
(PAGES 103-106).

BY MR. T. J. KUMARASWAMI OF MADRAS.

MR. J. A. WADIA :--Of all the papers read, I prefer the first which was more or less sound and I have come to one conclusion and it is : Let us go back to our silver standard. In this view I am supported by the report of the Babington Smith Committee. The silver standard is a capital standard. It served all our purposes and prevented fluctuation in prices. I think if you wish to have a gold standard, then you must have a gold currency also. If you cannot have a gold standard without a gold currency, then the sooner you go back to the silver standard the better.

PROF. HAMILTON :--I plead for a gold exchange standard. It is sometimes urged that India ought to have gold standard because India is a creditor country. I submit that India is not a creditor country. The essential condition of a creditor country is that it must have a balance of claims on other countries in excess of the claims which the other countries might have upon it. I maintain that India does not fulfil that condition. In my opinion, India is a debtor country. I should point out that the views of bankers and economists in England during the last year or so had been increasingly tending to the conclusion that it would be a fundamental mistake for England at the present moment to rush back to the gold standard. She has not a gold standard at the present time. She has a gold exchange standard and her present policy is to watch and wait. It seems to me that the arguments in favour of a gold exchange standard are increasingly accepted by statesmen, bankers and economists in the whole world. I submit that it is not right to say that the gold standard is the only perfect system. This was the view held by Baron Rothschild thirty years ago ; but it is not held by the bankers of to-day.

MR. B. F. MADON :—The policy of Government for the last five years has been that it is highly desirable to manipulate exchange in order to alleviate the hardships caused by fluctuation in prices. There the whole trouble came in. But I think Government should leave exchange alone at the rate which had been deliberately adopted thirty years ago, that is 1s. 4d. What we aim at is to see that the ratio of 7·53 grains of gold to our unit is restored and that Government allows gold to come in. If we could go back to these sound lines, then I personally consider that the gold exchange standard would be a sounder standard to be dealt with than the gold standard.

PRINCIPAL M. L. TANNAN :—I am not going to detain you with the various arguments which can be advanced in support of a gold standard. I may say that I am willing to accept that in theory the gold exchange standard is perhaps better than the gold standard. In practice, I say that the gold standard is better than the gold exchange standard, more so for a country like India. The gold exchange standard may be good for a country like England where people are literate, where people know that gold is in the Central Bank, and that whenever they want it for making ornaments or for other purposes it will be available. Then with regard to the experience of small countries referred to by Prof. Chatterji, I wish to say that in the first place, these experiences do not point out clearly that the gold exchange standard is really better than the gold standard. For instance, in order to maintain the gold exchange standard, the Government of the Straits Settlements had to increase the currency by nearly a hundred per cent in one year and another year to reduce it considerably. Thus it led to a very rapid rise in the price level in one year and a very rapid fall of the price level in the following year. Moreover, I want to mention the fact that whatever may be found good for a small country like Siam may not be good for a large country like India. I do not take it that whatever is good for one country is bound to be good for another country. Prof. Hamilton said, Bombay in particular wants the gold standard because with the people of Bombay it is a matter of pride. It is not for that purpose. We know our economic condition which suffers in the absence of a gold standard. I ask Prof. Hamilton, the champion of the gold exchange standard, if there is any other country in the world where the bank rate jumps up 75 per cent in the course of three to four weeks every year as it does in India. Even with a very high bank rate, the money market is very tight, whereas at the same time the bank rate in other countries remains as low as five per cent. The reason as far as I can see is that the money which is available in other countries does not flow into this country because the capitalists are not sure about the exchange at which it will be withdrawn. Therefore, they are not prepared to take the risk of sending money to this market, although the bank rate here goes up to 8 or 9 per cent when in the other countries

it remains as low as 4 or 5 per cent. Prof. Hamilton also said that London and New York have become the financial centres of the world for various reasons. One of these reasons as far as I can see is that England was the first country to adopt the gold standard (applause). It has become the centre of international finance. Of course, there are other factors also. Prof. Hamilton said that England was not a worshipper of the gold standard. Well, as far as the expressed views of British bankers and others are concerned, most of them point out that England does want to go back to the gold standard. I do not deny that there may be individual economists who hold that it is not necessary for England to go back to the gold standard. One of the chief arguments usually advanced against the adoption of the gold standard by this country is that India would not be able to get gold for export purposes; but I would point out that during the years 1920-21 she exported a fairly large amount of gold. If India could find gold for export purposes when she had no gold currency, I see no reason why India should not find gold for that purpose when she has a gold standard.

PROF. B. K. THAKORE :—The classical theories, the classical formulæ and the classical labels on the subject are losing ground. It is being realised more and more clearly that facts are far more complex than the classical economists had thought. Especially from the middle of the 19th century onwards, as the volume of international exchanges has grown and more and more distant countries have come into close economic contact with one another, the economic organisation in every country is becoming more and more sensitive to events and influences from every part of the world however distant. Production, transport, trade, banking, currency and finance are thus acting and reacting on one another more rapidly and to a greater extent than ever before, and this sensitive interaction is increasing by leaps and bounds.

Price statistics, trade statistics, production statistics, bank statistics, bullion and mint statistics and paper currency and finance statistics are being noted more and more carefully everywhere; and these figures are becoming available for the student from all the principal centres all over the world to an extent not possible even twenty years ago.

The period 1914 to 1921 is a period during which almost every country resorted to unheard of and desperate currency measures, all of which are recorded along with all the circumstances preceding and following them: thus we have a vast mass of authentic material to investigate and analyse, and the currency theory that scientific study would gradually evolve from it would, for the first time in economic history, be such as to square with the bulk of the recorded evidence.

When such a theory emerges and gains the day, every country will have to modify its currency in the light of it.

Moreover, politics and currency and finance are intimately connected

and if we succeed in evolving an international authority like the League of Nations as an arbitrator between individual nations, it is conceivable that we may also have a single international currency for international trade, and each political and economic unit will have in addition and correlated with it, a local currency issued by itself and for internal use only.

This however does not appear to be possible in the immediate future. And what every state and community really want is light on the present day and on the immediate future: a poor and struggling country like India wants this much more than other countries who are, comparatively speaking, better off.

From this more limited point of view of immediate utility the practical economist may say—

- (i) Violent changes must be avoided at all costs.
- (ii) We must gradually slide into a system involving far less interference and manipulation than to-day. In fact *ceterus paribus* that system is the best which involves the least possible interference and manipulation by the State.
- (iii) As steps towards this goal, may be most urgently recommended for adoption at the earliest opportunity—
 - (a)—A free market in gold.
 - (b)—A free mint for gold coinage.
 - (c)—A system of paper currency in which the currency note of the highest denomination only is a promise to pay on demand—not so many rupees—but so many of the gold coins that the mint of India coins.

If these three features are substantially secured, the resulting currency system may be called a gold standard or a gold exchange standard system, or by any other name the experts prefer to apply to it. The label officially or popularly to be attached to the system is a matter of no consequence whatsoever.

PROF. R. M. JOSHI:—In your opening address, Mr. President, you showed in how many respects India was behind the rest of the civilised world; but from the remarks of some gentlemen on the papers under discussion, it appears that there is at least one subject in which India is ahead of the rest of the world, nay, has always been for the last twenty-five years, *viz.* the currency system. The gold exchange standard which India adopted in 1899, is, we are told, the system which eminent economists of Europe like Mr. J. M. Keynes have declared to be the ideal currency system, which nations of Europe and America are going to adopt because they want an alternative to the gold standard which has failed to stabilise prices. Now, sir, abnormal growth in one part is as bad for a nation as for an individual. India is admittedly half a century behind the world in

many matters like agriculture, industry, commerce, politics and social reform; but in currency she anticipated the latest developments of scientific theory twenty-five years ago. What we must do in this respect, therefore, in order to ensure harmonious growth of all parts of the body politic is to go back to the good old gold standard as it was understood in England for a full hundred years before the war. In the meantime, let the Keyneses and Fishers and Gustav Cassels establish the scientifically superior gold exchange standard in Europe and America; and thirty years hence when that system is recognised as the best in the civilised world, backward India will gladly adopt it. Let us not try to jump when we can hardly limp.

On reassembling after lunch at 2-30 p.m., the discussion on the currency policy was resumed.

DR. BALKRISHNA :—Are we going to sacrifice the stabilisation of prices in India for the sake of stabilisation of the foreign exchange which I do not want? This is the first argument against having gold exchange standard. The second thing is, as was pointed out, that in Bombay and in other commercial cities the working of the cheque system is very much developed. But we should know that only 3 per cent of the population lives in cities like Bombay and Calcutta. In the villages where more than 95 per cent of the population of India is to be found, the credit system has not been well developed. What I feel is that the gold exchange standard can only work in a country where the credit system is highly developed. A learned writer once calculated the ratio of credit to cash. In England, if I remember aright, only $\frac{1}{4}$ per cent is being done by cash, while 99.5 per cent of the whole business of the country is being done by credit. What about the thing here? In India mainly we carry on our business transactions in cash; in such a case we require currency which must be substantial. The greatest point which has to be emphasised is that our currency here has been inter-amalgamated. We want an automatic currency. Is it because it is a foreign Government that its interests are being sacrificed? Leaving that point altogether out of consideration, and only guided by economic considerations, I feel that we require an automatic currency and that comes only when we have a gold standard with a gold currency. Why is it only New York and London that have these stores of gold and why not any other country, say, India? India represents $\frac{1}{5}$ th of the population of the world while England and America contain 50 millions and 30 millions. Why should we also not have some stores of gold? I think with our population, with our rising prosperity, when we are being told that we are prosperous,

we require gold being stored in our country. We need not trust New York and others. There is another chief practical argument. When we have to depend upon one or two markets the variations will be many, the oscillations will be more and more. Then for stability of money markets, gold should come to India as one of the store house like London and New York. Prof. Hamilton said it did not make much difference if we used brass or copper or a spoon of gold. He is right but only when we know that the spoon of gold is with us, and that is the question. There is danger when the gold is not with us but with others. The whole history points out that gold is not with us and that therefore people are suspicious. People cannot see that tangible thing. We want the gold spoon because that is a tangible, a visible thing, on which the people of the backward classes wholly depend in villages. In the villages people do not accept currency notes; those people have no faith in currency notes. They want something tangible and that is gold.

PROF. MYLES :—In spite of the most enthusiastic reception that the advocacy of a gold standard has received here, I must admit that I am not still convinced. I must agree with Prof. Hamilton when he said that it seemed to him that the advantages of the gold standard had been exaggerated. We have heard a very great deal about automatic currency and automatic system. Now if you think for one moment I think you will practically acknowledge that even before the war there was only one free market in the world for gold and that country was England. I was in America some time before the war. I know the greatest difficulty was put in the way of any one who wanted gold in America. With silver dollars in circulation, with difficulty put in the way of obtaining gold for internal or external purposes it was very far from the position that exists in India. Prof. Tannan said in his remarks that it was largely due to the gold standard. It is partly so, in the case of London. In the case of America, it is not so. One other point that does not seem to have been specially brought out is: Why was it that England was in a position to maintain a free market? I maintain that it is largely because of England's position in the international markets, England's position as far as trade is concerned. Owing to her manipulations of bank rates, England had influence over the world supply of gold. Do you expect, the bank rate in India would exercise the same influence if she adopted the gold standard? I personally very much doubt whether India would be able to achieve that result.

MR. T. K. DURAI SWAMI AIYAR :—The question has been raised as to which is the best currency. It was suggested by Mr. Wadia that we may go back to the silver basis. Other suggestions have been advanced that we must have a gold standard coupled with gold currency. Let us enquire what are the purposes of the currency. That is to secure more or less the stability of purchasing power.

Let us see whether if we had retained silver we would have obtained this stability. Most economists agree on this point that we must have gold in the background because we have not reached a state of international agreement on the basis of working by index numbers. When disarmament comes, then the world and commerce would go side by side. The idea of having a gold standard along with a gold currency circulating is not possible. As for the point raised by Mr. Tannan, they would not agree. Bring it in par with gold. Then you will see England would not go back having sovereigns in circulation as they were before the war. As for India, which is the best currency? As for the best standard, economists would agree whatever their political prejudices might be, that gold is the best standard. For all our arrangements we should have cheap material for the ready exchange provided that cheapness does not land us in disaster. So when once agreed, the question arises could you have it in India? Recent speakers pointed out that gold exchange standard should go from the country on account of the fact that the credit system has not been developed in the country. I hold quite a different opinion. The gold exchange standard has been retained in this country because the credit system has not been developed. If we have better currency then there is absolutely no need for a gold exchange standard which really disturbs our equilibrium. It is a question needing earnest consideration whether students of economics would not be well advised in calling for a great propaganda for the development of note issue on a larger scale and thus wean our people from hankering for the dead metal which only locks up capital which would otherwise be effective in developing trade and industries. Then as regards the sudden jumping of the bank rate, the previous speaker pointed out that with bank rate manipulations England is able to-day to have a free gold market. England has been able to have a free market very largely on account of its wide and varied international trade with a very sound and sensible banking system. As for India, the high bank-rate will have to go, and it will go if we have a sound banking arrangement. The whole trouble is only that public men who fill important places have not given sufficient attention to the development of a free, sound and healthy banking system all over the country. If you have that, then the extraordinary rise of the bank rate and the retention of such bank rates for 3 or 4 months which acts as an impediment to the trade, will go.

PROF. WARBURTON:—I do not know of any country in world that has the gold standard with the gold currency actually in the circulation. Eng'and had it before the war. The United States of America had not had it for a number of years. Practically we have none. The second system is a gold standard without a gold currency. One of the speakers spoke about the difficulties of getting gold. I will take it that he must have made a mistake. One can get gold if he wants it. I have seen one person having 25 gold coins during

my stay in the United States of America. We have several coins in the United State of America circulating. The third type of gold standard is what I should call and think the best, is the gold exchange standard whereby gold does not circulate in the country and the currency which does circulate is not convertible into gold within the country but is convertible, whenever wanted, outside the country. This can be done by having a gold reserve. I do not believe that I am acquainted with the gold exchange standard in India. Of what I should call the sterling exchanging standard the best example is that of the Straits. What has been pointed out is that the Straits coins relate to the sterling and not to gold. We have not had a gold standard without gold currency. Gold exchange standard means that the exchange does not vary. I firmly believe that India should have some definite currency policy. The present policy of vacillation and of not knowing what we were going to do is detrimental to the interests of the country. Now the question is what system should be adopted. I take first the gold standard with a gold currency. Gold standard convertible with gold or a gold exchange standard with the currency convertible outside the country are in fact essentially the same. But here is a point that is widely confused. Neither the gold exchange standard nor the gold standard will have the same effect upon the prices in India. Prices in India will be according to prices outside. This is a point about which people differ and into which I do not propose to go at length. The currency of the country should be arranged so as to create stabilised prices in which case you will not have a gold standard. Some are for a managed standard based on prices or something like that. Whether we should have a currency so as to have stable prices or we should have a currency in line with most of the world's currency based upon gold and gold prices, I leave for discussion.

MR. G. FINDLAY SHIRRAS :—I should like to make a few remarks purely as an economist and not as an official. The question of managed currency is one of vital importance. I have some experience of it in this country and in London I was amazed at the amount of management that existed in London with regard to their currency system. Every day the Treasury and the Governor of the Bank of England are looking very carefully into their system of currency and the huge superstructure of credit that is built up on gold. The same thing happens in the United States of America and in India. That is a point which they ought to consider when people talk of managed system of currency and they ought to remember that the system is not peculiar to the conditions prevailing in India. The last speaker spoke about the policy of vacillation but I maintain that it is anything but vacillation. With regard to the gold exchange standard, it has the defect of elasticity as pointed out by economists from time to time but that is being tackled very carefully at

the present time. Unfortunately, this Conference has taken place at a time when in India the currency position is rather difficult on account of various factors, seasonal especially, but that is passing away.

REPLY BY PROF. P. A. WADIA :—There are two distinct questions which we have discussed in our paper. One is the gold exchange standard on its merits; the other is the gold exchange standard as worked by the Government of India for the last 30 years. Let us in the first place take the gold exchange standard on its merits. We have been told that even as early as Plato the world was familiar with the idea of an exchange standard (laughter). If you look to the history of currency experiments, it points clearly to one great realisation. The practically acceptable standard for currency purposes which you can have is a gold standard. Not a gold standard with a gold currency. Nobody suggests that and I have not suggested it in my paper. The world has grown wiser. It has learnt to economise gold. But what we insist on is a gold standard which will secure convertibility for all purposes both internal and external. When the war came, with the absorption of gold by America, the rest of the world practically became bankrupt in the matter of gold and the gold exchange standard has been foisted upon India for the benefit of the bankrupt countries which want gold. We are now being seriously told that this is an ideal system for India—India which is a creditor country. The world is fighting for gold; there is a scramble for gold! When one country can gain in gold another country will lose; we have to face this. If we have the gold exchange standard genuine, let us have the gold in India. That is the primary condition on which we can accept even in theory a gold exchange standard. Mr. Findlay Shirras talks of managed currency. For currency, so far as internal convertibility is concerned, the policy for all purposes must be the policy of *laissez faire*. Let us keep in mind, if we are to have a managed currency, it must be a currency managed in the interests of India but not in the interests of England (applause).

The Conference then proceeded to consider the following three papers :—

6. Non-credit Agricultural Co-operation in India

(PAGES 42-146).

BY MR. J. A. MADAN, REGISTRAR, C. S., BOMBAY.

In the absence of Mr. Madan this paper was presented to the Conference by Rao Sahab Gunvantrai H. Desai, Personal Assistant to the Registrar.

7. Distributive Co-operative Societies in India

(PAGES 46-51).

BY PROF. H. L. KAJI OF BOMBAY.

8. Housing of the Working Classes

(PAGES 42-45).

BY RAO BAHADUR S. S. TALMAKI, HONORARY SECRETARY OF THE CENTRAL CO-OPERATIVE INSTITUTE, BOMBAY.

DR. JOHN MATTHAI :—I want to contrast both papers. Mr. Kaji's paper begins with a statement that the credit movement has progressed at a fairly rapid pace. I want, if I may, to challenge the assumption that the credit movement has really progressed faster than the non-credit co-operative movement. The point for the conference to consider is whether the co-operative credit side has been successful. Now there has been very little investigation in many provinces. As for the question that indebtedness has been reduced by the credit societies, one has to be very sceptical. The credit side has not I feel been able to justify herself. It seems to me quite impossible to disassociate from the credit part of the movement the non-credit side. If you really want to reduce the indebtedness of a country, you have got to increase the productive capacity of the ryot. Secondly you should be able to tempt him to secure better prices for the things he produced. In the first place you must be able to base the credit system on a foundation which will enable you to give loans of an amount that will help agriculturists to improve their land. Our credit movement is based on short-time loans, because our business is done on short deposit basis. On that basis we are not going to achieve any permanent improvement. The credit movement is closely bound up with the non-credit movement. When you look into the actual management of co-operative societies, you see the greatest difficulties lie in stimulating the loyalty of members. Loyalty of members is not an ethical question. If you are able to secure really cheaper prices for your men, then they are prepared to be loyal to your society. In parts of the country with which I am familiar, it seems to me that co-operative stores have failed because to a very large extent in our country, the gulf between the retail prices and wholesale prices is not sufficiently wide for co-operative societies to succeed. I think the advantage that the co-operative stores have in theory is that between the wholesale and retail prices there is a great difference; but the retail shop-keepers in India want very little profit; therefore they sell at fairly low prices, so that it is very difficult to stimulate the loyalty of members. In regard to articles which are not used within the country and with regard to the articles which are imported from elsewhere, it seems to me that if we are going to make a success of our co-operative stores, it would be necessary for us to begin with a sale of such articles; but there too unless we choose articles of a kind in regard to which there is a wide gulf between the retail and wholesale prices, it is difficult to make it a success. The fundamental reason that the credit movement has succeeded is the Government control. We want to a certain extent Government control, no doubt; but then this control takes away from the movement to a certain extent, its popular character.

PROF. G. N. JOSHI :—I am in agreement with Dr. Matthai. The co-operative movement will prove a panacea for all evils and bring about and promote moral and material prosperity under certain circumstances only. If

you want to make remunerative the toil of the population of the country, not only you must increase the productive capacity of the country but also you must seek a better market. The most important requisite is to wipe out their debt. Remove the incubus of the permanent debt of the agricultural population. Unless you eliminate that permanent debt, the co-operative movement will advance for one or two years and must afterwards stagnate or collapse.

The Government can float a loan and thus eliminate those who are creditors of the agricultural population. Government has large resources. It can start a bank and these creditors may be entered as depositors. The Government must interfere and must help the debtors. By the interference of Government 6 per cent interest will be given to the creditors. You can thus eliminate the debt of the agriculturist. Heavy indebtedness is a handicap that cannot be removed merely by the co-operative movement. The only panacea is the co-operative credit movement so arranged to promptly remove the indebtedness.

PROF. B. G. BHATNAGAR (referring to Rao Bahadur Talmaki's paper):—Let us not accuse Government; it is the Government that has taken the initiative. The cause of failure is the lack of interest among agricultural classes. People do not look upon the co-operative societies as their own. In Bombay there is perfect disregard to the hygienic element of the housing system. You provide one-room tenements. I would submit that the people of Bombay should take a wider view of things and approach the problem of housing from the point of view of comfort, hygiene and sanitation. There must be some place for children to play.

PROF. MYLES, referring to the progress of non-credit co-operation in the Punjab and particularly to the progress of the co-operative consolidation of holdings inaugurated by Mr. Calvert, said :—If lower prices were adopted, I fear opposition from the retailer. If we start the idea of giving credit, it may be fraught with danger. I personally would very much doubt the wisdom of Government or any other public body coming to the rescue, in order to enable stores to inspire confidence in their members or in the public.

PRINCIPAL T. K. SHAHANI:—I may say our stores consist of members who are employed in Government and in private services. How are we to realise the amount due if we give any credit to the such persons. Such sort of credit sales can be encouraged only if there are credit societies who can guarantee to the stores society and authorise it to give credit up to a certain amount. As for the success of credit societies, I have only one remark to make. I quote the report of His Excellency Sir Edward Maclagan when he stated that many of these credit societies, which are limited, are concerns masquerading under the name of co-operative societies and do not serve any purpose in ameliorating

the condition of the masses. I can say, that many of these limited concerns give out loans to many of their members who are people of urban class and not the masses, but co-operation is not intended for these people but for the poor.

MR. KUMARSWAMI said that the condition of people who own land was better than that of those who do not possess land.

PROF. B. R. CHATTERJEE:—In the matter of rural indebtedness, it is true that we cannot eliminate substantially the debt incurred by means of co-operative credit societies. In co-operative stores strict cash sales are impossible. Societies show rapid decline because of the system of cash sales. Some way must be found so as permit of credit sales to members with due provision for the safety of such loans in kind.

DR. BALKRISHNA :—In addition to the reasons advanced by Prof. Kaji, I may give three more reasons of the failure for the store movement in India. The first is amateur management. Those who are enthusiasts come forward, but they have no business experience and it is no wonder if they do not succeed. The second difficulty is that when we start stores we do not know where to buy at the cheapest rates. The retailer has the best information where to buy at the lowest rates. If we select a shop to buy from, it will be a third-rate shop. We are not offered the same amount of commission by wholesalers. Full information is not forthcoming to the people. The third difficulty is the charges of transportation, which generally come higher to the stores than to the other shop-keepers. Another point that the shop-keeper who has stability is able to get things on credit. He will get goods, paying the money 2 or even 6 months after.

REPLY BY PROF. KAJI :—The discussion has really, I am afraid, gone off at a tangent and related to questions which did not arise from the papers read. The success or otherwise of credit societies in relieving agrarian indebtedness was not an issue before the meeting. One paper dealt with non-credit agricultural co-operation and the other with the consumer's movement and I would have been very glad to have had views of economists and co-operators as to what they conceive are the reasons for the non-development of non-credit rural and urban co-operative movements. Regarding the question of short-time loans being ineffectual for enabling real improvement in the conditions of Indian agriculture, I do not deny that there is an element of truth in it. I may state that in Bombay at any rate, long term loans are being advanced by Government through credit organisations in approved cases at a very moderate rate of interest. Co-operative credit has its limitations, of course, but to stamp it as a failure because, it has not enabled the ryot to wipe out his old debts wholly is surely not fair. Unless investigations by economists are undertaken to discover how the co-operative credit system has

worked in improving the economic condition of the agriculturist, I do not think, one can pronounce positively on the failure or success of the movement.

However all that I want to emphasize here is that, whether failures or successes, credit societies are growing in number, working capital and membership, not so the non-credit societies. Why? That is the purpose of my paper. Dr. Matthaï feels that the margin of profit for the middlemen in India is very small and leaves no scope for the co-operative store organisation. My experience in Bombay is different. There was a good deal of profiteering during the war and even now the apparently low margin is really the result of fraudulent manipulations of weights and measures and adulteration. Prof. Myles wants to stick to cash sales. I cannot understand why he should object to credit sales if the chances of bad debts are eliminated in the ways I have indicated. A co-operative store is a business institution and cannot afford to let go customers by insisting on cash payment, merely because it is the better system. Dr. Balkrishna thinks ignorance and amateur management are at the root of the failure. He is right I fancy, and the way out seems to me that there must be one large store in the provincial capital functioning as the wholesale which would remove such obstacles from the path of small retail stores. Illiteracy of the people is a handicap in this movement undoubtedly but what is a greater handicap is the indifference of the educated classes.

The Conference then adjourned to 2-30 p.m. on Thursday the 24th January.

The Reception Committee of the Seventh Indian Economic Conference was At Home to the members and visitors of the Conference at the Sydenham College of Commerce and Economics at 5-30 p.m. the same evening. A large number of distinguished economists and businessmen were present and an enjoyable evening was spent.

Thursday, 24th January 1924.

The morning was devoted to the annual business meeting of the Indian Economic Association.

The Hon. Mr. Lallubhai Samaldas, C.I.E., was elected President of the Association for the next year, Professors Joshi and Kaji the Honorary Secretary and Treasurer respectively and twelve members were elected to the Managing Committee. A Hindi Technical Terms Committee and an Official Statistics Committee were also appointed. Mr. S. K. Iyengar was requested to arrange if possible for the meeting of the Eighth Conference at Hyderabad (Deccan), to be held towards the end of December.

The Conference reassembled after lunch at 2-30 p.m., when the papers on the Population Problem, Agricultural Improvements and Industrial Development were considered.

9. The Population Problem in India

(PAGES 147—161.)

BY PROF. C. J. HAMILTON OF PATNA.

PROF. A. C. FERNANDEZ :—The question is what kind of population we have got. This question has not been investigated at all. We discuss what is the birth-rate, what is the death-rate etc., and we want to come to an arithmetical calculation. My submission is if you want to find out whether we have a population problem or not, we want to find out what kind of population we have got. On account of our traditional mode of living, on account of our outlook on life, our people have got sometimes stereotyped habits. Is there any equilibrium between people that are producers and the people that consume ?

PROF. WARBURTON :—There is too much prohibition of the remarriage of widows. These measures really involve co-operation by the people. They cannot be carried out simply by an official fiat. We cannot have the widow remarriage introduced unless you have this co-operation and that sort of co-operation seems to me to involve a change of habits. I think the statistics from Europe clearly bring out this point that the fall of birth-rate is largely due to a large outlook of life, and education, which is rightly emphasised. If we increase our wealth, we increase also our members. The most important problem is the lack of purchasing power on the part of the masses. That is the great economic tragedy of our civilisation.

PROF. WADIA:—The question is whether India is overpopulated or not? It seems to me that it can be decided by a reference to a simple fact. The question of population is primarily the question of relation between the members and the food products of a country. In Europe there were about 100 million people more than Europe could support. All this population is dependent for food upon the food products of other countries including India, so that the position is this. Nobody here suggests, I wish it was suggested, that England was overpopulated because her food production is not enough; but, India is overpopulated because she has more food than people require. It is a question of population and the distribution of production. For the purpose of distribution I want a policy of reservation for the peoples of this country. So long as the Government of India with its railway policy encourages the export of the produce of the soil, while a large number of people are starving in India, it is no use crying out about an excess of population. The suggestion that underlies the treatment of the question of population in India is the suggestion that the poverty of India is the result of overpopulation. The poverty in India is entirely due to different causes. I am not going to that question. The whole question reduces itself to this that the public suffered from over-ruralisation. The remedy for that is the only remedy of industrialisation—industrialisation on the lines on which the western countries carries it out, for making India self-sufficient.

PROF. G. N. JOSHI:—The whole problem has been misconceived. We approach it from a wrong direction. The principle is this. If the population is not large enough to bring all industries up to the point of fixed returns the country is under-populated; if that point is reached, it is sufficiently populated; if that point is reached and more, then it is overpopulated. In agriculture also, it is expected that there is sufficient scope for production. The implication of this paper is, because you are poor, you are overpopulated. I beg to submit that this implication cannot be proved in the light of facts existing in this country.

PROF. BHATNAGAR:—In India there is a tendency towards overpopulation, I will say. My study of the population of India convinces me that there is a tendency towards overpopulation. To have a tendency towards overpopulation is different from to have actually overpopulation. But as one of the speakers pointed out, to me personally the problem of the relation of members is not at all important. My study of the problem, the qualitative aspect of the problem, tells me that all this is due to a peculiar phenomenon, the lowered vitality of each successive generation and it is the one important factor that people should keep in mind. The problem that population in India is getting weaker and weaker is more important, when looked at from any point of view. Those who are interested whether in labour problems or as manufacturers of goods will do well to study the causes which have brought about the decrease of vitality in the Indian population.

PROF. PHERWANI :—This problem is a very intricate one, and to decide it in the off-hand manner in which it has been attempted, is, in my opinion, mere guess-work. In the American Geographical Magazine, this question was discussed from the geographical point of view. It was said that we must construct an econograph for each region to find the habitation of that region under a particular stage of civilisation, under a particular stage of technical efficiency. These can be found out by exact working. They can construct an econograph to know which region is underpopulated or overpopulated. Nobody worked this out for the different regions in India. Then the possibility of different industries have to be considered. Similarly the possibilities of the different strata of population has to be considered. So the population question involves much study and careful working out. The population in India is very great. But we have not reached and I do not think we will reach the question of overpopulation in India even in the next century.

PROF. CHATTERJEE :—In this connection I agree with the previous speaker that it is not perhaps so much the case of overpopulation but I think it is a very strong tendency towards overpopulation amongst the poorest classes—the class among which it is least desirable.

PROF. R. M. JOSHI :—Prof. Hamilton's thesis seems to be that India is poverty-stricken because the mass of the people in India multiply so recklessly and hence that the real remedy for poverty in India lies in birth-control. I am afraid this diagnosis does not explain why India is, relatively to other countries, so very much poorer, because even in countries where birth-control is exercised, the habit can hardly be said to have been cultivated among those layers of society to which the bulk of the community belongs. Irresponsibility in the matter of multiplication is a failing from which the mass of the people in all countries, or almost all, suffer. We must, therefore, look to other causes to explain the characteristic poverty of India. But that is not the subject of the present discussion. True it is, however, that in spite of all the advances of science and its application to the production of the material goods of life, the race between numbers and their material well-being is perpetual, as Malthus indicated more than a hundred years ago. In fact, the problem of human poverty cannot be finally solved unless human beings realise their responsibility in the matter of addition to the species. In other words, the heads of every family have got to be educated up to the point of realisation that unless they can afford to give their would-be children at least as good a start in life as they themselves got, they have no business to bring children into the world. And they must be the more careful if they desire not merely their own but a higher standard of life for the succeeding generation. It is not enough that only the upper strata of society should realise this truth ; it must

be realised by all the strata not merely in India but the world over. That, combined with efforts increasing man's mastery over nature, may banish poverty for good and release man's energies for the pursuit of nobler ends.

REPLY BY PROF. HAMILTON :—Several speakers seem to me to have jumped to the conclusion that the population problem does not exist, because India is not overpopulated. I have made it perfectly clear in my paper that India is saturated with people. I appeal to students of economics not to accept conclusions on the ground of prejudice. Now there is the right answer and there is the wrong answer to problems of this kind, if purely regarded from the point of view of prejudice. It is I think an untenable fact that unfortunately in this country there are some views, which are Government views and some views which are regarded as popular views. Sometimes it is suggested that the poverty of India is not due to overpopulation, but to Government administration. That is an unscientific prejudice. I do firmly believe that India is overpopulated. That is an undoubted fact and I do not for a moment think that poverty can be reduced when it is overpopulated. The poverty of India is due to a hundred causes. The tendency of prices to increase is also a cause of poverty.

10. Agricultural Improvements in India

(PAGES 18—34).

BY PROF. P. BASU OF INDORE.

11. Agricultural *versus* Industrial Development

(PAGES 35—41).

BY PROF. R. M. JOSHI OF BOMBAY.

PROF. MYLES :—There are a large number of statements made in Mr. Joshi's paper. They may be true or untrue. One statement is that India is the poorest country in the world. When compared with such countries as England, the United States of America and other advanced countries, India is poorer but not so when compared with Italy, Russia and such other countries. Let us take the Punjab. The food of the ordinary Punjabi consists of wheat flour, ghee and milk, which are commodities that many parts of Europe do not eat. They take ghee which is more nutritious than butter. So in the Punjab at any rate the scale of diet from this standpoint is extraordinarily high. The working classes of Germany do not get wheat to eat ; they have to be content with rye.

PROF. H. L. KAJI :—Mr. Basu has done well to bring up the subject of agricultural improvements and I agree largely with the remedies and means he suggests.

Mr. Joshi seems to me to have hit upon a title which does not convey what he really means to convey by his paper. The title seems to imply an antagonism between agricultural and industrial development. Does Prof. Joshi seriously mean that agriculture, the industry which at present maintains more than 75 % of the population, needs no improvement ; and

that industrial development is the only thing necessary? The concluding sentences of his paper however recognises the complementary nature of these two. In his desire to emphasize the necessity for rapid industrialisation, he has made statements, I am afraid, that will not perhaps bear critical examination. With the general theme of the paper, I am heartily in agreement. A rapid industrial development is urgently needed in our country but I hold at the same time it is no use belittling the importance of improvements in agriculture.

PROF. WARBURTON drew attention to the per capita production of certain agricultural commodities in the United States of America and showed how the figures there were much higher than the corresponding figures for India.

DR. BALKRISHNA maintained that ruralisation had gone on very rapidly in India. Since 1911, 49 million people had been added to the agricultural population and the question was how to feed them. Was there more land available? In 1895, there were eight acres of cultivated land per person engaged in agriculture; in 1909 there were only six acres per head. The density of population was in the neighbourhood of 200 per square mile. It is clear therefore that greater transport facilities and rapid industrial development were very urgently necessary in India.

THE HON. SIR IBRAHIM RAHIMTULLA :—The discussion on the papers tempts me to make a few observations on the general question. A few years ago the Associated Chamber of Commerce of Great Britain and Ireland passed a resolution to the effect that the economic prosperity of a country depended on the extent to which they obtained their supplies from their own soils and from their own factories. That only means that India's economic prosperity can be reached by intensive agricultural developments and intensive industrial developments. The two should go hand in hand and the great minds of India have for more than a generation applied themselves to this problem and have been seeking remedy. They have had several commissions inquiring into the various aspects of this big question, but I think the people of India will not be satisfied till after the fullest enquiry that may be necessary for practical and effective measures to be adopted for the intensive development of agriculture and simultaneously for the intensive development of other industries, as far as possible they might obtain their supplies from their own country and from their own factories. Personally I think that it will be a move in the best direction if a commission of experts is appointed to enquire into not only industrial development, not only fiscal matters, not only agricultural development, but to co-ordinate efforts by one commission which should look and enquire into the effective and immediate measures which are necessary for raising India economically to a stage where there will be adequate food and clothing. It has been urged by some economists that Indian production of food - grains is

inadequate to meet the food requirements of the people of India. It is however in consequence of large exports of food grains that the people of India cannot get adequate materials for their supplies. There are various directions in which these enquiries can be made but I think the time has come when the economic problem in India outweighs all other considerations and demands insistent attention. I do not wish to go into the question of the growing population of India. But the population of India has got a vast field for its economic regeneration. India is very simliar to the United States of America, which is both agricultural and industrial. It is one of the richest countries in the world. A study will have to be made of the means adopted by the United States of America for her development and of how it has managed to develop its agriculture and its industries, and of how measures found suitable for the education of the people of India can immediately be adopted. I appeal to economists to try to raise India to the height of economic prosperity.

DR. JOHN MATTHAI :—Canada and the United States of America have enormous scope for agriculture, but in spite of this they have developed industries. I think, that should be the ideal of this country also, and the very fact that we are backward in industrial development, should prompt us to take steps in that direction.

The President also made some observations about co-ordinating industry and agriculture and said that no country could economically become prosperous unless in both these directions, intensive efforts were made.

PROF. R. M. JOSHI replying to the discussion said :—My main thesis is that we in India have at present got far too many people engaged in agriculture ; that in order to get the maximum produce out of the soil even according to our backward methods, so many people are not required on our land ; that the people are there partially employed, and partially fed, clothed and housed, simply because they have nothing else to turn to ; that their lot therefore, can be improved only by diverting a large proportion of them—probably a third or more—away to industrial and commercial pursuits ; that improvement in agricultural methods and implements and organisation of co-operative societies can only be subsidiary and not the main remedy for our national problem of poverty ; and finally, that the sooner the Government and the people realise this fundamental fact, the better. I have seen no reason in the discussion which has taken place to alter the position which I took in my paper.

The Conference then adjourned to 11-30 a.m. on Friday the 25th January. In the evening, the members were entertained to Tea by Prof. K. T. Shah of the Bombay University in the South Wing of the University Buildings.

Friday, 25th January 1924.

The Conference held its last day's sitting at the University Convocation Hall on Friday, 25th January, at 11-30 a.m. with Sir M. Visvesvaraya in the chair. As the time at the disposal of the Conference was limited, Dr. J. Matthai suggested that the papers of the day be considered as read and discussion entered into forthwith. Accordingly the President called upon Mr. G. Findlay Shirras to make a few observations on his paper. Mr. Shirras' paper, which was characterised by many speakers including the President as a valuable document striking a novel path, was highly commented upon.

12. India's Real Balance of Trade in 1922-23.

(PAGES 69-81).

BY MR. G. FINDLAY SHIRRAS, DIRECTOR, LABOUR OFFICE, BOMBAY.

Before presenting the memorandum, Mr. Shirras said that it had been prepared in 1923 at the instance of the Hon'ble Sir Basil Blackett, K.C.B., Finance Member of the Governor-General's Executive Council, in view of a request received from the Secretary-General of the League of Nations, and explained that it had lately been revised and the data brought up to date. He drew attention to the fact that the figures as printed in his paper required some alterations.

The table at page 69 should read thus:—

Exports—

1. Exports of merchandise and treasure (Visible exports)	342,34	..
2. Funds borrowed in England for interest charges (para 4) (invisible exports)	13,12	..

Imports—

1. Imports of merchandise and treasure	312,42	
2. Allowance for under-valuation of imports of merchandise and treasure (gold and silver) (5 per cent of Rs. 311,41 lakhs)	15,57	
3. Visible imports of funds (Net)	2,48	
4. Invisible imports:—		
i. Expenditure in interest for overseas capital invested in India	26,25	
ii. Expenditure for shipping services †	22,15	
iii. Expenditure for commissions ‡ (mainly finan- cial and insurance services)	9,00	
iv. Net expenditure for other services	4,00	

Visible Balance of Trade (Net)	11,87	..
Invisible items (Final figure from both sides)	17,13	
Final Balance (Visible and invisible items)	5,26	

The table at page 73 should read thus :—

British Seaborne and land frontier							
Exports	..	..	..	328,70	3,28	2,62	334,60
Imports	..	..	..	240,30	64,96	5,10	310,36
<hr/>							
Excess of exports (+)	..	..	..	..	..	..	24,24
Excess of exports of merchandise and treasure for non-British territories (Estimated) (+)	..	..	..	..	..	..	3,20
<hr/>							
Total							.. + 27,44

In the Exports table at page 80, under C—Land Frontier Trade, the figures should read 1,469 and 51 respectively.

The Imports table at page 81 from C—Land Frontier Trade to end should read as follows :—

C—LAND FRONTIER TRADE.

22. Imports of merchandise	..	..	..	..	..	..	16,11
23. Imports of treasure	..	..	..	..	..	..	2,17
24. Allowance for under-valuation of imports of merchandise and treasure (gold and silver) (5 per cent of Rs. 311,41 lakhs)	..	..	..	..	..	..	15,57
INVISIBLE IMPORTS.							
25. Expenditure in interest for overseas capital invested in India	..	..	..	..	..	..	26,25
26. Expenditure for financial and insurance services †	..	..	..	..	..	..	9,00
27. Expenditure for shipping services †	..	..	..	..	..	..	22,15
28. Net expenditure for other services	..	..	..	..	..	..	4,00
<hr/>							
VISIBLE BALANCE OF TRADE (Net)	..	..	..	..	..	..	11,87
INVISIBLE ITEMS (Final figure from both sides)	..	..	..	..	..	..	17,13
<hr/>							

FINAL BALANCE OF TRADE (visible and invisible items) ?... .. 5,26

MR. K. DURAISWAMY IYER emphasized the necessity of attaching one and one meaning only to the expression, 'Balance of Trade' and said that whatever be the meaning, whether including or excluding invisible imports and exports, or whether referring to the Balance of International Payments or not, it must be stuck to, out of regard for students of economics. He further held that excluding Government stores in the preparation of

the country's balance of trade was misleading and confusing, and said that the country was not paying its way. The remittances from India did not pay the home charges and loans had to be raised to carry on day to day affairs of administration. It could not be said that India imported capital for improvement only.

MR. B. F. MADON congratulated Mr. Shirras on his very valuable paper and said that the paper was a contribution not only to economic literature but also to the task of assessing the credit of the country. The Government of Japan attaches the highest importance to such work and full statistics are available for Japan for the last thirty years. Such investigations were not merely academic things but paid the country well. It was due to such propaganda work that Japan had been able to borrow such vast amounts in foreign countries at such low rates of interest. He dilated on the supreme national necessity of showing to the world at large a country's credit and hoped that students of economics all over India would soon be forthcoming to help Government endeavour and arrive at even a much closer approximation of the Balance of Trade than had been reached by Mr. Shirras. The import figures did not affect the exchange till after some time, about three months; the sale of Councils and even Bills of Exchange were made in advance. If the figures of any single year were therefore considered, the balance of trade would not be accurate. A period had to be taken. They all knew Mr. Jevons' Theory of Trade Cycles. The ten-year cycle might or might not be true; but his experience told him that in India a cycle was completed in about ten years. The period then which should be taken for arriving at a correct Balance of Trade of India, was ten years. He thought that if analysed in this way, perhaps India would be found to be a creditor country importing gold and silver for so many years in spite of the natural opposition of countries like England and the United States of America who use gold for currency purposes. It was not a creditor country in the sense that she had invested her money in foreign countries, like England and France. When the position of India was determined by thus working out the real Balance of Trade for a period of ten years, and made known to the world, the Indian Exchange would be benefitted thereby.

PROF. R. M. JOSHI:—I would like to call the Balance of Trade by the name of the Balance of Payments, and would urge the abolition of the elegant-looking but very unmeaning and confusing terms, namely, *invisible imports* and *invisible exports*. I hold further that in getting at any document of a statistical character like Mr. Shirras' memorandum, all the items which represented claims by the rest of the world against a country or *vice versa* should be taken into consideration. Government stores and railway materials cannot be excluded. The

Councils are but a method of payment and as such should not have been included.

For arriving at India's Balance of Trade, I would recommend a method akin to that detailed by Mr. C. K. Hobson in his book "Export of Capital". Mr. Hobson takes the excess of the export of merchandise and treasure over the import of merchandise and treasure, and then takes the excess of the claims by over the claims against and finally estimates the export or import of capital from or into the country by taking the difference between these two excesses. On the basis of Hobson the claims of India against other countries will be the profits and savings of Indians in foreign countries and the expenditure of the foreign travellers in India. The claims against India will be the interest on the rupee and sterling debts, sinking fund for these debts, interest on debts of Indians in foreign countries, profits of foreign business houses, shipping companies, and insurance companies, profits of the coasting trade, charges of the India Office, pensions and salaries of Indian officers, civil and military, charges for the Indian High Commissioner, savings of non-Indians sent out of India, and expenditure of Indians especially students in other countries. This is by no means an exhaustive list but it serves to indicate on what lines a Balance of Payments can be arrived at.

Mr. Madon referred to India being a creditor country, because she imports gold. But this is not true since we may be able to buy gold but we may be selling future claims against us. We may be buying gold as a commodity. I differ from Mr. Madon also about the value of such investigations as these for propaganda work. It is not such balances which are looked into and examined by financiers; these look to the Government budget. Neither do the Japanese carry on their propaganda with such Balances. They advertise their national wealth, the resources on which their Government has a claim if need be to satisfy its creditors.

PROF. MYLES found much food for thought in Mr. Shirras' paper and agreed with Mr. Madon in the necessity of further work in that direction. He congratulated the Conference in bringing out two fine statistical papers in the last two years. The importance of the importation of capital into a country depended on the fact whether or not that imported capital was used productively. It was a good thing for a country to import capital if it cannot provide capital itself; only it must be used productively.

PROF. JATHAR:—We export visible exports and import in return visible imports, service and bullion. It may or may not be advantageous for us to import bullion. I do not mean to discuss that point at present. But if I sell goods worth say Rs. 10 to you and you pay me goods worth Rs. 4, services worth Rs. 3, and gold worth Rs. 3, am I a debtor or a creditor?

REPLY BY MR. G. FINDLAY SHIRRAS:—He said that the discussion was an

eye-opener. He agreed with Mr. Iyer that at the end of the year a review of India's invisible exports and invisible imports should be undertaken on a scientific basis. He also saw much reason in Mr. Myles' remarks and said that what India needed next to education was more capital—more productive capital.

13. The Problem of Poor Relief in India

(PAGES 59-63).

BY MR. K. C. RAMAKRISHNAN OF MADRAS.

PROF. WARBURTON referred to the footnote on page 61 and said that mere numbers did not suffice to give an accurate picture of India's industrial workers.

PROF. R. M. JOSHI emphasized the same point and said the Indian industrial population should be compared with the industrial population of other countries with caution. Regard must be had to the size and total population also. The League of Nations would not have been as generous as it was in calling India the eighth industrial country of the world if the relative size of the industrial and general population had been considered.

PROF. MYLES said that two years ago when H. R. H. the Prince of Wales visited India, some one wrote to say that he should be shown how India had solved its poor problem. The poor problem, as found in the west, had however just begun in India. He regretted that the writer had not attempted to draw any lesson from the efforts of others nations to solve this problem.

PROF. S. N. PHERWANI referred to the efforts of the Salvation Army and urged that people should now interest themselves in the study of this subject.

14. Excise Policy in South India

(PAGES 107-112.)

BY DR. JOHN MATTHAI OF MADRAS.

MR. KUMARSWAMI made a few remarks about co-operative societies for the sale of liquor in India and referred to the Bengal Gunza Stores Ltd.

PROF. WARBURTON referred to a strong minority that was against prohibition in the United States of America.

The Conference reassembled after lunch at 2-30 p.m., and summaries of the following papers were presented by their writers. No discussion was possible as the time at disposal was very short :-

15. Indian Economics

(PAGES 131—132.)

BY PROF. P. BASU OF INDORE.

16. Teaching of Economics and Stimulating Economic Research

(PAGES 120-130).

BY PROF. S. N. PHERWANI OF BOMBAY.

17. Trend of Indian Thought in Economics

(PAGES 134-141.)

BY PROF. B. G. BHATNAGAR.

The papers on Export Duties and Protection (pp. 12-17) and the Dawn of Economic Science (pp. 52-58) could not be considered on account of the absence of the writers while the papers on the Supply of Labour to the Madras Cotton and other Industries (pp. 64-68) and Indigenous Banking in the Madras Presidency (pp. 113-119) could not be considered for want of time.

SIR M. VISVESVARAYA in his concluding remarks said he felt gratified at the way in which the discussions were carried on. He thought that an all-India body like the Indian Economic Association could easily make its deliberations felt by passing resolutions embodying their considered opinion. Perhaps one of the difficulties in doing so was the fact that many members were Government officials and if they passed resolutions contrary to the policy of the Government, the Government might find itself in an awkward position.

He then briefly reviewed all the papers that had been discussed at the Conference. The paper on Imperial Preference was a very interesting paper; but when the self-governing Dominions had not decided anything, India could not possibly accept Imperial Preference. The considered opinion of the Conference was against Imperial Preference. Referring to Sirdar Kibe's paper, he said that customs duties were being collected by the Government of India at the ports for many of the imports which were going into Indian States. The population of the Indian States was about one-fifth of that of the whole of India. It would be therefore right to set apart one-fifth of the total revenue from customs collected and distribute that among the Indian States according to their population. He also suggested that these states might send their representatives to the Central Legislature and be allowed to participate in discussions of an all-India character.

Though there was considerable amount of disagreement in the discussions about Indian currency, he was of opinion, that the practice of maintaining a token coin for internal circulation should be replaced speedily by a standard gold currency. He would not have liked to commit himself to any opinion when so much difference existed but he had already committed himself to a gold standard in his opening speech. Interchange of views with the leading statesmen of the world had confirmed his opinion that the gold standard was the only standard for currency at present. He was in favour of more private banks in every province and district and said that they should also have industrial and agricultural banks all of which should be inter-linked with a central banking organisation. He agreed with Mr. Shirras that banking was not much advanced in this country.

Turning to the papers on co-operation said that the discussion had centred on Mr. Kaji's interesting paper and on some rather irrelevant issues and regretted that the question of housing was neglected. He pointed out the importance to Bombay and such other congested city areas of a discussion on that problem and suggested that Salsette which was some thirty-five miles from Bombay could if the means of communication and transport were laid on a sound and workable basis, be converted into a colony wherein the labourers could build with a little capital small houses of their own. He had studied this subject for some time back and has prepared a scheme which was handed over to H. E. Sir George Lloyd. As regards the population problem, he said that the population was growing and that therefore there was need for education and preventive checks and related the story of a professor who told him that he could not afford to have more than a couple of children. He drew attention to the interesting discussion on agricultural and industrial development and remarked that the country's production should be half and half from agriculture and industry. Industrial development should proceed rapidly so as to yield 50 per cent.

He congratulated Mr. Shirras for his extremely able paper and hoped that many more such papers would be discussed in the future sessions of the Conference.

With regard to excise policy he was of opinion that though it was not practical politics to think of prohibition just at present it should always be kept in view, while the trend of Indian thought was in favour of prohibition. As for poor relief, he said that there were two classes who have to be looked after and they were the infants and the poor, and pointed out that for that purpose there can be Government agencies and an agency of the people. In the Government of India, he thought, there should be a nation-building department which should keep in close touch with other advancing countries like Japan, Canada, and Australia.

Finally he touched on what appeared to him a vital question, namely, that of literacy in referring to which he appealed to the educated people to join hands with the Government in removing the proverbial illiteracy of the Indian masses.

He then made a few remarks about the Indian Economic Association and said it would be of immense value to all concerned if provincial branches were also established to educate people and help elevate the economic condition of the Indian nation.

The Conference was then declared dissolved. The members were then taken round the harbour by S.S. *Begum*. The low water at Sewri Bunder made it necessary to abandon the idea of proceeding to the Cotton Green on the Sewri-Mazagaon Reclamation. The party had a delightful cruise.