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INDIAN SOCIETY OF
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PUBLICATIONS RECEIVED

Bhalerao, M. M., *Economics of Indian Agriculture (in Hindi)*, Banaras Hindu University, Varanasi, 1969. Pp. 1056. Rs. 25.00.

Cohen, B. J., *Balance-of-Payments Policy*, Penguin Education, Penguin Books Ltd., Harmondsworth, Middlesex, England, 1969. Pp. 166. 35 p 7/-.

Desai, B. M. and Desai, M. D., *The New Strategy of Agricultural Development in Operation*, Thacker & Co. Ltd., Bombay, 1969. Pp. xvi + 148. Rs. 25.00.

Economic and Scientific Research Foundation, *Pulp and Paper—Prospects for 1975*, New Delhi, 1969. Pp. ix + 161. Rs. 10.00.

Economic and Scientific Research Foundation, *Changes in the Locational Pattern of Select Indian Industries, 1950-65*, New Delhi, 1969. Pp. 148. Rs. 15.00.

Grubel, Herbert G., *The International Monetary System*, Penguin Education, Penguin Books Ltd., Harmondsworth, Middlesex, England, 1969. Pp. 208. 35 p 7/-.

India, Government of, *Modernising Indian Agriculture—Report on the Intensive Agricultural District Programme (1960-68), Vol. I*. Expert Committee on Assessment and Evaluation, Ministry of Food, Agriculture, Community Development and Co-operation (Department of Agriculture), New Delhi, 1969. Pp. xii + 130.

Lucey, Denis, I. F. and Kaldor, Donald R., *Rural Industrialization—The Impact of Industrialization on Two Rural Communities in Western Ireland*, Geoffrey Chapman Limited, London, 1969. Pp. 208. 35s.

McCormick, B. J., *Wages*, Penguin Education, Penguin Books Ltd., Harmondsworth, Middlesex, England, 1969. 35 p 7/-.

Metcalf, David, *The Economics of Agriculture*, Penguin Education, Penguin Books Ltd., Harmondsworth, Middlesex, England, 1969. Pp. 144. 35 p 7/-.

Nanekar, K. R., *Land Reforms in Vidarbha*, Research Programmes Committee, Planning Commission, Government of India, Oxford and IBH Publishing Co., Calcutta, 1968. Pp. xxv + 334. Rs. 20.00.

Richardson, Harry W., *Elements of Regional Economics*, Penguin Education, Penguin Books Ltd., Harmondsworth, Middlesex, England, 1969. Pp. 166. 35 p 7/-.

Poehlman, John Milton and Borthakur, Dhirendranath, *Breeding Asian Field Crops with special reference to Crops of India*, Oxford & IBH Publishing Co., Calcutta, 1969. Pp. xx + 385. Rs. 18.00.

ANNOUNCEMENTS

SUBJECTS SELECTED AND THE VENUE FOR THE NEXT CONFERENCE OF THE SOCIETY

The 30th Annual Conference of the Society will be held from 23rd to 25th October, 1970 under the auspices of the U. P. Agricultural University, Pantnagar (Dist. Nainital).

The following subjects are selected for discussion at the Conference:

1. Labour Market in Rural Areas.
2. Pattern of Income Distribution, Savings and Expenditure in Rural Areas.
3. Development of Agriculture in Tribal Areas.

Those desirous of submitting papers for discussion at the Conference, are requested to send in their papers in triplicate along with the summary (500 words) so as to reach the Society's Office latest by 15th June, 1970.

CONCESSIONAL RATE OF STUDENT SUBSCRIPTION TO THE INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

The 29th Annual General Body meeting of the Society has decided to offer to post-graduate students of agricultural economics, the Journal of the Society at a concessional subscription rate of Rs. 15 per year. Post-graduate students desirous of availing this facility should send in their subscription along with recommendation from the Head of the Department.

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XIV INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS*

The XIV International Conference of Agricultural Economists is to be held in Minsk from August 24 through September 2, 1970.

The general theme of the Conference will be “Economic Policies, Planning and Management for Agricultural Development—National and International.”

Those wishing to take part in the Conference should inform the Organizing Committee not later than April 1, 1970.

All the participants will be expected to pay the registration fee equal to 10 US dollars. Members of the International Association of Agricultural Economists will then be expected to pay the membership fee, which is also equal to 10 US dollars or in any other freely convertible currency and send to the Bank for Foreign Trade of the USSR, Ul. Neglinnaya, 12, Moscow, USSR, account No. 70102287, not later than July 15, 1970. After this date the fees will be paid at the time of registration. The registration fees cover the cost of publication and other materials of the Conference, but they do not include hotel accommodation, meals and tours. Participants are expected to register on August 23 and in the morning of August 24, 1970 at the State University of Minsk.

For the travel to the Soviet Union it is recommended to address to the correspondent of the USSR Company for Foreign Travel “Intourist” in the participant’s country. Persons coming to the Conference from countries where there are no “Intourist” correspondents, are advised to address to the “Intourist” agencies in any other country. The participants of the Conference should arrange for their entrance visas through the consular departments of the USSR Embassies in their countries using the services of “Intourist” correspondents.

All correspondence relating to the preparation and carrying out of the Conference should be addressed to Organizing Committee, Orlikov, 1/11, Romm 832, Moscow, USSR till 31st July, 1970 and thereafter to Organizing Committee, Government House, Romm 307, Minsk, USSR.

Fourteen tours in different areas of the country will be arranged, lasting from five to ten days, soon after the Conference is over. They will be organized by the Organizing Committee and “Intourist” for the participants and persons accompanying them. The participants of tours will get acquainted with research and educational institutions, collective and State farms in different rural zones of the Soviet Union, as well as with historic monuments and other places of general interest, with museums, national parks and game management reserves.

* For details of the subjects to be discussed, kindly refer to the ‘Announcement’ in the July-September, 1969 issue of this Journal, pp. 96-97.

THE INDIAN SOCIETY OF AGRICULTURAL ECONOMICS

CONSTITUTION†

1. The name of the Society shall be "The Indian Society of Agricultural Economics."
2. (i) The objects of the Society shall be to promote the study of social and economic problems of agriculture and rural areas and also to promote technical competence for teaching and research in Agricultural Economics and allied subjects.
 - (ii) These objects shall be sought to be achieved by:
 - (a) undertaking, organizing and co-ordinating research in problems of agricultural economics and rural development and maintaining research library and documentation centre;
 - (b) holding periodical Conferences and Seminars;
 - (c) publishing books, reports, papers or summaries of papers, either separately or collectively, or in a periodical which may be issued under the auspices of the Society;
 - (d) co-operating with other institutions having similar objects, such as the International Association of Agricultural Economists and the Indian Economic Association, etc.;
 - (e) receiving grants, subsidies, donations, etc.;
 - (f) obtaining all powers and authorities necessary to carry out or to extend any of the above objects;
 - (g) employing any other means upon which the Society may decide.
3. (i) The Society shall consist of (a) Members, (b) Honorary Members and (c) Member-Institutions, who are interested in the economic and social progress of agriculture and rural life.
 - (ii) Applications for Membership shall be recommended by any two Members of the Society and approved by the President subject to subsequent confirmation by the Executive Committee.
 - (iii) The membership of any person whose subscription is in arrears for two consecutive years will be terminated.
 - (iv) The Executive Committee may terminate the membership of any person whose conduct is, in its opinion, prejudicial to the interest of the Society, but such persons shall be given a reasonable opportunity to present an explanation to the Committee before final action is taken by the Committee.
 - (v) Candidates for Honorary Membership shall be nominated by the Executive Committee and elected by a majority of Members present and voting at a General Meeting of the Society.
 - (vi) Members and Member-Institutions shall pay to the Society an annual subscription which shall be fixed at the Annual Meeting on the recommendation of the Executive Committee from time to time. Members are eligible to become Life Members on payment of a lump sum amount which shall be fixed by the General Body on the recommendation of the Executive Committee.* Institutions cannot become Life Members.
 - (vii) A Member-Institution shall be entitled to send only one representative to the Conferences and Meetings of the Society but the said representative shall not, in that capacity, be entitled to be enrolled as a Life Member.
 - (viii) The Honorary-Secretary shall keep a register of members which shall contain such particulars as the Executive Committee may prescribe from time to time.

†As amended at the Annual General Body Meeting held on December 31, 1969.

*The present rate of annual subscription which Members and Member-Institutions shall pay to the Society is Rs. 20.00 or £2-10-0 or \$6.00. The amount of subscription for Life Membership is Rs. 450.00 or £ 50-0-0 or \$120.00.

4. Except as otherwise provided in the Constitution, the business of the Society shall be conducted by the Executive Committee.

5. *Executive Committee :*

(a) The affairs of the Society shall be conducted by the Executive Committee which shall consist of the President, not more than five Vice-Presidents, the Hon. Secretary and Treasurer, the Hon. Jt. Secretary (if appointed), and twelve members.

(b) The Office-bearers and the Members of the Executive Committee shall be elected by the majority of votes of the Members present in person at the Annual General Meeting of the Society and shall retire annually but may be re-elected.

(c) The quorum for the meeting of the Executive Committee shall consist of seven members.

(d) The Executive Committee will have the general powers of supervision of the affairs of the Society. The Committee shall manage these affairs in accordance with the rules and regulations of the Society, and such general or special directions, not being inconsistent with either the Constitution or the Rules and Regulations of the Society, as may be given by the Annual General Meetings of the Society.

(e) In the event of the President's inability to fulfil his duties, the Executive Committee shall nominate one of the Vice-Presidents to act in his place and stead and shall be called the Executive Vice-President.

(f) The Executive Committee shall have power to fill by co-option any vacancies in the Committee that may arise during its term of office.

(g) The Executive Committee shall submit to the Annual Meeting a report on the working of the Society together with Statements of audited accounts.

(h) The Executive Committee shall have power to frame rules and regulations within the framework of the Constitution for the general working of the Society; these will be placed before the next meeting of the General Body for approval.

(i) The Executive Committee may appoint Committees and Sub-Committees with such powers as it deems necessary. Provided, however, the Executive Committee shall be responsible for the action/s of such committees or sub-committees.

6. *Local Sub-Committee :*

There shall be a Local Sub-Committee of the members elected to the Executive Committee, resident at the headquarters of the Society, which shall meet as and when desired by the President to give advice in regard to the affairs of the Society. The President shall have the power to co-opt other members on the Committee.

7. *Office-bearers of the Society :*

The President : (a) The President shall have the authority to direct and supervise all the affairs of the Society with the general guidance of the Executive Committee.

(b) He will preside at the Annual General Meetings of the Society, meetings of the Executive Committee and also all Committees or Sub-Committees, conduct the proceedings, give effect to the resolutions passed by various bodies and attend to the general working of the Society. The President will be ex-officio member of all Committees and Sub-Committees and may preside, when present.

(c) The President shall have the power to incur expenditure for the legitimate activities of the Society as defined in Clause 2 and subject to the rules which may be framed as provided under Clause 5(h).

(d) The President shall consult the Executive Committee by correspondence or the Local Sub-Committee on all important matters of policy.

(e) Special or emergency actions, if any, taken by the President during the year shall be reported to the Executive Committee.

Hon. Secretary and Treasurer : (a) The Hon. Secretary and Treasurer shall look after the affairs of the Society under the guidance and direction of the President. He shall keep proper

minutes of the proceedings of the meetings of the Executive Committee, General Body, and such other bodies appointed from time to time, shall give effect to the resolutions of these bodies, shall carry on correspondence and shall be in charge of the records of the Society.

(b) The Hon. Secretary and Treasurer shall supervise the collection of all money due to the Society and shall be responsible for the proper maintenance of the accounts of the Society.

(c) He shall have the power to discharge bills for expenses incurred during normal functioning of the Society. Any other payment shall be made with due authorization and sanction of the President and/or the Executive Committee.

Hon. Jt. Secretary: The Hon. Jt. Secretary, if appointed, shall share with the Hon. Secretary and Treasurer his functions as defined and stipulated above.

8. Editorial Board :

The Annual General Meeting shall appoint an Editorial Board which shall be responsible to the President and the General Body. The composition of the Board shall be decided at the Annual General Meeting. The Board shall edit and look after publication and printing of the Journal to be issued. The Board shall make necessary arrangements to scrutinize and edit the manuscripts approved for publication.

9. Annual General Meeting :

(i) The Annual General Meeting of the Society shall ordinarily be held once a year. The time and place of such General Meeting shall be fixed by the Executive Committee and not less than twenty-eight days' notice of this meeting shall be given to all Members, Hon. Members and Member-Institutions. The quorum for the Annual General Meeting of the Society shall consist of twenty-five members.

(ii) A special General Meeting may be convened by the Executive Committee at any time; it shall also be convened on the requisition of not less than forty Members on the roll on the day such requisition is made. Fourteen days' notice of such Special General Meeting shall be given.

(iii) The following business shall be transacted at the Annual General Meeting :

- (1) Consideration and approval of the annual report and audited accounts.
- (2) Ratification of the special/emergency actions of the President, if any.
- (3) Election of Office-bearers, President of the Annual Conference, the Executive Committee and the Editorial Board.
- (4) Election of Honorary Members, if any.
- (5) Appointment of auditors.
- (6) Consideration of proposed amendments to the Constitution, if any, subject to Clauses 2 and 11.
- (7) Other relevant business.

10. Finance, Accounts, etc.:

(i) The funds of the Society shall be deposited in a Scheduled Bank or in an Apex Co-operative Bank and be operated upon under the signature of any one of the three Office-bearers, viz., the President, the Hon. Secretary and Treasurer and the Hon. Jt. Secretary (if appointed).

(ii) The Accounts of the Society shall be audited each year by a firm of Chartered Accountant/s within the meaning of the Chartered Accountants Act, 1949, appointed by the General Body on the recommendation of the Executive Committee.

(iii) For the purposes of Public Trust Act, the Office-bearers shall be the Trustees of the Society under the Trust Act.

11. The Executive Committee is authorised to interpret the Rules and to act upon the matters not provided for in the Rules, in a manner not repugnant to the provisions of the Societies Registration Act XXI of 1860. Any amendments intended to effect any alteration in the Constitution shall be submitted in the form of a written notice of motion, to be circulated to Members, Honorary Members and Member-Institutions giving one month's notice to a General Meeting to be held about the same time and it shall be considered at such General Meeting. Amendments when duly proposed and seconded shall be declared adopted if carried by two-thirds majority of the Members present and voting at such General Meeting.

12. The Headquarters of the Society shall be located in Bombay. The Society shall have a secretariat to help the Office-bearers in the day-to-day execution of the work.



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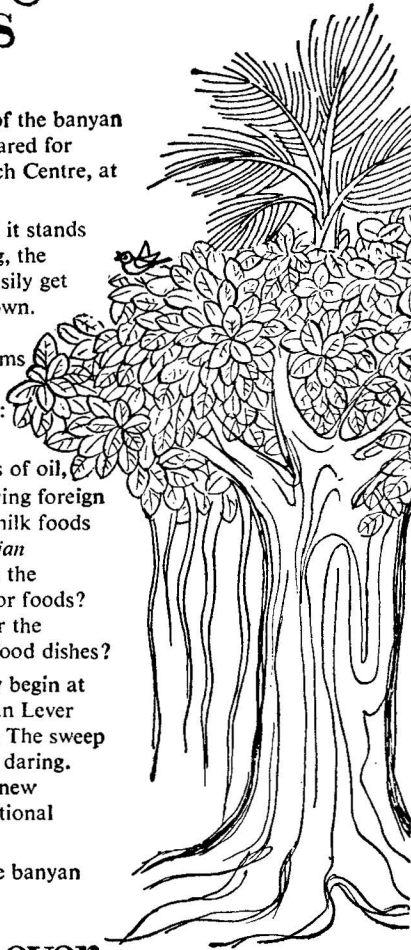
'Let it stand,' someone said of the banyan tree as the site was being cleared for the Hindustan Lever Research Centre, at Andheri.

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Hindustan Lever

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LIST OF CONTRIBUTORS

AUTHORS

- S. S. Johl : Professor and Head, Department of Economics and Sociology, Punjab Agricultural University, Ludhiana.
- M. V. George : Professor of Agricultural Economics and Sociology, Punjab Agricultural University, Hissar.
- A. J. Singh : Department of Economics and Sociology, Punjab Agricultural University, Ludhiana.
- Ashok Parikh : Lecturer in Economics, School of Social Studies, University of East Anglia, Norwich, England.
- S. O. Olayide : Senior Lecturer, Department of Agricultural Economics and Extension, University of Ibadan, Western State, Nigeria.
- Dupe Olatunbosun : Research Fellow, Nigerian Institute of Social and Economic Research, University of Ibadan, Western State, Nigeria.

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