

BIBLIOGRAPHY

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AGRICULTURAL EXTENSION
IN THE DEVELOPING COUNTRIES

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WAGENINGEN/THE NETHERLANDS/1968

Agricultural extension in the developing countries

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INTERNATIONAL INSTITUTE FOR
LAND RECLAMATION AND IMPROVEMENT
WAGENINGEN / THE NETHERLANDS / 1968



International Institute for Land Reclamation and Improvement
Institut International pour l'Amélioration et la Mise en Valeur des Terres
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PREFACE

This bibliography is intended to serve in the first instance all those who are charged with the training and guiding of agricultural extension personnel in the developing countries in identifying sources of information that would help them in their job. An attempt has been made to include the most relevant publications for this purpose, but experiences with agricultural extension have been discussed so frequently that it was not possible to include all publications. A choice of the literature of related sciences, dealing with subjects on agricultural extension, is included.

In general, only literature in English, French and German, mostly published during the last decade, has been mentioned.

A serious effort has been made to classify the publications under the appropriate headings, but the reader will understand that classifying often is arbitrary, because many publications are covering two or more topics.

In making the annotations, use has been made of the valuable knowledge gathered in "Tropical Abstracts" and in "World Agricultural Economics and Rural Sociology Abstracts" (WAERSA).

Due acknowledgements in this respect are paid to the Editors of both abstracting journals, viz. the Royal Tropical Institute at Amsterdam, and the Commonwealth Bureau of Agricultural Economics, Oxford, U.K.

The author feels indebted to Dr. ir. A. W. van den Ban, Professor in Extension Education at the Agricultural University in Wageningen (Netherlands) for his advice during the preparation of this paper.

GENERAL WORKS ON AGRICULTURAL EXTENSION AND COMMUNITY DEVELOPMENT

Advisory work in farm management. OECD, Documentation in agriculture and food no. 77, Paris, 1966. 195 pp.

ARENSBERG, C. M. and A. H. NIEHOFF / Introducing social change.
A manual for Americans overseas. Aldine Publishing Co, Chicago, 1964. 214 pp.
The writers present many aspects of the subject and give numerous examples of projects leading to failures or to satisfaction.

Australian Agricultural Extension Conference. Melbourne, 1962. 363 pp.

BIDDLE, W. W. / The community development process; the discovery of local initiative. New York, 1965. 334 pp.

A comprehensive textbook on community development.

CHANG, C. W. / Extension education for agricultural and rural development. FAO, Bangkok, 1963. 186 pp.

The book gives the experience of the author particularly in S.E. Asia.

Only extension principles applicable in Asia and the Far East are described, illustrated with practical examples.

Id. / Increasing food production through education, research and extension. Freedom from Hunger Campaign, Basic study 9, FAO, Rome, 1962. 78 pp.

This study, based on known facts and agreed conclusions of experts, briefly reviews agricultural education, research and extension in the developing countries. A good coordination of these three closely interrelated services is essential, and can best be obtained when the three functions are under one administration. In most countries, however, agricultural schools and colleges are under a ministry of education, while research and extension are under a ministry of agriculture. Secondary schools of Agriculture have not been successful. The development of agricultural research, education and extension in developing countries is a matter of vital importance in the movement for increasing food production (Tropical Abstracts 1963-1969).

Community development, a handbook. H. M. S. O., Colonial Office, London, 1958. 84 pp.

A clear view of the methods which appeared to be useful to stimulate development in the less developed countries.

ENSMINGER, D. / A guide to community development. Rev.ed., New Delhi, 1957. 205 pp.

A textbook on community development adapted to the circumstances in India.

Experiment in extension. The Gaon Sabhi. Oxford Univ. Press, 1956. 240 pp.

A textbook grown out of actual extension experience in India, as practised in the extension project, carried on at the Allahabad Agricultural Institute. This project is divided in three parts: a pilot extension project in some 400 villages, a training programme for extension workers and a programme for the production of extension materials. The Gaon Sabhi is the extension agent in the Allahabad Extension Project.

Farm management manual, for the use of agricultural extension workers in Asia and the Far East. FAO Reg. Off. Asia, Far East, Bangkok, 1965. 131 pp.

This manual was drawn up as a model for member countries by a committee set up at the first session of the FAO regional working party on Farm Management for Asia and the Far East in Japan, 1961, and was approved in 1964. It is written for agricultural advisory workers with sufficient schooling and aims to provide answers to three main questions: 1. Why is such a manual needed. 2. What are farm management programmes under extension. 3. How should extension workers help farmers? The main part of the book is devoted to question 3.

FAY, I. G. / Notes on extension in agriculture. Asia Publ. House, London, 1962. 204 pp.

A presentation of the major phases of extension education with which all extension workers should be familiar. Three chapters are devoted to the organization and the county unit in extension in the United States. As the author feels, India can modify the successful features in the U.S. extension scheme to meet local conditions, and avoid weak and cumbersome features. The early movements of agricultural extension in India and the launching of the Community Development Plan in 1952 are outlined. Stress is laid on the importance of personal meeting, the group discussion method, visual and audio-visual aids and youth clubs. The responsibilities of the village teacher, the local leader and the gramsevak are covered. Each of the 28 chapters is followed by questions for study and discussion and by a list of references for further reading (WAERSA 1963-2520).

FRANCO, J. di / Aspects of extension work. Inter-American Inst. of Agr. Sciences. Turrialba, 1963. 91 pp.

Compilation of ten previously mimeographed papers, used in extension at the Graduate School of the Inter-American Institute of Agricultural Sciences. Subject matters treated are extension, education, philosophy, evaluation in extension work, specialists in extension, extension organization, local leaders in extension, principles and guidelines, prerequisites to progress in agriculture, coordination and the United States Cooperative Service (WAERSA 1964-1035).

GOODENOUGH, W. H. / Cooperation in change. Russell Sage Foundation, New York, 1963. 523 pp.

A textbook on agricultural extension cooperation.

A guide to community development. Min. of Commun. Dev. and Coop., Govt. of India, New Delhi, 1959. 205 pp.

KELSEY, L. D. and C. C. HEARNE / Cooperative extension work. 3rd. ed. Comstock Publ. Co., New York, 1963.

A well known U.S. textbook on agricultural extension. Explains what extension is, how it works and what its programmes are. Chapters on methods and programme preparation and development. Mainly drawn from United States experience. A chapter is included on the application of extension principles to other countries.

Id. / Trabajo de extensión agrícola.
Translated into Spanish by Humberto Rosado. Editorial Reverté S.A., Mexico, 1961. 471 pp.

A translation of "cooperative extension work".

KING, C. / Working with people in community action; an international case-book for trained community workers and volunteer community leaders. New York, 1965. 192 pp.

LAIDLAW, A. F. / Training and extension in the cooperative movement. A guide for fieldmen and extension workers. FAO, Rome, 1962. 78 pp.

LAL, R. / Community development principles, practices and problems. Bookland Private Ltd., Calcutta, 1963. 439 pp.

OLOKA, T., H.L. DUSENBERRY and D.W. PETT / A handbook for extension workers. University College Ibadan, 1961.

PENDERS, J. M. A. (Ed.) / Rural extension at the crossroads. International Agricultural Centre, Wageningen, 1963. 249 pp.

The book is published on the occasion of the tenth international extension summer school at Wageningen. It contains articles by many authors. Most of the articles deal with certain critical aspects of extension work. Subjects included are: the role of rural extension in developing countries, comparative extension studies in Asia, extension and community development, social aspect of rural extension, evaluating of rural extension, agricultural cooperatives in more and less developed countries, etc. (WAERSA 1964-1943).

RHEINWALD, H. and G. PREUSCHEN / Landwirtschaftliche Beratung. Bayerischer Landwirtschaftsverlag, Bonn, 1956. 145 pp.

A textbook, divided into two parts: 1. extension principles and methods.
2. extension practice.

ROGERS, F. E. and A. G. OLMSTEAD / Supervision in the Cooperative Extension Service. National Agricultural Extension Center for Advanced Study, Madison, Wis., 1957. 162 pp.

A textbook on supervision in agricultural extension.

SAVILE, A. H. / Extension in rural communities. A manual for agricultural and home extension workers. Oxford University Press, London, 1965. 148 pp.

A practical guide to those who have the task of training advisory and extension workers and local leaders in agriculture and community development. It aims to help field workers to improve their methods of securing the cooperation of farmers in their efforts to transform land use and farm management practices.

SHANNON, Th. J. and C. A. SCHOENFELD / University extension. The Library of Education, New York, 1965. 115 pp.

A review of the vast range of activities carried on under the name of extension services. The authors describe the scope of these activities and evaluate them critically. They indicate possible lines of development in the near future. The authors give separate treatment to each of the two main kinds of university extension that have developed in the United States, the so-called general extension, and the agricultural extension carried on under the auspices of the Cooperative Extension Service.

They point out that, in virtually every university, the two services are under completely separate jurisdictions. The advantages and disadvantages of this separation are set forth, and the possibilities of a unified service are discussed.

DIFFUSION OF INNOVATIONS AND ADOPTION BY FARMERS

AGARWALA, A. N. / Village people and the plans. Only 1 of 3 villagers know our plans exist. *Yojana*, 10 (1966) 24 : 2-5.

A survey conducted by the Agro-Economic Research Centre of Allahabad University (India) in a village only 37 km away from Allahabad revealed that less than one-third of the villagers knew of the existence of 5-year plans. Among students and cultivators only 40% had this knowledge. All media of mass communication should be used in order to create plan-awareness in village people. On the basis of the present survey it is expected that the spoken word will have the greatest impact. Teachers, students and other educated people should form the spearhead of a movement to spread information on the development plan in villages.

BOHLEN, J. M. / The adoption and diffusion of ideas in agriculture. In: James H. Copp (Ed.). *Our changing rural society: perspectives and trends*. Iowa State University Press, Ames, Iowa, 1964. 354 pp.

A summary of the empirical findings from farm practice adoption research.

BOSE, S. P. / The diffusion of a farm practice in Indian villages. *Rur. Sociol.*, 29 (1964): 53-66.

In this study the same farm practice was studied in seven different villages in West Bengal. Each village is a social system and is different from the other villages. They vary in such factors as religion, caste structure, education, land tenure, urban contact, etc. It is reasonable to assume that a new practice will meet with different kinds of reception in different villages. In fact, this has happened, as is evident from the data. While the logistic curve has been fitted to the data of all villages, you can read from the curves different slopes. Nevertheless the same result has been obtained. It is noted that similar curves of diffusion have been found in both India and the U.S.A.

CHAWDHARI, T. P. S., S. L. CHOWDURY and B. M. SHARMA / Farmers' perception of constraints influencing choice of crops and adoption of certain recommended practices. *Agric. Situ. India*, 20 (1965): 555-566.

To examine the nature and interplay of the various factors governing choice of crops and techniques being adopted by cultivators, data were collected from four to seven holdings in each of 14 randomly selected villages in the Delhi territory. The need for family food, and fodder and feed for cattle

are shown to be the principal determinants of the cropping pattern in the area. Production credit was most needed to buy improved seeds and fertilizers. High interest rates, high cost of membership of cooperatives and low credit-worthiness under existing systems were the most mentioned difficulties in obtaining credit (WAERSA 1966-1970).

CHOU DHARY, K. M. / Factors affecting acceptance of improved agricultural practices. Study in an I. A. D. P. District in Rajasthan. Vallabh Vidyanagar, Gujarat. Agro-Econ. Res. Centre, Res. Stud. No. 9, 1965. 101 pp.

Data were obtained from farmers by interview and questionnaire while secondary sources are also used extensively. Traditional and improved practices in wheat cultivation are examined and stages of adoption are identified. The findings indicate that among the various practices, the responses are very positive to fertilizers, insecticides and pesticides. The reasons identified for non-adoption of improved seed bring out the superiority of the local seed over the improved seed. The lack of irrigation or unsuitability of water is considered to be the major factor for non-adoption of fertilizers (WAERSA 1966-1971).

CHOU DHARY, K. M. and M. MAHARAJA / Acceptance of improved practices and their diffusion among wheat-growers in the Pali-district of Rajasthan. Ind. J. Agr. Econ., Bombay, 21 (1966) 1 : 161-165.

A description of adoption of innovations.

DESAI, D. K. and B. M. SHARMA / Technological change and rate of diffusion. Ind. J. Agr. Econ., Bombay, 21 (1966) 1 : 141-154.

A case study on the use of fertilizer was carried out in 1962 in a village in the Delhi territory. The average rate of application of nitrogenous fertilizers was only 16 lbs. of nitrogen per acre of irrigated wheat, compared to the recommended 40 lbs. The observed gap appeared to be related to the size of the farm, literacy, and irrigation facility. It is concluded that unless the technological change is of a particular magnitude, it does not have a significant impact on the farm economy. There is a long gestation period between the knowledge of a technological change, such as the use of fertilizer, and its adoption (WAERSA 1966-4124).

FLIEGEL, F. C. and E. KIVLIN / Differences among improved farm practices as related to rates of adoption. Bull. 691, Agr. Exp. Sta., Pennsylvania State University college of agriculture, 1962. 18 pp.

FLIEGEL, F. C. ; P. ROY; L. K. SEN and J. E. KIVLIN /
Innovation in India. The success or failure of agricultural development programmes in 108 Indian villages. Research Report no. 9. Project on the diffusion of innovations in rural societies. National Institute of Community Development, Hyderabad, India, 1967. 213 pp.

A research report concerned with the human factors involved in the diffusion and adoption of improved agricultural practices in Indian villages. It is a part of a larger study carried out in three countries: Brazil, Nigeria and India. The project consisted of three phases. In the first phase, the village was taken as the unit of study; factors that facilitate or inhibit the success of agricultural programmes for the whole village were studied. The present report provides results from the first phase. In the second phase, the focus of the study will be on the individual farmer. The third phase of the project will be devoted to a follow-up study of an experiment in mass communication.

HAVENS, A. E. / Testing a social psychological model for predicting the adoption of innovations. Washington, 1962. 23 pp.

JONES, G. E. / The adoption and diffusion of agricultural practices.

WAERSA 9, (1967) 3: 1-34.

A review article mentioning 468 references.

Id. / The diffusion of agricultural innovations. J. Agr. Econ., Reading, 15 (1963) 3 : 387-403.

The article deals with innovational activity at the level of individual adopters. Three groups of factors are involved: 1. characteristics of the innovations; 2. communications media; 3. personal and sociological characteristics of potential users. Emphasis is on the human factor, too often neglected by agricultural advisory services. Adoption and diffusion of appropriate social organizations and individual patterns of behaviour are essential complements to technological progress (WAERSA 1963-2581).

JUNGHARE, Y. N. / Factors influencing the adoption of farm practices. Ind. J. Soc. Wk., Andheri, 23 (1962) 2 : 291-296.

A study to determine the effect of selected factors influencing the adoption of recommendable farm practices in the rural community of Nagpur. A random sample of 129 farmers was interviewed on the following variables: 1. adoption of practices, 2. extension contacts, 3. formal social participation, 4. socio-economic status, 5. education, 6. age, 7. social status, and 8. economic status (WAERSA 1964-1997).

KATZ, E. and P. F. LAZARSFELD / Personal influence. Free Press, Glencoe, Ill., 1955. 400 pp.

The book presents a comprehensive and clear view of the factors influencing human behaviour. Opinions of friends and neighbours appear to be of determining importance.

KOLBE, F. F. H. / Die aanvaarding van verbeterde akkerboupraktijke in die settlers-grondbewaringsdistrik soos beïnvloed deur sekere sosio-ekonomiese faktore. Thesis, Univ. Pretoria, 1965. 161 pp.

The most important factors associated with the adoption of improved agricultural practices were found to be factors concerned with the farmer's financial position, education, contact with extension, leadership functions, attitudes, degree of progressiveness, knowledge of practices, aims and efficiency of production. The results of this study in a Bantu farming community agree in general with overseas findings within the Western cultural pattern.

LINDSTROM, D. E. / Diffusion of agricultural and home-economics practices in a Japanese rural community. Rur. Soc., 23 (1958) 2.

LIONBERGER, H. F. / Adoption of new ideas and practices. Iowa State University Press, Ames. 1961.

LIONBERGER, H. F. and H. C. CHANG / Comparative characteristics of special functionaries in the acceptance of agricultural innovations in two Missouri communities, Ozark and Prairie. Agric. Exp. Sta., Columbia, Bull. No. 885, 1965. 59 pp.

Data were received from 457 farmers on recently introduced farm practices and changes made in kinds or brands of farm supplies purchased. Analyzed were the questions where the farmer first learned about the new practice, where he got additional information about it, and the information source most influential in his decision to adopt or use it (WAERSA 1966-4130).

MOULIK, T. K. and U. PAREEK / Group factors in participation. Ind. J. Soc. Wk. 24 (1963) 2 : 79-84.

Participation in agricultural programmes among caste-groups in North India.

OPPENFELD, H. von / Results of a study of adoption of better farm practices in the Philippines. Ind. J. Agr. Econ. 17 (1963) 4 : 23-32.

Generally the farmers are willing to participate in agricultural development by changing farm practices, provided suitable technical information is presented to them in an acceptable manner (WAERSA 1963-968).

PANSE, V. G. and D. SINGH / Promotion and assessment of technological changes in Indian agriculture. *Ind. J. Agr. Econ.*, 21 (1966) 1 : 121-131.

Studies undertaken to assess technological change in Indian agriculture are critically examined. Most of the investigations on technological change and its impact are confined to the "Package programme". It is concluded that farmers with larger holdings more readily adopt technological change, which then gradually seeps down to farmers with smaller holdings; secondly, farmers who accept one type of improved practice also readily accept other similar types of practice. If extension efforts are concentrated on the most important improved practice, namely fertilizers, which a very large proportion of farmers can adopt profitably under their present methods of cultivation, then they will also be induced to adopt other improved practices like plant protection, improved implements, etc. (WAERSA 1966-4126).

PATIL, N. P. / Effects of adoption of improved practices on the yield of ragi. *Ind. J. Agr. Econ.* 20 (1965) 2 : 65-68.

98 farmers were included in a farm management study in Mysore state, where ragi forms an important food crop, were interviewed to assess how far improved practices had been adopted, and their impact on yields. The results showed that 20 percent of the farmers had adopted no improved practices, and nearly 70 percent only one or two. The introduction of such practices, especially in combination, could possibly double current yields (WAERSA 1965-2110).

PERK, A. / Some aspects of agricultural extension work in development countries. *Neth. J. Agric. Sci.*, 12 (1964) 4 : 249-259.

The author discusses various types of projects which hold pride of place in most agricultural extension programmes of developing countries. They include: 1. the introduction of better varieties of food crops, 2. the introduction of better agricultural techniques, 3. the use of fertilizers, 4. the use of green manure, 5. soil conservation, and 6. the control of pests and diseases. The reasons why the measures mentioned under 1. and 2. were generally successful, whereas those under 3, 4, 5, and 6 had only a modest success, are explained. It is considered that the acceptance of agricultural methods depends not only on technical and economical factors but that the social background is of vital importance (Tropical Abstracts 1965-940).

RAHIM, S. A. / Diffusion and adoption of agricultural practices: a study in a village in East Pakistan. *Pakistan Academy for Village Development, Techn. Publ.* 7, Comilla, Pakistan, 1961. 76 pp.

The study is based upon interviews with 63 land owners in an agricultural

village. The adoption of four newly introduced practices and the patterns of informal communication among the villagers provide an interesting comparison to other studies on the diffusion of ideas and adoption of practices. The four practices studied include: line sowing of rice, use of insecticides, use of chemical fertilizer, and growing wheat. Impersonal sources of information were much more important in the "awareness" and in the "information" stage, while formal personal sources (agency, personnel) were most important in the "trial" stage (WAERSA 1961-1516).

RAHUDKAR, W. B. / Testing a culturally bound model for acceptance of agricultural practices. Ind. J. Soc. Wk., 24 (1964) 4 : 265-269.

A sample of 339 farmers was selected at random and interviewed. Results show that farmers with large farms increasingly made use of information media and adopted more farm practices. Contact with agricultural extension officers was convincing to farmers. On the other hand, farmers who consulted the village headmen, who are fast losing administrative control, were likely to have reacted negatively (WAERSA 1964-2873).

ROGERS, E. M. / Diffusion of innovations. Free Press, New York, 1962. 366 pp.

An extensive review of a large number of studies on the diffusion and adoption of agricultural innovations.

ROGERS, E. M. and A. W. van den BAN / Research on the diffusion of agricultural innovations in the United States and the Netherlands. Soc. Rur. 3 (1963) 1 : 38-51.

Through improved "diffusion" between the U.S. and the Netherlands of findings and methods, the quality of research on the diffusion of innovations in both countries can be raised. In the Netherlands, more attention could be given to building a theoretical model of the adoption of innovations and to analysing the relationship between farmers' goals and their cultural values. In the United States (and elsewhere) investigations of the relationship between the diffusion of new farm ideas and cultural norms will be fruitful (WAERSA 1963-1816).

SAVALE, R. S. / Technological change in agriculture: Study of sources of its diffusion, efficiency of these sources and the economic factors affecting the adoption of improved practices. Ind. J. Agr. Econ., 21 (1966) 1 : 199-208.

Information sources and the reasons for non-adoption are discussed. Among the economic factors affecting adoption are : uncertainty, capital requirements, income level or economic status of farmers, expectation of net

marginal returns, suitability of the practice to a particular locality, distance of locality from marketing and educational centres, and size of holding and tenancy. The investigation reveals that a large number of farmers could not adopt new technology because they could not be contacted by any agency, and because demonstrations arranged were out of their reach. A large number of recommended practices did not promise attractive returns over local practices. The problem of supplies is of great importance and proper technical guidance is also required at the village level (WAERSA 1966-4127).

SENGUPTA, A. K. / Innovations in agriculture; problems of acceptance. Kurukshetra, 14 (1966) 10 : 8-10.

The author presents 3 cases of rejection of agricultural innovations in the Indian States of Orissa, Madhya Pradesh and Andhra Pradesh as a consequence of insufficient recognition of economic and socio-psycho-cultural factors. The introduction of the improved maize hybrid Ganga-10 failed mainly because the new variety was difficult to digest, and because it matured late and hence hampered the cultivation of the subsequent cash crop, mustard. The introduction of the Japanese method of rice cultivation failed because transplantation in lines and application of fertilizers were not accompanied by intercultivation or weeding in accordance with the traditional method (Tropical Abstracts 1966-2683).

SHETTY, N. S. / Inter-farm rates of technological diffusion in Indian agriculture. Ind. J. Agr. Econ., 21 (1966) 1 : 189-198.

SINGH, H. / Uncertainty and adoption of new practices in agriculture. Econ. Weekly, Bombay, 16 (1964) 22 : 925-927.

The author studied this problem in a field survey, conducted in two villages in Uttar Pradesh State (India). The study reveals that the relative importance of different casual factors, which give rise to uncertainty in agriculture and consequently prevent adoption of improved practices, are different for different farmers cultivating holdings of different sizes (WAERSA 1964-2362).

STURT, D. W. / Farm operations and expenditure patterns in four villages in West Pakistan. Background Pap. Ser., Econ. Agric. Dev. Inst., Mich. St. Univ., No. 1, 1965. 70 pp.

A random sample of 200 cultivators was interviewed in 1962, covering two villages in the Punjab and two on the frontier, in each case one was irrigated and one not. Basic data were collected on acreage, labour, crops grown, equipment and marketing, and information obtained on the changes made in any of these in the previous year, and changes that farmers would like to

have made and motives. About 34 percent had made changes, mainly in the crops grown, the type of seed, or the increased application of fertilizers, mainly manure. Some 93 percent would have liked to make changes, particularly acquiring more livestock, better farm implements, more fertilizers or better seed. The motive in most cases was economic. Sometimes there was a physical lack of fertilizer or other materials wanted. No one considered making changes in the time or method of planting or harvesting, despite governmental recommendations for improvements and the fact that this required no additional credit, and no one considered altering methods of storage or marketing, though there was considerable scope for improvements (WAERSA 1966-1975).

STURT, D. W. / Producers response to technological change in West Pakistan. J. Fm. Econ., Menasha, Wisc., 47 (1965) 3.

A study was made to determine the extent and types of changes in farm practices occurring on farms in N.W. Pakistan, and the reasons for such changes. The greatest number of changes occurred where farmers were made able to bear the risks involved. The major motivation appeared to be the desire for more food for family consumption (WAERSA 1965-2111).

WELSCH, D. E. / Response to economic incentive by Abakaliki rice farmers in Eastern Nigeria. J. Fm. Econ., Menasha, Wis., 47 (1965) 4 : 900-914.

The introduction and subsequent expansion of a new crop, rice, into the Abakaliki area is described. For centuries yams were the chief crop. The results of the project accord with the hypothesis that the small farmers affected respond to economic incentives by allocating very efficiently the factors of production at their disposal, and that their investment decisions tend to maximize returns to scarce resources. The economics of rotations explain the rapid adoption and expansion of rice production. However, the initial development impact of rice appears exhausted, and only the introduction of a bundle of new, profitable factors of production will give further impetus to development (WAERSA 1965-3143).

WILDE, J. C. de, et al. / Experiences with agricultural development in tropical Africa. Vol. I. The synthesis. Vol. 2. The case studies. The John Hopkins Press, Baltimore, 1967.

A great part of vol. I is devoted to factors affecting receptivity and incentives to change (p. 45-70), and to agricultural extension (p. 157-197).

Vol. II presents the case studies on which this evaluation is based.

WILKENING, E. A. and D. E. JOHNSON / Goals in farm decision-making as related to practice adoption. Agr. Exp. Sta. Wis. Research Bull. 225, 1961. 36 pp.

The present study is an attempt to determine the extent to which the goals of "profit", "quality of the product", "ease and convenience", the desire to "keep up with the best farmers" and "maintaining good relationships with others" enter into making different types of farm decision. The study sample is 139 dairy farmers of Rock County, Wisconsin, and the five goals mentioned above are considered in relation to 14 types of farm decisions relevant to dairy farming. The analysis deals with: 1. "the variation in goals" considered by type of decision, 2. "the effect of status and role of the farmers upon goal orientation"... and 3. "the influence of the priority of goals on adoption of specific farm practices": "Profit" emerged as the most frequently recognized goal in the 14 decisions, followed by "ease and convenience" and "quality or standard" (WAERSA 1961-2721).

CHANGE OF BEHAVIOUR

BAN, A.W. van den / Cultural change: the basis for increasing agricultural productivity. *Int. R. Commun. Dev.*, 12 (1963): 67-88.

BENNIS, W.G., K.D. BENNE and R. CHIN / The planning of change. *Readings in the applied behavioural sciences*. Holt, Rinehart and Winston, New York, 1961. 781 pp.

An extensive treatment of approaches for changing behaviour. Within the social psychological theory the group dynamics approach gives many valuable ideas.

BENVENUTI, B. / Farming in cultural change. Humanities Press, New York, 1961. 469 pp.

BERELSON, B. and G.A. STEINER / Human behaviour, an inventory of findings. Harcour Brace and World, New York, 1964.

BOSERUP, E. / The conditions of agricultural growth. The economics of agrarian change under population pressure. Allen and Unwin, London, 1965. 124 pp.

Based mainly on the experience of Asian countries, the book seeks to analyze the problem of agricultural progress in primitive societies, using a new approach, in which population growth is regarded as the autonomous factor making for a steady intensification in agriculture, which in turn brings many economic and social changes in its wake. This approach contradicts the neo-Malthusian view that at any given time there is in any community a warranted rate of population increase with which the actual growth of population tends to conform, for it is based on the assumption that the main line of causation is in the opposite direction: population growth is regarded as the independent variable which in its turn is the major factor determining agricultural development. Thus, the following chapters deal with the effects of population changes on agriculture and not with the causes of these changes: 1. the dynamics of land utilization; 2. the interdependence of land use and technical change; 3. labour productivity under long fallow and short fallow systems; 4. carrying capacity of land and productivity under intensive agriculture; 5. population growth and working hours; 6. the coexistence of cultivation systems; 7. diminishing returns to labour and technical inertia; 8. the vicious circle of sparse population and primitive techniques; 9. systems

of land use as a determinant of land tenure; 10. investment and tenure in tribal communities; 11. rural investment under landlord tenure; 12. rural investment under modern tenure; 13. the use of industrial input in primitive agriculture; and 14. some perspectives and implications. It is contended that the information presented here lends no support to the conception of an agrarian surplus population emerging as the result of population growth (WAERSA 1965-1295).

BRAUSCH, G. / Change and continuity in the Gezira region of the Sudan. *Int. Social Science J.*, 16 (1964) 3 : 341-356.

The population of the Gezira region of the Sudan has been able to adopt relatively smoothly to the impact of the great irrigation scheme. Certain traditional features of life have helped the transition along. Other features have emerged again in a different form, especially the values and habits of the old landlords, largely taken over - not always to their economic advantage - by tenant cotton farmers now constituting the new élite (WAERSA 1964-2845).

COLIN, R. / De la tradition à l'évolution consciente vers le développement authentique en milieu rural. *Développement et Civilisations*, 28 (1966) : 50-56.

A prerequisite for rural development is that the farmers understand, wish and are able to implement innovations. This requires honest and comprehensive information. Extension should not be directed to a few selected farmers but the problems should be introduced for discussion in the total group of farmers concerned. This method, which is at present followed in the Niger Republic, has led to the creation of naturally cooperation structures (maganic) . This cooperative movement which is developing from below, reveals that it is possible to raise traditional communities to auto-activity.

DEZ, J. / Un des problèmes du développement rural: l'évolution des comportements. *Bull. Madagascar*, 230 (1965) : 589-641.

An outline is given of the behaviour of Madagascar peasants confronted by certain aspects of development, such as mechanization of agriculture, improvement of rural techniques, and the adoption of land-improvement measures.

DUBE, S. Ch. / Cultural factors in rural community development. *The Journal of Asian Studies*, 16 (1956) : 19-30.

Id. / India's changing villages. Human factors in community development. Cornell University Press, Ithaca. Routledge and Kegan Paul,

London, 1958. 230 pp.

A study of the results of the community development programme in two selected villages.

ETZ IONE, A. E. / Social changes, sources, patterns and consequences. Basic Books, New York, London, 1964.

FOSTER, G. M. / Traditional cultures and the impact of technological change. Harper and Row, New York, 1962. 292 pp.

The author discusses the social and psychological aspects of cultural stability and resistance to change as they affect both the giver and the receiver of foreign aid. Using many tradition-bound peasant communities to illustrate the problems, the author explains the nature of cultural change, and the role and problems of American specialists working in newly developing countries. Associated with every technical and material change, is a corresponding change in the attitudes, thoughts, values, beliefs and behaviour of the people affected by the material change. Such changes are more subtle and often overlooked (WAERSA 1963-1002).

FOSTER, G. M., M. L. BARNETT and A. L. HOLMBERG / Behaviour science research and its potential role in agricultural development In: Policies for promoting agricultural development. Cambridge, Cent. Inst. Stud., Mass. Inst. Technol., Mass., 1965: 285-293.

It is clear that the following motivations are of special importance in changing behaviour: perception of economic gain, a significant part of which remains with the progressive individual (i.e. it is not drained off in fulfillment of traditional obligations); the desire to achieve prestige and status; and the desire to please the change agent who, by the mere fact of being in a community for some time, becomes involved in patterns of reciprocal friendship that entitle him to cooperation from his new friends. These motivations appear universal and not merely culture-bound. The behavioural scientist, especially the anthropologist, is well placed to act as an effective communicator between farmer and bureaucracy in underdeveloped economies where there is no effective feedback mechanism between peasants and bureaucrats. His role as a link between the highest and the lowest elements in development programmes is thus very important. The paper discusses the role of behavioural science research (i.e. into social, cultural and psychological factors in agricultural development) in a. finding ways to increase agricultural production and b. contributing the basic theoretical and practical knowledge on individual and group behaviour that is part of the scientific infrastructure of every modern society (WAERSA 1966-858).

GERMANI, G. / Secularización y Desarrollo Economico. Resistencias a Mudanca, Rio de Janeiro, 1960: 261-279.

The different aspects of the progress of "secularization" with regard to economic development are discussed: 1. The type of social action changes from prescribed action to chosen action; 2. from institutionalizing of traditions one arrives to institutionalizing of changing and 3. out of a mostly undifferentiated complex of institutions grows a differentiation and specialization of institutions.

HOLMBERG, A. R. / Case studies of subsistence and transition: Vicos, Peru. Agric. Dev. Coun., Honolulu, 1965. 39 pp.

An analysis was made of a case of transition by a population of Indian farmers from a position below subsistence to one of fairly largescale commercial production. The results of the closely coordinated programmes of education, training, advice and assistance already show that such a transition is possible in very few years by enlightening the peasant farmers themselves, by providing the landless "peones" with increased incentives to produce in their own interest, through land-tenure reforms which convert them into peasants, but without venturing into expensive irrigation projects, and problematical resettlement schemes, nor forcing many farmers off the land before they are ready for industrial employment and urban life (WAERSA 1966-2984).

HOLMBERG, A. R. / Changing community attitudes and values in Peru: a case study in guided change. In: HARPER and BROS, Social change in Latin America today, New York, 1960.

HUSAIN, S. Z. / Social forces and economic change. A.I.C.C. Econ. Rev. New Delhi, 15 (1964) 14/15: 157-161.

The article deals with social barriers to economic development in developing countries, particularly India. These are the social milieu, social institutions, cultural pattern, value system, customs modes and traditions etc. A frontal attack on the social barriers will accelerate the rate of economic growth.

LINTON, R. / The study of man. Appleton Century Co., New York, 1936.
A classic for insight into motives and attitudes of men.

LIPPITT, R., J. WATSON and B. WESTLY / The dynamics of planned change. Harcourt Brace and Co., New York, 1958.

Deals with the group dynamics approach as a valuable means for changing

behaviour.

MUELLER, J. O. / Beobachtungen zur Reaktion kleiner Landwirtschaftler in Togo auf Berater und Beratung. Z. Ausländische Landwirtschaft, 6 (1967) 3 : 278-292.

The way in which small Togolese farmers react to agricultural extension workers and extension methods was studied on 40 peasant holdings situated in different areas, viz.: 1. the cassava-maize area of the Ouatchi tribe; 2. the coffee-cassava-rice area of the Ewe tribe on the highlands of Dayes; 3. the cotton-yam-rice area of the Kabre and Losso peoples in central Togo; and 4. the cotton-groundnut-sorghum area in the dry, northern part of the country. It is concluded that in the initial stages of agricultural development the intensive advisory method is particularly effective and economical. Extensive advisory methods without demonstrations and practice in the field have very little effect and should therefore be given up. English summary.

NIEHOFF, A. H. / A casebook of social change. Critical evaluations of attempts to introduce change in the five major developing areas of the world. Aldine, Chicago, 2nd ed., 1967. 312 pp.

This book presents nineteen histories of actual efforts at innovation in Latin America, Africa, the Middle East, and Asia, illustrating the specific problems faced by change agents. From many case histories, the author selected those that most clearly exemplify the technique of the innovator, the motivations of potential recipients and the reactions of these recipients due to local cultural patterns and values. This volume may be seen as a companion to "Introducing social change" by the same author.

SACHCHIDANANDA / Leadership and culture change in Kullu. Man in India 44 (1964) 2 : 116-131.

SANWAL, R. D. / Agricultural extension in a Kumaonese village. J. Dev. Stud., London, 1 (1965) 4 : 384-398.

An account is given of how innovations initiated by state-sponsored community development schemes may be blocked or fail for reasons other than the peasant's irrational and apathic aversion to anything new, or the usual socio-cultural factors. This case study revealed that resistance was due to the failure of the novelty to provide the peasant with an adequate economic incentive to replace the traditional pattern. The historical development and the natural and social conditions of the village of Harsila in the Kumaon area, India, are outlined, and the effects of the community evaluated. The development programme failed because these innovations did not appear

economically feasible to peasants. Though the new methods increased the yield of food grains significantly, they made three harvests impossible. The peasants saw the solution of their problems not in the adoption of the suggested innovations but in "open" forests, more land for pasturage and agriculture or, alternatively, in the provision of opportunities to earn cash, preferably in the village itself (WAERSA 1966-910).

SCHLIPPE, P. de / Le relèvement rural en fonction de notre connaissance de la coutume agricole. International Institute of Differing Civilizations. Record of the 28th meeting, 7-10 September 1953, at The Hague, Bruxelles, 1953: 76-81.

The author stresses the necessity of taking native agricultural practice into account when planning development projects, basing his view on experiences with the Zande scheme in the Southern Sudan.

SPICER, E. (Ed.) / Human problems in technological change; a case book. Russell Sage Foundation, New York, 1952. 301 pp.

From the viewpoint of agricultural extension, the most known situations give a good opportunity to learn the effect of certain methods of instruction and information on peoples' way of life.

THE ROLE OF COMMUNICATION

ARESVIK, O. / The Mymensingh and the Comilla approach in agricultural extension. Saertrykk Inst. Driftslaere Landbr. økon. Vallebekk, nr. 86, 1966. 26 pp.

In East Pakistan 2 new approaches to agricultural extension are being investigated:

1. the pilot rural development programme of the Pakistan Academy for Rural Development, Comilla;
2. the pilot project sponsored by the U.S. Agency for International Development in Mymensingh.

The two approaches have some principles in common but the methods of implementation are different. The first approach leads to collective management of the land relying on collective decisions, while the second approach relies on private initiative of farmers.

BACHMAN, J. W. / How to use audio-visual materials, 4th pr. New York, 1962. 60 pp.

BAN, A. W. van den / Boer en landbouwvoorlichting: de communicatie van nieuwe landbouwmethoden. Van Gorcum Comp., Assen, The Netherlands. 1963. 279 pp. Thesis Agric. Univ. Wageningen (Engl. summary).

Analysis of the communication processes by which Dutch farmers get information about new farm practices. Part I of this publication is a review of the literature from which hypotheses regarding these communication processes were derived.

COWING, A. / Writing words that work; a guide for extension workers. Federal extension service, U.S.D.A., no. 466, Washington, 1961. 20 pp.

DASGUPTA, S. / Communication and innovation in Indian villages. Social Forces, 43 (1965) 3 : 330-337.

246 Farmers in W. Bengal (India) were interviewed about their sources of information for nine improved agricultural practices. It appeared that the sources of information vary with the farmer's socio-economic status and type of practice for which information is sought. When the farmers are divided in innovators, early adopters and late adopters, according to immediacy of response to an innovation, the innovators are found to utilize institutionalized sources, while late adopters rely more upon non-institut-

ionalized sources. The position of early adopters is intermediate (WAERSA 1965-2109).

EBRIGHT, D. F. (Ed.) / Audio-visual handbook for India. Madras, 1955. 335 pp.

GEORGE, M. V. / Intensity of information in diffusion of technology in agriculture. A note. Econ. Affairs, Calcutta, 11 (1966) 4 : 183-187.

A field study to test the hypothesis that the intensity of knowledge about farm technology depends on the number and quality of the information media serving an area, and to examine the significance of information on the adoption of improved farm practices, was carried out in 1962-'63 in two groups of villages, one inside the Agricultural Package Programme Area and the other outside. Eight villages were selected, four each from Alleppey and Quilan districts in Kerala State, including altogether 320 farm households.

Farmers were asked about the adoption of 12 different farm practices. Some 53 percent adopted the use of chemical fertilizer and the next highest response was for livestock improvement. Technological changes, such as soil-conservation practices and improved implements had the lowest rate of response. Inter-district variations in the rate of response to different practices are significant. The advisory service of the agricultural extension agency was concluded to be of low effectiveness compared to informed sources. In planning advisory work the different methods of communication should be chosen so as to maximize the intensity of information among cultivators' (WAERSA 1966-4053).

HALL, E. T. / Working with the press; a handbook for home economics extension agents. Extension publ., New York State College of Home Economics, no. 12, Ithaca, 1961. 28 pp.

JOHNSON, G. L. and C. B. HAVER / Agricultural information as an aspect of decision making. Techn. Bull. 273, Dept. of Agric. Economics, Agr. Exp. Sta., Michigan State University, East Lansing, 1960. 56 pp.

KLAPPER, J. F. / The effects of mass communication. Free Press of Glencoe, Ill., 1960.

LERBINGER, O. and A. J. SULLIVAN / Information, influence and communication; a reader in public relations. New York, 1965. 513 pp.

LERCH, Jr., D. G. / Dissemination of farm information through newspapers, magazines, radio and television. Washington, 1959. 28 pp.

LERNER, D. and W. SCHRAMM (Eds.). / Communication and change in the developing countries. East-West Center Press, Univ. of Hawaii, Honolulu, 1967. 333 pp.

This volume presents the work of more than a dozen experts from the United States and Asia who attended the East-West Center seminar on "Communication and Change" in August 1964. It represents the practical advantages of international cooperation in the solution of international problems. After an introduction on general problems of using communication in the service of development, part 2 deals with some problems of communication and change, and part 3 gives case studies of communication and change in India, Communist China and the Philippines. The book ends with a chapter on communication and the prospects of innovative development.

MALETZKE, G. / Psychologie der Massenkommunikation (Psychology of mass-media). H. Bredow Institut, Hamburg, 1963.

MASON, R. G. / The use of information sources in the process of adoption. *Rur. Soc. East Lansing, Mich.*, 29 (1964) 1 : 40-52.

This study relates the use farmers make of information sources to their stage of the adoption process and to these farmer's relative influence. Use of all information sources was found to be related to stages of the adoption process. Rate of use differed among sources. Use of authoritative sources increased rapidly as farmers passed through the successive stages of the adoption process. The rate of mass media used by stages of the adoption process was less than that for authoritative and commercial sources (WAERSA 1964-2009).

MERCADO, C. M. et al. / The relative effectiveness of four types of extension publications. *Philippine Agriculturist*, 49 (1966) 10: 833-843.

A study on the relative effectiveness of 4 types of extension publications, conducted in the Philippines showed the preference of the respondents for the presentation of the intended message in the form of a coloured conic strip. However, the simpler black-white conic strip more effectively induced the audience to adopt certain practices advocated in the leaflet. The respondents consisted of extension workers, farmers, home-makers and members of 4-H clubs. There was a highly significant relationship between level of education and degree of understanding. Preference for specific types of publications were not related with age, sex, civil status, education level,

prior knowledge about the subject, or dialect. A semi-illustrated and a non-illustrated leaflet ranked 3rd and 4th in impact, respectively.

MYREN, D. T. (Ed.) / First interamerican research symposium on the role of communications in agricultural development. Mexico City, October 5-13, 1964. Imprenta Venecia, Mexico, 1965. 163 pp.

The symposium dealt only indirectly with techniques as it was organized not to disseminate existing knowledge on how to communicate more effectively, but rather to try to identify the lines of research which offer most promise for obtaining guidelines for technicians in action programmes. The papers dealt with each of the major issues of agricultural development in which knowledge dissemination plays a central part. There are papers related to production information, information on price and market outlook, on agricultural programmes and policies, etc.

OLIVER, R. T., H. P. ZELKO and P. D. HOLZMAN / Communicative speech, 3rd ed. New York, 1966. 418 pp.

RAHUDKAR, W. B. / Communication of farm information in an Indian community. Ind. J. Soc. Wk., 23 (1962) 1 : 99-103.

Progressive farmers are reached first by the extension agencies and mass media. Information is later transmitted to the small farmers, who are late adopters of a new practice. Extension officers should therefore concentrate on convincing progressive workers to adopt new practices.

ROBINSON, E. J. / Communication and public relations. Columbus, Ohio, 1966. 618 pp.

SCHRAMM, W. (Ed.) / The process and effects of mass communication. University of Illinois Press, Urbana, 1954. 586 pp.

An anthology with interesting chapters from agricultural extension viewpoint e.g.: SCHRAMM, How communication works (3-27); KLAPPER, The comparative effects of the various media (91-106); KLAPPER, Mass media and persuasion (289-320); SCHRAMM, The importance of the group in the communication chain (359-362).

Id. / The sciences of human communication. Basic Books, New York, 1963. 151 pp.

Written by twelve leading scientists in this field. Good summaries of the research in communication.

SHEPPARD, D. / The importance of "other" farmers. Soc. Rur. 3(1963) 2 : 127-141.

SINGH, Y. P. and V. PAREEK / Source of communication at different stages of adoption of farm practices. Indian J. social Wk. 26 (1966) 4: 385-391.

To identify the stages of innovation and the means of communication at each of the various stages, data were collected from all the 94 agricultural families in a medium-sized multi caste village near Delhi (India), who were asked to report the sources they actually used at various stages of adoption of three farm practices. Change agents and other farmers are important sources of awareness. Once a need was felt, people talked with the change agent. Impact of mass media was less at all stages (WAERSA 1966-1972).

SMITH, M. G. / The communication of new techniques and ideas: some cultural and psychological factors. In: Social research and rural life in Central America, Mexico and the Caribbean region. UNESCO, Paris, 1966: 121-130.

In Central America and the Caribbean, the relation between communicator and audience merits special attention, since the communicator is typically drawn from an urban milieu and represents a social and cultural section quite sharply distinguished from the peasants. This relation is itself an obstacle to innovation and acceptance of change (WAERSA 1966-1967).

WALLMANN, S. / The communication of measurement in Basutoland. Human Organization 24 (1965) 3 : 236-243.

The author discusses difficulties in rural development work experienced by agricultural extension officers, nutrition consultants and personnel of tractor schemes in Basutoland, arising from the fact that villagers have great difficulty in visualizing land areas irrespective of field shapes and in grasping more or less abstract concepts such as units of length, time, weight, and fractions. Tractor ploughing was not accepted because prices in tractor-hours or per acre created misunderstandings and areas were measured from aerial photographs instead of in the fields; recipes containing items such as "1/2 cup of milk costing 3/4 cent" were unintelligible; different amounts paid for identical sacks of grain according to their contents were regarded with suspicion, etc. More attention should be paid to the expression of quantities in language within the conceptual framework of the African farmer (Tropical Abstracts 1966-1195).

WANG, I. K. / Communication and adoption of certain agricultural practices recommended in three Korean villages. Dept. Agr. Ec. College of Agr., Nat. Univ., Seoul, 1965. 22 pp.

Two major conclusions were: 1. physical availability of mass media, especially radios, seemed in itself to be of less significant effect on the adoption behaviour of farm operators; 2. personal or interpersonal

communication through agency-personnel and successful farmers seemed to be very much influential in the process of innovation adoption.

SPECTOR, P., A. TORRES, S. LICHTENSTEIN, et al. /
Communication and motivation in community development; an experiment.
Report of phase I, submitted to the Agency for International Development Contract
AID / 1a-27. Institute for International Services, Washington, 1963. 114 pp.

CHARACTERISTICS OF PEASANTS AND FARMERS

ABU-LABAN, B. / Social origins and occupational career patterns of community leaders. Socio. Inquiry, 33 (1963) 2 : 131-140.

Selective recruitment of leaders in a Pacific community.

BAN, A. W. van den / Research in the field of advisory work. Neth. J. Agr. Sci. 9 (1961) 2 : 122-133.

A summary of sociological research in the Netherlands on behalf of the agricultural extension service. Two major problem areas are discussed:

1. The difference in the way of thinking of the modern farm managers, who are willing to utilize the extension service whenever possible, and the traditional peasants.
2. The communication processes through which the farmers receive information about new practices, especially communication with other farmers.

The need for more psychological research in this field is stressed.

BEDI, I. S. and R. P. SAXENA / Improved agricultural practices - Behaviouristic pattern of farmers in Punjab and Uttar Pradesh. A.I.C.C. Econ. Rev., New Delhi, 16 (1965) 21 : 27-33.

The factors impeding the adoption of improved practices were identified as:

1. irregular supply of water and its maldistribution;
2. high water rates;
3. lack of village leadership and joint action;
4. inadequate and untimely supply of agricultural input;
5. no means of demonstrating improved techniques;
6. the inadequate and untimely provision of credit;
7. unfavourable prices;
8. the inertia, poverty and illiteracy of the farmers, and
9. the belief in traditional practices (WAERSA 1965-2108).

BESSELL, J. E. / Measurement of leadership among farmers. Statistician, London, 14 (1964) 3 : 227-253.

The author constructs a "leadership" index. He argues that if it could be shown that some leaders with certain characteristics have a greater influence in their communities than other leaders, the rate of diffusion of technological change might be accelerated by using their influence (WAERSA 1965-527).

BLANCKENBURG, P. von / Afrikanische Bauernwirtschaften auf dem Weg in eine moderne Landwirtschaft. Z.f. ausl. Landwirtschaft, Sonderheft 3, 1965. 111 pp.

Based on a UNESCO research object 1961/1962. Describes the felt needs of

the African peasant. The extension officer shall not be able to improve agricultural practice without the help of the local leaders and without knowing the economic behaviour pattern of the rural people. Innovations will be accepted most easily when they are not expensive and easy to learn, when the cost-benefit ratio is favourable, and when customs are not violated.

BOHLEN, J. M., et al. / Adopters of new farm ideas, characteristics and communications behaviour. North Central Regional Extension Publ. no. 13, Michigan State Univ., 1961. 12 pp.

A brief summary on the diffusion of innovation, from the viewpoint of the adopter.

BOSE, S. P. / Characteristics of farmers who adopt recommended agricultural practices in some selected villages in West-Bengal. *Rur. Soc.*, 26 (1961): 138-145.

Id. / Peasant values and innovations. *Am. J. of Soc.*, 68 (1962): 552-560.

CASTILLO, G. T. / Some insights in the human factor in overcoming barriers to adequate food supply. *Philippine J. Nutr.*, Manila, 17 (1964) 2 : 134-147.

The author, a teacher of rural sociology at the University of the Philippines, expands on the thesis that the rice problem lies not so much in any shortage of knowledge or resources as in the farmer's lack of understanding and resistance to change. The outstanding reason is considered to be that advocates of change have failed to prove to the farmer that the new ways will be superior to the old on his own land (WAERSA 1965-3064).

DUBE, S. Ch. / Considerations of social and political structures and agricultural traditions in influencing agricultural developments. Rehovoth, 1963. 8 pp.

When the benefits of improved methods are not clear to the farmers, they will be anxious to seek security in traditional farming.

FARMER, B. H. / Pioneer peasant colonization in Ceylon. Oxford Univ. Press, London, 1957. 387 pp.

A study in Asian agrarian problems. People in underdeveloped societies have a different view of the things which are worthy of effort, and these things do not necessarily include technical change for its own sake, or as a sign of modernity, or as a means to more efficient production. The modern

Western attitude is seen to be highly abnormal.

FINKEL, H. J. / Attitudes toward work as a factor in agricultural planning in the West-Indies. *Caribbean Stud.*, 4 (1964) 1 : 49-53.

People look down upon farming with contempt. Improvement can only be expected on the long run by education.

FLIEGEL, F. C. and E. J. BROWN / Low income farm people. *J. Co-op. Ext.*, 4 (1966) 1 : 44-50.

The very many local studies of poverty among farmers, although they stress the diversity of causes, often show five main characteristics: 1. a high proportion of aged people; 2. a high proportion of physical handicaps; 3. an orientation to off-farm work in that even among full-time farmers the chances of economic improvement are looked on as being off-farm; 4. commercial orientation, without physical or financial orientation; or 5. subsistence orientation, where traditional attitudes, like refusal to get into debt, may prevent the use of credit. Other factors such as lack of education, race, and land tenure are also frequently involved. A many-sided extension programme is necessary, as that suitable for group 4 would not appropriate to 5. The maximum impact is achieved by coordinating all agencies and education must help the whole family. The low-income families would also be helped by taking part in community and development programmes (WAERSA 1966-2250).

GALETTI, R., K. D. S. BALDWIN and I. O. DINA / Nigerian cocoa farmers. *Oxford University Press*, 1959. 295 pp.

The family's labour could be more fully mobilized but only at the cost of sacrificing leisure and enjoyment, which the farmers and their families rate more highly than possible increase in their income.

MADIGAN, F. C. / The farmer said no. A study of background factors associated with dispositions to cooperate with or be resistant to community development projects. *Philippines*, 1962. 359 pp.

A study of 23 variables believed to be associated with respectivity to community development innovations. Variables positively correlated with respectivity were a high-school grade, income, occupation, literacy, member of a local committee, clique popularity, personal health and energy, social class position and size of farm.

MAREK, J. / The significance of the good farmer. *Soc. Rur.*, Assen, 6 (1966) 2 : 144-155.

8543 farmers in 79 rural communities in eastern and central Poland were asked to select those farmers that were in their opinion "good farmers" in their own communities. The conclusion was that in the less advanced regions of Poland non-economic and non-professional criteria play a greater part in evaluating leaders. Although innovations rank high in all regions, the innovators chosen in the less developed regions are usually not good producers (WAERSA 1966-4129).

MARSH, C. P. and A. L. COLEMAN / Farmers practice-adoption rates in relation to adoption rates of leaders. Rur. Soc., 19 (1954) : 180-183.

RAHUDKAR, W. B. / Farmer characteristics associated with the adoption and diffusion of improved farm practices. Ind. J. Agr. Econ., 17 (1962) 2 : 82-85.

From investigations it was found that education is an important factor in the adoption of recommended farm practices. There was no significant relationship between the adoption of recommended farm practices and age, social status or economic status.

Id. / Impact of fertilizer extension programme on the minds of farmers and their reactions to different extension methods. Indian J. of Agronomy, 3 (1958) : 128.

Id. / Local leaders and the adoption of farm practices. The Nagpur Agriculture College Magazine, 24 (1960) 1 : 1-13.

The author stresses the important place of the local leader in improving agriculture.

REDFIELD, R. / Peasant society and culture. University of Chicago Press, 1956. 163 pp.

A description of the motives, attitudes and way of life of the traditional farmer.

ROGERS, E. M. / Motivations, values and attitudes of subsistence farmers: towards a subculture of peasantry (with discussions). Agric. Dev. Comm., Honolulu, 1965. 115 pp.

SINGH, G. / The differential characteristics of early and late adopters of new farm practices, Punjab State, India. Diss. Abstr., Ann. Arbor, Mich., 26 10, 6224. Diss. Cornell Univ., 1965. 188 pp.

A sample survey of 260 farmers from 26 villages showed that Punjabi

farmers who adopt the use of commercial fertilizer early as compared with those who are late or non-adopters; they have more years of schooling, own larger farms, have higher incomes, have more contacts with extension agents and are more self-confident in their ability to perform leadership functions in the village. Early adopters tend to come from nuclear families and late or non-adopters from extended families. Early adopters have travelled more than late adopters. The size of village in which the farm operators live does not have a significant relationship to their adoption behaviour (WAERSA 1966-4118).

TAGUMPAY-CASTILLO, G. / Toward understanding the Filipino farmer. Philippine Agriculturist, 49 (1965) 6-7 : 423-437.

Observations are presented about the Filipino farmer: the farmer and his family, the farmer and politics, the farmer and his response to modernization, and the farmer's challenge to the experiment station and the extension service. Farmers rejected or failed to adopt improved practices for the following reasons: 1. incompatibility of the practice with existing conditions; 2. high cost; 3. the practice failed to prove its superiority; 4. anticipation of undesirable consequences; 5. non-availability of resources such as fertilizers and sprays, and lack of skills needed to carry out the practices; 6. difficulties in carrying out the practices in terms of time and labour needed. Agricultural research should be oriented more to solving the pressing problems of the farmer.

YANG, H. P. / The farmer and the extension service. Extension in Asia, 4 (1959) : 1-2.

Essential conditions of extension development, and social and cultural factors affecting it. Description of the agricultural and home improvement phases, the rural youth activity, and the need for familiarity with local conditions.

AGRICULTURAL EDUCATION OF FARMERS

AMIHERE, J. A. / Programme of courses: rural training centres. Advance, Accra, 1961. 31 : 16-28.

An attempt to tabulate the syllabus of the various courses held at the Rural Training Centres throughout Ghana (WAERSA 1962-111).

CHATELAIN, R. / Main problems of agricultural training at village level. Rehovoth, 1963. 10 pp.

The level of agricultural training should closely adjust to the stage of development of the rural people.

DUMONT, R. / Le développement agricole spécialement tropical, exige une enseignement totalement repensé. Tiers Monde (Paris), 5 (1964) 17 : 13-38.

The best method for the agricultural extension service is to train numerous young farmers to become village leaders with a new way of thinking.

MATHUR, J. C. / Farmer's training is central to farm production. Yojana, 11 (1967) 12 : 15-18.

In India, farmer's training should be part of any production programme since the farmers are becoming aware of the benefits of some new practices. Coordinated programmes for training farmers should converge on the rapid increase of agricultural production. Because farmers' groups at the village level do not yet exist, the author suggests to promote such bodies. It should be possible to work out integrated training programmes in the districts that are to be covered by the "high yielding varieties programme". Adequate training of the farmers could fill the existing communication gap that is still noticed in the agricultural extension programmes.

MOOLANI, M. K. / Changing patterns in agricultural education in India. Indian Agriculturist, 7 (1963) : 1-6.

Agricultural education in India is considered by the author completely insufficient for a people so much dependent on agriculture. Increase of extension work in order to obtain a more general application of existing knowledge is of much more importance than further accumulation of knowledge by a few. The establishment of 100 vocational agricultural schools with essentially practical training is strongly recommended.

NAIK, K. C. / Agricultural education in India. Indian Council of Agric. Research, New Delhi, 1961.

PENDERS, J. M. A. / Educating rural people for regional development. The Hague, 1963. 9 pp.

PERK, A. / Notes on agricultural training in rural areas of developing countries. Neth. J. Agric. Sci. 14 (1966) 4 : 239-250.

Various systems of agricultural training are discussed, including:

1. schools for agricultural training and farming practices; 2. village farmer's courses; 3. training courses for village agricultural instructors; 4. the elementary agricultural school; 5. continued assistance for graduates of the agricultural schools and village farmers' courses; and 6. training institutes as centres for local leaders. The possibility of large-scale organization is a prerequisite for the success of all rural agricultural training courses.

Both structure and content of agricultural training should be on the basis of:

1. the general level of development of the rural population; 2. the regional or local agricultural situation; 3. the need for and the prospects of effecting improvements in the local type of farm or the local agricultural system.

QUDDUS, M. A. / Extension literature. J. East Pakistan Acad. Village Dev. (Comilla) 6(1961) : 7-11.

The East Pakistan Academy besides conducting training courses for village people prepares booklets of rural interest to serve as guide books for farmers, workers and non-technical village people. An account of the extension literature is given by the author (WAERSA 1961-1442).

RHEINWALD, H. / Die Aufgabengebiete von Ausbildung, Fortbildung und Beratung bei der Forderung der Landwirtschaft. Kali Briefe, 12/13, 1959.

Agricultural improvements by way of material aid and by legal measures cannot become effective unless preceded by intellectual assistance by education and advisory work. The most important and difficult task of the farm advisor is the regulation of social interrelation of peasants.

RIECK, R. E. / An inventory and analysis of farm management extension short courses, schools and workshops for farm people in the United States and Puerto Rico 1963-1964. Madison, 1964. 113 pp.

ROWAT, R. / Report to the Federal and Regional Governments of the Federal Republic of Nigeria on the development of education and training in the field of

agriculture and related subjects. FAO, Rome, 1964. 109 pp.

The report begins with a review of the existing agricultural education system in Nigeria at the University, intermediate and farmer training levels. After assessing the present and future needs of trained manpower for agriculture, the author attempts to assemble in one single overall comprehensive plan the education and training needs of Nigeria in the fields of food and agriculture, both at the federal and the regional level. Special attention is asked for the problem of the lack of practical knowledge of farming and farming operations among agricultural students and staff personnel.

SASAKI, F. / Agricultural education in Japan. Asian Affairs 5 (1961) 2 : 1-138.

Training the school leaver in agriculture: family agricultural training centres. Community Dev. J., 1 (1966) 1 : 38-43.

Of the 156,000 farm boys and girls reaching 14 years of age in 1960, 68,000 took agricultural courses, 52,000 took other courses and 36,000 received no further training. In 1930 a group of farmers with children of 14-17 years had already started to set up each year Family Agricultural Training Centres; they accept the moral and financial responsibility of running them. By 1965 there were almost 500 of such centres in 71 French départements. The example was followed by Algeria (1958), several other French-speaking countries in Africa, Italy (1962) and Spain (1965). Projects for establishing such centres in Cambodia, Argentina and Brazil are underway. Details are given of the working of these Family Centres.

WESTERMARCK, N. / The associability and effect of farm management extension service. Ind. J. Agr. Econ., 19 (1964) 3/4 : 18-24.

It is shown from experiences in Finland that the farmer like other business men, is not motivated by economic considerations alone but that his reasons for action are often emotionally coloured and not based on logic. It is suggested that rational thinking is relatively common among farmers with advanced vocational education, while emotional factors play a more important role among those with only primary education (WAERSA 1966-848).

WILLNER, D. / The training of local leaders in Israel. Int. R. Community Dev. 3 (1959): 59-72.

ZEALY, Ph. / Training local leaders for community development. Int. R. Community Dev. 3 (1959) : 117-123.

EXTENSION PERSONNEL, CHARACTERISTICS OF AGENTS, SELECTION AND TRAINING

Agricultural extension training center in Hongkong. Dept. of Agric. and Forestry, Hongkong, 1962. 139 pp.

Part 1 deals with subject-matter fields, part 2 describes extension education for agricultural and rural development, part 3 contains a village survey and programme planning. In part 4 evaluation of the training centre is discussed. It is concluded that the effectiveness of agricultural extension largely depends upon the kind of people it can employ, the amount of backing it has from research stations, and the facilities with which it works.

BARBIER, Ch. H. / La formation des cadres intermédiaires dans les pays en voie de développement. Int. R. Community Dev., 12 (1963) : 21-52.

BATTEN, T. R. and M. BATTEN / The human factor in community work. Oxford Univ. Press, London, 1965. 184 pp.

Thirty-seven cases of community work in developed and developing countries are grouped into chapters according to their problems. The information given relates to how an agent tried to help a group of people, his purpose, what he did to achieve it, and the result. In each case the worker thought he had failed. The chapters end with summaries of conclusion and suggestions for workers faced with similar problems (WAERSA 1966-846).

BATTEN, T. R. / Training for community development. A critical study of method. Oxford Univ. Press, London, 1962. 200 pp.

The author gives many stimulating ideas for a training programme in agricultural extension methods.

BORTON, R. E. (Ed.) / Selected readings to accompany "Getting agriculture moving. Essentials for development and modernization", by A. T. Mosher, New York, 1966. 2 vols.

An anthology of 136 short articles on subjects regarding agricultural development written by authors from several countries.

BRADFIELD, D. J. / Guide to extension training. FAO, Rome, 1966. 176 pp.

The purpose of this publication is to provide a guide for the training of agricultural extension personnel. Though the text frequently refers to aspects of agriculture, rural organization and administrative services of

Malawi, its principles and practices are applicable to other developing countries. Extension teaching methods are classified into individual methods, group methods, and mass methods. The ways in which the extension worker actually teaches and informs farm people are described. A selected reading list covers a wide range of publications on various aspects of agricultural extension.

BURGER, Ph. J. / The effect of agricultural training at the Grootfontein college of agriculture on the behaviour of farmers in the eastern Karoo region. Diss. Pretoria, 1964. 262 pp.

BYRNES, F. C. / Assignment to ambiguity: Work performance in cross-cultural technical assistance. Human Organization, 23 (1964) 3 : 196-209.

The work performance of 34 Americans who had been employed abroad as technical assistants.

C. E. E. M. A. T. Actions de formation visant à développer la mécanisation de l'agriculture au Mali. Machinisme Trop. 14 (1966) : 39-47.

In Mali, the use of draught animals for ploughing, initially in rice growing and later in dry farming, steadily increased from 1925, whereas implements complementary to the plough became available more recently. Under the guidance of CEEMAT (Study and Experimental Centre for Agricultural Machinery in the Tropics) the training of future extension workers and of tool-users was initiated in 1965. The organization and first results of these activities are described. Demonstrations were given to several seasonal training courses and to farmers by 2 technicians, each of them provided with a lorry equipped for repairing and servicing agricultural tools and implements. English summary.

CHACIN MEDINA, G. / Análisis comparativo del uso del tiempo por algunos agentes agrícolas en Venezuela. Turialba, 13 (1963) 4 : 235-237.

A sample of six agricultural agents in Venezuela was taken to determine how time was used. Time consumed on non-educational activities (64%) is higher in relation to time spent on educational activities (36%) (WAERSA 1964-1033).

CHANG, C. W. / How to organize a national in-service training course on extension. Extension in Asia, (1960) : 5-6.

This article surveys the national extension training course held in Malaya in 1960.

CHOPDE, S. R. and W. B. RAHULKAR / Characteristics attributing to the success of village level workers. Ind. J. Soc. Wk., 21 (1960) 1 : 67-73.

University graduates have on the whole not proved to be successful village level workers. The essential quality needed for success as a village level worker is real love for rural life.

Extension education in community development. Ministry of Food and Agriculture, New Delhi, 1961. 458 pp.

A textbook for the training of staff in the Community Development - National Extension Service Programme. It is a collection of articles by 18 authors with experience in community development, divided in four sections: 1. aims and concepts of community development and agricultural extension in India; 2. suggestions on programme development; 3. extension teaching methods and techniques; and 4. related activities, as home economics and youth training.

Extension training round the world; A handbook. Washington, 1962. 31 pp.

GORDON, J. / Selection and training of agricultural students. World Crops, 19 (1963) 1 : 34-36.

Recent years have seen a great expansion in agricultural education at the university level in developing countries. Under African conditions the poverty of the farmers means that most students come from the cities and have no practical experience of agriculture. Lack of protracted periods of farm work during vacations does not improve the situation. Further, excessive emphasis on pure science tends to make existing courses most suitable for research workers whereas extension workers, economists and agricultural engineers are required as well. Earlier specialization would remove the need to teach so much that is academic in the final years before leaving the university. The adoption of "care courses" in tropical agriculture, economics, field experimentation and statistics, sociology and human nutrition is advocated.

HAIGH, G. V. / Competing strategies for the community development function in the Peace Corps. Commun. Dev., 12 (1963) : 53-65.

There are two contrasting kinds of behaviour reported by Peace Corps volunteers: the project-centered approach and the people-centered approach. In the first case the communication with the people is uni-directional and persuasive; in the second case it is reciprocal, encouraging them to make their own decisions.

HAWLEY, J. B. / Recruitment: selection and training for international community development. *Int. R. Commun. Dev.* 12 (1963) : 3-20.

HOOJA, G. B. K. / Role of agricultural universities in extension programming. *AICC, Econ. Rev.*, New Delhi, 15 (1963) 12 : 27-31.

Extension education in Indian universities is so far not oriented to make it an applied science and is not able to produce competent technicians who, in turn, become effective contacts between extension workers and farmers in the fields and by discussing their problems with them at the field level, in agricultural production committees of the panchayat samitis in panchayat assemblies, can highlight maladies and suggest remedies for lifting the agricultural economy from its present level of low productivity (WAERSA 1964-115).

JOHNSON, A. C. and R. D. CASSELL / Appraising personnel in the cooperative extension service; a monograph in the personnel management series. Nat. Agricultural Extension Center for Advanced Study and the Division of Management Operations, Federal extension service, Publ. 17, Wisconsin, 1962. 109 pp.

JUNGHANS, K. H. von / Agricultural Training and Development Centre Khuntitoli / Bihar - Ein Projekt der Aktion "Brot für die Welt" in Indien. *Z. ausl. Landw.* Frankfurt a.M., 5, 1966, 4, 337-52. (With English Summary).

The centre is financed by the German Lutheran Church to provide multi-purpose education to the backward tribes of the Chotanagpur Range of Bihar and N. Orissa (Adivassis) and is divided in three departments: 1. A secondary school with 150 children in the middle school and 250 in the high school group, and a hostel for 100 boys and 50 girls. For pupils who cannot complete the full matriculation course, a one year theoretical and practical training in mixed farming is offered in the eight acre school farm; 2. A fully mechanized farm with 50 acres of paddy and 25 acres of upland has been established to produce high quality seed and pedigree livestock; 3. As the success of the extension programme for minorities in India depends mainly on anthropological background, six Adivasis have been trained in extension work and have started a poultry programme successfully in villages where trainees of the agricultural school have settled as farmers.

KOLBE, F. F. H. / The training of extension officers at university level. *Landbouwk. Tijdschr.*, 76 (1964) 2 : 55-66.

The study is divided into 3 parts. The first part, dealing with the present situation, gives information on the number of universities which offer degrees

in extension education, and discusses the dissimilarity of training programmes. Emphasis is laid on the educational aspects of extension and training. The second part discusses the training requirements, while the third part pays special attention to some problems to be overcome in the most general training method, and in the selection of candidates for the extension service.

LEAGANS, J. P. / Developing professional leadership in extension education. Comparative Extension Publication Number, New York State College of Agriculture at Cornell Univ., no. 3, Ithaca, 1958. 23 pp.

Id. / Guides to extension teaching in developing countries. Bull. Int. Agric. Dev., Cornell Univ., Ithaca, N.Y. No. 5, 1964. 27 pp.

Id. / India's experience with training in extension education for community development. Cornell Univ., Ithaca, New York, 1961. 24 pp.

MAIER, N. R. F. / Problem-solving discussions and conferences. Leadership methods and skills. New York, 1963. 261 pp.

MELVILLE, A. R. / The training of extension workers - Kenya. Dept. of Technical Cooperation Misc. 2, London, 1962 : 56-59.

This paper describes the training used in order to prepare extension workers for the technical and human problems they will encounter (WAERSA 1963-2524).

MOSHER, A. T. / Getting agriculture moving. Essentials for development and modernization. Frederick A. Praeger, New York, 1966. 190 pp.

A review of the essential requirements for agricultural development in developing countries. To be used during training of personnel of agricultural development agencies in Asia, Africa and Latin-America. See also:

BORTON, R. E.

MOSHER, A. T. / Training manual for group study of "Getting agriculture moving". The Agricultural Development Council, Inc., New York, 1966. 128 pp.

This training manual is a companion volume to "Getting agriculture moving", written as a guide for leaders of in-service training groups of school-teachers in order to make the best use of the former book. It suggests questions to put to the trainees for group discussion, gives lists of publications for further reading, and provides hints for the arrangement of the classroom and the presentation of the subject. Chapters correspond to those of the basic volume while at the end of each chapter reference is made to some articles in 2

further companion volumes which the trainees should read in connection with the subject under discussion. (See above, BORTON, R.E.)

MOSHER, A. T. / A note on the evolutionary role of extension workers. *Ld. Econ., Madison, Wisc.*, 42 (1966) 3 : 387-389.

MOUGHARBEL, S. K. / Improving agriculture in Syria through a programme of extension education. *Diss. Univ. of Georgia*, 1963. 334 pp.

The changes in the Syrian culture since independence in 1946, which were described in this study, have produced new demands upon the agricultural population. Syria needs well trained agricultural extension educators to reach the farming communities, if the farm family is to make an adequate adjustment to these demands. A programme of training agricultural extension educators was proposed for implementation in the newly established College of Agriculture in Aleppo (WAERSA 1964-2825).

MYREN, D. T. / Training for extension work in Latin-America. *America Latina*, 7 (1964) 2 : 75-85.

The author explores four contributions that rural sociologists might make to training for extension in Latin America: 1. the training of Latin American students in the United States; 2. the training of Latin American students in Latin America; 3. the preparation of an inventory of knowledge about social change in Latin America; and 4. research on key issues of change in Latin America.

National conference on extension training. Main recommendations and proceedings. *India's wheel of agricultural progress*. Chandiarh, Punjab, 1964.

RAHUDKAR, W. B. / The relationship of certain personal attributes to the success of village level workers. *Ind. J. Soc. Wk.*, 23 (1963) 4 : 319-326.

Report on community development programmes in India, Iran, Egypt and the Gold Coast, with special emphasis on training of personnel. *U.S. International Cooperation Administration, Commun. Dev. Div.*, Washington, 1955. 101 pp.

SCHULER, E. A. / The origin and nature of the Pakistan academies for village development. *Rur. Soc.*, 29 (1964) 3 : 304-312.

The Pakistan Academies for Village Development are new experimental educational and training agencies of the Government of Pakistan, designed and created to aid rural development and planned change. They were established partly to train Pakistan Government officers who were to administer

the village development operations under the V-AID undertaking, and partly to train the supervisory and administrative personnel in the civil and other nation building departments (WAERSA 1965-1123).

SHARMA, S. K. / A comparative study of the training of agricultural advisory personnel in the Netherlands and India. Thesis Agric. Univ. Wageningen, 1960. 183 pp.

The author begins with the history of the agricultural advisory services in both countries. In India more emphasis is laid on production techniques than on managerial aspects of agriculture. Individual and group methods of agricultural extension are emphasized in India, whereas in the Netherlands more stress is laid on mass media. He deals shortly with the social structure of the rural community in each country from the point of view of the agricultural advisory services and its personnel. The remainder of the thesis is devoted to the organization of the advisory services in both countries, methods of selection and training of personnel and their principal shortcomings (WAERSA 1961-815).

SMITANANDA, Ph. / Training programs for extension field workers in Thailand. Diss. Cornell Univ., 1961. 224 pp.

The purpose of the study is to present prospective programmes for the improvement of in-service training in extension work for the Kingdom of Thailand. Pertinent material regarding the historical development of extension work in Thailand as well as in certain other countries of Asia, especially those in Southeast Asia and the Far East is presented to show the basis for prospective extension work in Thailand.

The present structure of Thailand's extension administration is also presented. The study concludes that two types of formal professional improvement opportunities as well as academic advancements are available:

1. graduate study in extension education at Kasetsart University, Bangkok for all extension personnel having a college education in technical agriculture;
2. college education, with emphasis on extension for persons who possess high school equivalent qualifications (WAERSA 1962-1747).

The social training for front-line rural development workers. New York, 1962. 77 pp.

A training to equip rural workers to encourage and promote people's initiative leadership and capacity for concerted action, and to act as links between the people and the technical services of the government concerned. Frontline workers constitute the lowest level of salaried personnel directly aiding and advising the village community on its development. Examples from India

Thailand and Pakistan.

SOLOMON, D. / An approach to training for community development.
Int. R. Community Dev., 3 (1959) : 25-38.

SREEKANTIAH, K. N. / Training in community development, earlier
experiments. Kurukshetra, 12 (1964) 9 : 14-15.

A brief historical review of the training of community development workers in India is followed by some information on the present training programmes. As many as 310 institutions are training community development workers throughout the country. It is recommended to improve the quality of this training, and to organize refresher training (Tropical Abstracts 1964-2922).

MEANS AND METHODS OF AGRICULTURAL EXTENSION

Agricultural extension methods and community development programmes in India. Department of Agriculture, Information Booklet no. 6, Mysore, 1959.

L'animation rurale. Bull. Madagascar 15 (1965) 231 : 703-714.

The term "animation rurale", which is at present much used in the French speaking parts of Africa, is elucidated. Rural animation is not intended to replace the provision of technical services, nor is it an activity in the field of rural extension; it is a national movement which tries to impact a more dynamic attitude to the rural population through the intermediation of a progressive farmer who is elected by the village community. The development of this movement in Madagascar is discussed.

BOSE, S. P. / Aims and methods of agricultural extension and their adaptation to the human factor in developing countries. Rehovoth Conference, 1963. 12 pp.

The aim should be to change a folk society into an urban society. The method of agricultural extension should comprise a wide and comprehensive educational programme designed to bring out changes in the habits and mental horizon of the rural people (WAERSA 1964-1032).

BOTHAM, C. N. / Audio-visual aids for cooperative education and training. FAO, Agricultural Paper no. 86, Rome, 1967. 98 pp.

The present study contains detailed information on a complete range of audio-visual aids suitable for cooperative education and training, divided in:

1. nonprojected aids (the chalkboard, posters and charts, flannelgraph, magnetic board and adhesive aids, and three-dimensional aids);
2. projected aids (filmstrip and slide, projectors, screens, overhead projector, episcope and diascope, cine film and film projection);
3. tape recorders and recording;
4. mass media and rural campaigns (television, radio and exhibitions, equipment for rural campaigns).

BOTHELHO NEIA, A. J. / Introduction à la méthodologie du travail en vulgarisation agricole. FAO, Rome, 1966. 79 pp.

This booklet resulted from the experience acquired at a course of agricultural extension conducted in Madagascar. Special attention has been paid to the role of agricultural extension in the improvement of the nutritional status of the rural population. The main principles and methods of agricultural extension are discussed in a brief and popular way. The basic

principles on which the programme of an extension worker should be based are recorded.

COOK, J. / Extension methods in the Far East. Dept. of Technical Cooperation, London, Misc., 1962 : 59-68.

A description of extension methods employed in Japan, the Philippines and India. In all these countries it is now realized that successful extension work must be an approach to the family as a whole, bringing both agricultural and home improvements.

CRILE, L. / Educational television research findings. Extension Service Circular 514, U.S.D.A., Washington, 1957. 83 pp.

A survey of investigations on the use of television as a means of information.

DALE, F. / Audio-visual methods in teaching. 15th pr., Dryden Press, New York, 1952. 516 pp.

A textbook.

DORNIK, O. / Methoden der betriebswirtschaftlichen Gruppenberatung. Förderungsdienst. Wien, 10 (1962) 12 : 405-407.

The method of single farm advisory work is best suited for farm management extension, but its limitations, on account of high demand on staff, are obvious. Therefore, the need for group extension. Two methods are suggested: 1. farm visits, provided the selected enterprise fulfills two pre-conditions: a. it must be typical of the entire area, and thereby comparable to the enterprises of the group of visitors, and b. it should also be in the process or reorganization; 2. a farm managerial short course, or what is often preferable; 3. on the spot comparison of two farm enterprises, operating under the same economic production conditions, illustrating the influence of different farm operation and organization on the success of the enterprise (WAERSA 1963-1735).

FALLDING, H. / The group as a medium of agricultural extension. A study of the agricultural bureau of New South Wales. Research Bulletin no. 4, Dept. of Agric. Economics, Univ. of Sydney, 1962. 48 pp.

How to organize rice production competitions. Principles and procedures. FAO, Rome, 1966. 16 pp.

Rice production competitions can play an important role in agricultural extension since in many developing countries a natural competitive spirit

exists among farmers. The types of competitions outlined in this booklet include: 1. community rice crop production competitions; 2. rice seed production competitions; and 3. "junior farmers" rice clubs. It is emphasized that the terms and arrangements for competitions of this kind should be carefully related to the practical conditions of rice production within the area. There should also be substantial evidence that this type of activity is acceptable to the farmers and that the necessary administrative support will be provided.

IGNATIEFF, V. and H. J. PAGE (Eds.) / Efficient use of fertilizers. FAO, Rome, 1958. 355 pp.

This monograph deals with the subject especially for agricultural planners, workers, advisers and teachers, who work with farmers and farm organizations. The book ends with a chapter on the farmer and the agricultural services.

JOERGES, B. / Animation rurale in Afrika. Die Methoden der IRAM. Ausl. Landw., 6 (1967) 3 : 293-309.

An explanation is presented of the concept "animation rurale" as defined by the "Institut de Recherches et d'Application des Méthodes de Développement" (IRAM). "Animation rurale" is characterized by: 1. its heavy reliance on a network of "animateurs ruraux"; 2. the cooperative organization of the village economy; 3. the mobilization of labour resources for the development of infrastructures and regroupment of small villages into larger units. A typical training programme for "animateurs" is described, and the role of the foreign expert discussed. A comparison is made between "animation rurale" and community development.

JONES, A. / The agricultural economist and his tools. Extension work. Proceedings of the 11th International Conference of Agricultural Economists Cuernavava, 1961. Oxford Univ. Press, London, 1963 : 135-155.

The author deals with farm management and the place it has or should have in agricultural extension or advisory services to farmers and horticulturists. Extension services have been slow in appreciating the need for "overall" advice, advice that embraces both the technical improvement and economic soundness. As a country becomes more highly developed industrially, it inevitably moves further away from subsistence farming; the further it moves, the more important become the economic as distinct from the technical aspects of farming. Farm management is concerned with farming as a business. Its tools and techniques differ in countries where farm management is well established and in those in the process of development.

The author stresses that the family farm, the most numerous type of production unit, demands special attention (WAERSA 1963-1738).

JONES, E. (Ed.) / Metodología de extensión. Turrialba, 1963 : 86 pp.

A description of 16 different extension methods: methods of individual contact (visits, consultation, letters), of group contacts (meetings, demonstrations, clubs, courses), and of mass contacts (radio, circulars, magazines, exhibitions) (WAERSA 1963-2525).

LINDSTROM, D. E. / An agricultural college in India forges links with villagers. A programme to overcome social barriers and persuade farmers to accept new production practices. Spec. Publ. 5, Univ. of Illinois in coop. with U.S. agency for Intern. Dev., Urbana, 1964. 27 pp.

The author gives four case studies that illustrate successful and unsuccessful attempts to promote changes in agricultural techniques.

LONGEST, J. W. and F. D. ALEXANDER / Design and methodology. Office Extension Studies. State College of Agriculture and Home Economics, Cornell Univ., Report no. 9, Ithaca, 1961. 50 pp.

LEAGANS, J. P. / Extension methods. How to teach effectivity. Extension in Asia, 7 (1961): 2-3.

A short description of the necessary items of an effective extension programme.

MATHUR, J. C. and P. NEURATH / An Indian experiment in farm radio forums. UNESCO, Paris, 1959. 132 pp.

As an agent of transmission of knowledge the radio farm forums have proved to be a great success. The account of the radio farm forums pilot project in India is being presented in the form of two reports put together in this volume. The first report seeks to explain the background to this enterprise, the planning of the project and its implementation at various stages in respect of organization, programme and field work. The second report comprises the evaluation of the scheme. Increase in knowledge in the forum villages between pre- and post-broadcasts was spectacular, whereas in the non-forum villages it was negligible.

MEISSNER, G. / Landfunk als Faktor in der Beratung. Diss. Stuttgart/Hohenheim, 1955. 124 pp.

NEURATH, P. M. / Radio farm forum as a tool of change in Indian villages.

Econ. Dev. Cult. Change, 10 (1962) 3 : 275-283.

The latest reports by the director of All India Radio Station in Poona said that the radio farm forums are flourishing and functioning well. The author gives a description of the experiment, the evaluation survey and the results of this survey.

Radio broadcasting serves rural development. Rep. Papers Mass Commun. 48 (1965) : 1-51.

The first part (pp. 1-30) of this publication, contributed by B. P. BHATT and P. V. KRISHNAMOORTHY tells the story of the "Radio Rural Forums" in India, their growth from a pilot project in the region of Poona, based on the methods and techniques of the "Rural Farm Forum" developed in Canada, to a large-scale programme spreading throughout the country, which already covers some 10,000 villages. The second part (pp. 31-39), by R. MARATHEY and M. BOURGEOIS, deals with UNESCO's efforts to introduce rural broadcasting in the African countries, and to provide systematic training in the use of radio for rural adult education (Tropical Abstracts 1966-1739).

RAMIREZ, A. and D. W. ADAMS / Una técnica para introducir cambios en una comunidad rural. Agricultura Trop., 22 (1966) 10 : 532-537.

Because lack of funds and scarcity of extension personnel in Columbia does not permit large-scale improvement of the agricultural situation, the only effective strategy is to make small-scale attempts at selected improvements based on thorough local analysis. This approach was used by a team working in a poor smallholders' community in the Dept. of Narino, where maize is the main subsistence crop. It was considered that the least expensive, least risky, and easiest accepted method would be the free distribution of small quantities of seed of improved maize varieties among the farmers by the team with the assistance of the village priest. Though the 2 varieties chosen proved to be less suitable for the cold climate of the region, the validity of the approach was confirmed by its ready acceptance by the farmers.

REYES, B. N. de los, and L. P. de GUZMAN / Farm and home development programme of the College of Agriculture, University of the Philippines. Farm Management Notes, on Asia and the Far East, Bangkok, 3 (1967) 1 : 16-25.

The farm and home development programme (FHD) aims to improve individual farms and homes mainly through raising the managerial skill of the farmer. It grew out of a pilot study conducted from 1958-'61 in four villages to: 1. investigate management problems in adopting new methods;

2. determine effects of recommended practices in farm incomes and train subject specialists for extension work (WAERSA 1967-3232).

ROUTLEDGE, D. A. / Agricultural extension: learning and adoption.

S. Agr. Sugar J., 51 (1967) 4 : 319, 321, 323.

Agricultural extension in particular the work and difficulties of the extension officer, is discussed. A continuous evaluation of the programme and of the people involved with it, is necessary for success of the extension officer in his task, i. e. to bridge the gap between farmer and research worker. The extension officer must use his knowledge of processes involved in communicating, learning, diffusion and adoption, so as to motivate farmers that they can see the benefits of the proposed new method. Five categories of farmers can be distinguished, viz. innovators, early adopters, informal leaders, the members of the majority and the non-adopters. The most important man in the pattern of diffusion is the formal leader.

Rural television in Japan; a report on an experiment in adult education.
Paris, 1960. 198 pp.

SCHUMAN, H. / Economic development and individual change: a social psychological study of the Comilla experiment in Pakistan. Center for International Affairs, Harvard Univ. Cambridge, Mass., 1967. 59 pp.

In this small monograph the author analyzes the results of the experiment in planned social change of the Comilla Academy for Rural Development. The outcome is very positive. The land in East Pakistan is over-populated, extraordinarily fragmented, heavily indebted and inefficiently farmed. During the 1950's a considerable effort was made to attack these problems through Western methods of agricultural extension met with very little success. The main structure of the Comilla programme consists of primary cooperatives, organized at the village level. Perhaps the greatest difference with ordinary efforts at rural development has been the emphasis on developing new local leadership. Instead of sending extension officers into the villages, the village leaders, midwives, doctors and religious leaders are encouraged to come at regular intervals to the center to observe new methods, materials, values and techniques. The research findings are based on detailed interviews with 51 cultivators from 17 cooperative villages and 158 villagers from 4 control areas outside the Comilla experiment.

SILVA MARQUEZ, O. / Estudio comparativo de métodos de extensión utilizados en Costa Rica. Turrialba, 14 (1964) 2 : 93-95.

The study shows that the methods most frequently used and most effective

are farm visits, demonstrations, and farm tours. Radio and film are severely limited in use. Circular letters and bulletins were thought to have little educational value. In the opinion of the agents, direct contact methods are more effective than indirect ones. Agents recognized disadvantages of certain methods in introducing farm practices (WAERSA 1964-2828).

SOPER, J. / Extension work in agriculture. Corona, 11 (1959) : 132-134.

Based on experience in Tanzania. The author prefers methods of persuading rather than compelling African peasants to adopt new farm practices.

Television in agricultural advisory work. O.E.E.C., Paris, 1960. 64 pp.

This publication is a report on a Workshop held in Birmingham, United Kingdom, in February 1959. The publication contains papers delivered by television experts or farm advisory workers from several European countries, the United Kingdom and Canada.

TINDALL, H. D. / Promoting onion growing: extension techniques applied to crop introduction. (A case study of a two-year programme of extension work in Sierra Leone). Commun. Dev. J., 1 (1966): 22-28.

The results of field trials with about 30 varieties of onions revealed that only one variety was satisfactory for growing in Sierra Leone. Its introduction into African farming made little progress owing to the new technique of sowing and transplanting, the fact that although shallots can be produced throughout the year, onions should be sown at the end of the season, and the long time required to reach maximum size, viz. 3.5 - 4.5 months. The experience of the extension staff has been that extension techniques should be flexible, that the personality of extension staff members is as important as their technical ability, and that the active support of local dignitaries is indispensable.

WILLIAMS, M. S. and J. W. COUSTON / Crop production levels and fertilizer use. FAO, Rome, 1962. 48 pp.

An extensive description of techniques and methods to initiate farmers in developing countries to use fertilizers. As obstacles to farmers' acceptance of the increased use of fertilizers, the authors mention: 1. lack of information on the kinds and amounts of fertilizer needed; 2. lack of adequate supplies of fertilizer and inadequate distribution systems; 3. unfavourable relationships between value of agricultural products and the cost of fertilizers; 4. the resistance of cultivators to new ideas; 5. lack of suitable plant varieties, disease and insect control measures, and other

practices needed for the potential from fertilizer to be realized; 6. farm lease arrangements that tend to discourage the economic use of fertilizers.

WILSON, M.C. and G. GALLUP / Extension teaching methods.

Federal Extension Service, U.S.D.A., Washington, 1955. 80 pp.

A review, particularly comprising the results of the investigations made on this subject by the Department of Agriculture of the United States.

DEMONSTRATIONS AND PILOT FARMS

ALBRECHT, H. / The importance of demonstration farms as a form of agricultural development aid. Conditions of efficiency and problems in demonstration. Göttingen, 1965. 34 pp.

Algunos resultados de la area demonstrative de San Ramón, Uruguay.
Inst. Interamericano de Ciencias Agr. de la DEA Zona Sur 1961. 49 pp.

This research study tries to determine to what extent the aims have been realized which underly the Inter-American Institute of Agricultural Science's demonstration area of San Ramón in Uruguay. The study includes the evaluation of economic results obtained by the producers during the six years since the establishment of the programme and also describes a methodology for economic evaluation of farm extension programmes. The conclusions are summarized as follows: 1. the economic conditions in the area during the period of study underwent changes reflected in an increased production and rising income levels of the settlers; 2. improved cultivation practices were adopted and resulted in better economic returns; 3. the increase in production was greater than the costs incurred in outlining and developing the extension programme (WAERSA 1962-110).

BAREISS, G., E. HRUSCHKA and H. RHEINWALD / Probleme des Beispielbetriebes. Ullmer Verlag, Stuttgart, 1962. 133 pp.

The authors analyze the value of the pilot farm in advisory work. The main aim of the study is to find out which factors of a pilot farm influence other farms. Three spheres of influence were taken into consideration: 1. objective factors (such as objective difficulties in copying the model on other farms); 2. social-psychological factors (problems of contact between the farm managers); 3. individual psychological factors: the personality of the farm manager - his age, his qualities of leadership, self confidence and status within the village community (WAERSA 1962-2539).

DECKEN, H. von der / Wichtige Gesichtspunkte für die Entwicklung von landwirtschaftlichen Versuchsbetrieben in Entwicklungsländern. Agrarwirtschaft, 15 (1966) 3 : 85-89.

Experimental farms offer a decisive means of agricultural development aid and their functions should include the improvement of production, supervision of pilot farms in nearby villages, the improvement of the educational standard, the promotion of villages craftmanship and the development of

local markets. They should be established in four stages: 1. systematic desk and field research; 2. detailed planning of farm location; 3. contractual arrangements defining the roles of donor and host countries in the operations of the farm; 4. estimates and final preparations for the setting-up (WAERSA 1966-1864).

HINE ALVARADO, D. / Demonstraciones de método en grupo versus individuales en secs comunidades de Costa Rica. Turrialba, 15 (1965) 4 : 255-357.

This abstract of a thesis presents results of an investigation into the attitude of farmers in 2 regions of Costa Rica towards the extension service, and of attempts to introduce an improved method of coffee pruning. In each region 3 communities were chosen in which the new practice was introduced, respectively by group demonstrations, individual demonstrations, or not at all. Instruction was found to increase the acceptance of the pruning system but the data did not allow a clear decision as to which method of its introduction was the better one. English summary (Tropical Abstracts, 1966-970).

Effectiveness of crop demonstrations. A study of wheat demonstrations in Aligarh District. U.P. Intensive Agric. District Programme Studies, Agric. Econ. Res. Centre, Univ. Delhi, No.1, 1964. 34 pp.

The aim of the programme on which the publication reports was to show that production could be significantly expanded of a whole set of inputs, including seeds, fertilizer, pesticides and irrigation water. They were made suitable to cultivators in one complete batch or "package". In addition extension efforts were intensified so that the necessary publicity and advisory facilities were at hand to support the use of the various inputs and recommended agricultural practices. Some characteristics of the cultivators interviewed are described and their reactions are analyzed (WAERSA 1965-1120).

HUQ, M. N. / Setting up a poultry demonstration unit. J. East Pakistan Acad. Village Dev., (1961) 6 : 21-25.

Briefly describes the system of popular poultry raising in Pakistan and the importance of setting up demonstration units for educating the farm families in improved method of poultry raising. Mentions the importance of mass training in this field. Demonstration Unit as the East Pakistan Academy is described in detail (WAERSA 1961-2147).

KRISHAN, R. / Agricultural demonstration and extension communication. Asia Publishing House, London, 1965. 261 pp.

The book deals mainly with the inadequacies and pitfalls that are generally

noticed in the programme of demonstrations, and shows how they could be overcome by extension workers. It also deals with the manifold communication media and their methods of use which could be profitably employed under conditions existing in India for disseminating the results of demonstrations. The author discusses the reasons for non-adoption or poor adoption of programmes, despite the successful demonstration. Not all individuals are good communicators, a selection of personnel for their ability in advisory must be made with care. The present book is the outcome of seven years' field experience in agricultural demonstration and advisory work in Uttar Pradesh.

PILOT PROJECTS

ALVI, S. / Towards evolving a project in rural development. J. Rur. Dev. Adm., Peshawar, 5 (1965) 1 : 13-33.

The Pakistan Academy for Rural Development, Peshawar, is the training institution for government officials and Basic Democrats in W. Pakistan. The Academy has initiated a pilot project in a selected number of union councils in the Peshawar district to evolve a model of rural development for W. Pakistan. The project shows how the problems of rural development and administration can be solved (WAERSA 1965-2198).

TODESCHINI, F. / First fruits of the Mekong project. A pilot farm in Laos. Span. 7 (1964) 3 : 164-167.

The aim of the experimental farm is to show local farmers what can be achieved by irrigation in view of the time when the vast irrigation project of the Lower Mekong Basin will become operational, and to train some 20 students on a practical farming school to become extension officers for this project.

COHEN, R. / The success that failed. An experiment in culture change in Africa. Anthropologia, 3 (1961) 1 : 1-16.

Introduction of a fertilizer in Nigeria.

BEGUIN, H. / Espoirs, bilan et leçons d'un "Paysannat" au Congo. Tiers Monde, 6 (1965) 24 : 891-913.

An appraisal, made in 1960, of a modernization project started over 10 years before in the Gandajika area of Kasai province (ex-Belgian Congo) revealed that the new rotation system introduced did not increase incomes and even slightly decreased labour productivity. Mechanized ploughing seemed uneconomic except possibly on the best soils. Changes in the layout of the fields had time-consuming effects for certain farmers. A detailed analysis of the mistakes made is provided. Fertilizer and crop protection measures are recommended (WAERSA 1966-1667).

FAROUK, A. and S. A. RAHIM / Modernizing subsistence agriculture. An experimental survey in Comilla (1963-64). Dacca: East Pak. Bur. Econ. Res., Dacca University, Comilla, Pak., Adad. Rur. Dev., 1965. 92 pp.

An investigation was undertaken of a pilot scheme of a voluntary village cooperative in Comilla, backed by a central association and supported by

a government scheme of public works on drainage, irrigation, etc. to give employment in the slack season. Some significant correlations were established between various factors such as literacy, cash input, degree of indebtedness and farm income. The modernization scheme appeared to have some effect, particularly on small medium farms (WAERSA 1966-801).

MAYER, A. / Pilot project India. The story of rural development at Etawah, Uttar Pradesh. Univ. of California Press, Berkeley, 1958. 367 pp.

An elaborate description complete with letters and memoranda of the well known project which had major influence on the community development organization, launched a few years later.

PANIKKAR, U. B. / Whither Indian cooperative farming? Kurukshetra, 15 (1966) 1 : 49-50.

Cooperative farming in India has been advocated since 1946. In Sept. 1965 there were about 2,300 societies with a membership of 40,000 covering an area of 93,000 ha in pilot projects, and 2,200 societies with a membership of 47,000 covering an area of 107,000 ha in non-pilot projects. A close study of the recent report of the Evaluation Committee on Cooperative Farming leads to the conclusion that the cooperative farming programme has been a failure since it has not registered any spectacular success either in production or in reducing the cost of agricultural operation. The author suggests to do some re-thinking on the programme with its target of 10,000 additional cooperative farming societies planned for the fourth 5-year plan period.

Premiers résultats d'enquêtes obtenus dans le village-pilote de Laptinkaha (zone de Korhogo, Côte d'Ivoire). Agron. Trop., 20 (1965) 2 : 147-219.

A comprehensive socio-economic and agronomic study is presented of the pilot village of Laptinkaha. This village which will be developed into a model village for modernized agriculture, is representative of the Korhogo region of the Ivory Coast, a densely populated area with degraded soils. The results are considered to be of great importance for the general prospects of extension. The social and technical difficulties to be expected with the various extension schemes and with the development of agriculture in general are discussed in detail.

SCHNELLBACH, O. / Landwirtschaft und Gewerbe ergänzen sich. Drei Musterdörfer in Togo. Landtechnik, 20 (1965) 15 : 544-551.

This article gives a description and evaluation of a German technical assistance project in Togo. The aim is to establish in each of the villages

a production cooperation, based on the principle "help through self-help". The cooperations are the first of this type in Togo. The most difficult problem appears to be the change of mind. It is hard for the members to learn that they are not labourers in an enterprise but entrepreneurs themselves.

SHETTY, V. V. / High-yielding variety programme in a Mysore district. First Year's lessons. Yojana, 11 (1967) 10 : 19-20.

A brief discussion is presented on the experience obtained in the Shimoga district in Mysore State, India, with the introduction of high-yielding varieties of sorghum and rice.

COMMUNITY DEVELOPMENT

BATTEN, T. R. / The non-directive approach in group and community work. Oxford Univ. Press, London, 1967. 148 pp.

In this book, the author critically assesses the nature, the advantages and the limitations of the community development or non-directive approach. In part 1, he examines the old, directive approach and the non-directive approach and concludes that each approach offers some advantages and incurs some disadvantages that the other lacks. In part 2 the functions to the non-directive worker's role are examined in detail. In part 3 the problem is considered how workers can best be trained to perform these functions effectively, and in part 4 the training of trainers in the appropriate training methods and techniques.

BLAUG, M. / What price community development. *Community Dev. Bull.*, 15 (1964) 3 : 84-89.

Contrary to general views, community development has never really caught on in Africa. Very little money is spent on it, and funds and staff are being curtailed instead of increased. Facts are presented about expenditures and field staff in Uganda, Tanzania, Kenya and Ghana. Lack of basic data makes it impossible to submit community development to any rational analysis of cost and benefit. Nevertheless, the author feels that community development may well be the most effective instrument yet devised for social and economic progress in underdeveloped countries (*Tropical Abstracts* 1964-2926).

CHAKRAVARTIS, S. S. / Community development, planning and administration at local level in India. *J. Loc. Admin. Overseas*, 2 (1963) 4 : 212-221.

CHANG, C. W. / Community development and economic development. Part I. A study of the contribution of rural community development programmes to national economic development in Asia and the Far East. FAO, Bangkok, 1962. 113 pp.

CHANG, C. W. / Community development and economic development. Part II. A study of farmers associations in Taiwan. FAO, Bangkok, 1962. 95 pp.

It has appeared that farmers' associations can develop to one of the most grateful and valuable means of communication for the agricultural extension service.

The Community development approach to land settlement. United Nations Dept. Econ. Soc. Affairs, New York, 1966. 86 pp.

The spontaneous settlement, without intervention from any authorities can lead to destructive use of natural resources, heavy erosion, random selection of lands, continuation of a subsistence economy, and social disorganization of the settlers. However, the other extreme, i.e. establishment and development of settlements under a high degree of control and direction, has not been successful either because of high costs or the failure of settlers to become independent farmers. This report demonstrates that the community development approach is a prerequisite for successful land settlement.

DEY, S. K. / Community development. Vol. I. The Quest. Vol. II. A movement is born. Kitab Mahal, Delhi, 1960.

These two volumes are written by the Minister of Community Development in India who was a prominent personality in launching this movement. "The Quest" contains the thinking of Mr. Dey during the incubation of the programme; the other volume is in style and content not different from "The Quest" and relates to the programme in action (WAERSA 1961-846).

FONSEKA, C. de / Shramadana: mobilization of unutilized human resources. Int. Dev. Rev. 7 (1965) 1 : 14-20.

FRANCO, J. di / Differences between extension education and community development. Cornell Univ., Ithaca, New York, 1958. 19 pp.

International seminar on community development 1964; report on the proceedings. Dept. of University Extension, Univ. of New England, Armidale, N.S.W., 1964. 233 pp.

LEAGANS, P. J. / Elements of extension education process related to community development. Ford Foundation, New Delhi, 1960.

Extension education for community development; programme planning to meet peoples needs; extension teaching methods; the communication process, and evaluation of extension programmes.

LLOSA LARABURE, J. / "Cooperación popular"; a new approach to community development in Peru. Int. Labour Rev., 94 (1966) 3 : 221-236.

Village cooperation, a new approach to community development on the basis of aided self-help, was launched in Peru a few years ago. It has created a conscious readiness to change among the peasants, and a readiness to do volunteer work in the villages among the university students. Local

development committees discuss the wishes of the villagers, and report them to a centre staffed by a team of experts. In terms of labour investment, the village cooperation scheme is a marked success. Some of the achievements are: 2600 km of roads built; 3700 buildings constructed; 250 small irrigation projects carried out; 1900 m of drains made. General education and special refresher courses were organized and attended by 24,000 persons (WAERSA 1967-2036).

MEZIROU, J. D. / Dynamics of community development. The Scarecrow Press, New York, 1963. 252 pp.

Chapter 1 indicates the dimensions of the concept of community development and describes antecedent experiments. Ch. 2 and 3. provide a sketch of the cultural background in Pakistan and a review of Village Aid. Ch. 4. reports programme developments. Organizational and administrative problems are discussed in ch. 5. The chapters 6. and 7. give an analysis of the bureaucrat as a democratic change agent and the village worker as an adult educator, while the final ch. 8. contains a brief conclusion.

MINICLIER, L. M. / Values and principles of community development. *Int. R. Community Dev.* 5 (1960) : 57-61.

MOSHER, A. T. / Varieties extension education and community development. Comparative extension publ, no. 2, Cornell Univ., Ithaca, N.Y., 1958. 111 pp.

Different approaches to the problems of agricultural extension are considered. Tests made in the USA showed personal qualities to be more important than technical knowledge or formal training.

MUKERJI, B. / Community development in India. Repr. Bombay, 1962. 312 pp.

NEISSER, Ch. S. / Community development and mass education in British Nigeria. *Econ. Dev. Cult. Change*, 3 (1955) : 352-365.

PLANCK, U. / Community development in Ägypten. *Z. ausl. Landwirtschaft*, 6 (1967) 2 : 149-172.

A description of the history of community development in Egypt is followed by an appraisal of the movement, the emphasis being laid on its social aspects. The new policy is based on the combined-units programme which aims at: 1. promoting the basic public services needed for socio-economic development, and 2. encouraging rural social and cultural life in a democratic

way. The combined units should serve about 15,000 people by providing health, educational, social and agricultural services. In 1965, 300 units had been established. Agrarian reform and community development are closely interrelated. Shortage of both financial means and qualified personnel hamper expansion of community development. There is a growing danger of bureaucracy, institutionalism and centralization. (English summary).

POTHEN, K. P. / Community projects and National Extension Service Blocks. Ind. Soc., 4 (1962) 5 : 33-39.

Report on community development programmes in India, Pakistan and the Philippines, by Team no. 1, U.S. International Cooperation Administration, Comm. Dev. Div., Washington, 1955. 88 pp.

SCHMIDGALL, F. L. / Community development. Div. Non-Western Sociology, Agr. Univ., Wageningen, 1958. 57 pp.

A literature review on the means to develop underdeveloped countries.

SHAMIM, I. / The role of lay leaders in community development work. Int. R. Community Dev. 3 (1959) : 81-87.

SEN, L. K. and P. ROY / Awareness of community development in village India. National Institute of Community Development, Hyderabad, 1966. 75 pp.

The research project, reported in this preliminary report, was undertaken in 1965. 7224 respondents in 356 villages, chosen at random from all sixteen States in India, were interviewed. In this report, items pertaining to the general awareness of the rural people of the various aspects of the community development programme have been investigated, and the extent to which this awareness has lead to specification by the individual. Another area of study was the development of communications and institutions.

SOEMARDJAN, S. / The dynamics of community development in rural Central and West Java. A comparative report. New York, 1963. 40 pp.

SRIVASTAVA, R. N. / Impact of community development programme on tribal life. Kurukshetra, 13 (1965) 5 : 11-12.

Results are presented of seven years research into the impact of the community development programme on tribal life in the backward region of Dudhi in Uttar Pradesh State (India). Implementation of the programme

was hampered because: 1. local conditions were not properly understood; 2. Hindi was used instead of native dialect; 3. it was not realized that folk customs, symbols, idioms etc. are important in the process of communicating ideas; 4. the wrong people were approached, 5. certain communities were not included in the project. On the other hand, the people showed a real desire for change and improvement. It was furthermore found that the villagers preferred the private money lenders to the cooperative society.

THORAT, S. S. / Some salient characteristics of sarpanchas and the success or failure of agricultural innovations in India's villages. Nat. Inst. of Comm. Dev. at Hyderabad and Michigan State University, 1967. 22 pp.

The author concludes that the social, personal and political characteristics of the gram panchayat sarpanchas or village council presidents (level of education, the caste to which they belong, size of their holding, the concentration of power, the degree of their secularity, their contacts with change agents) make a marked difference in the success of agricultural programmes to a considerable extent.

Village volunteer force and defence labour bank. Nat. Inst. of Comm. Dev., Hyderabad, India, 1964. 121 pp.

THE PACKAGE PROGRAMME

CHAWDHARI, T. P. S. et al. / Impact of intensive cultivation scheme programme of I.A.R.I. in Delhi villages. Ind. J. Agr. Econ., 20 (1965) 3 : 76-83.

In 1962 it was 10 years since the Indian Agricultural Research Institute at New Delhi launched its "intensive cultivation scheme" in 19 villages, comprising the "intensive cultivation block" and "non-block" areas. In each of 6 villages 10 holdings were selected and the impact of the "intensive cultivation scheme" was evaluated. It was found that the inputs of the "scheme farmer" were Rs. 27 (US \$ 1. = Rs. 4.75) more than those of the counterpart in the "non-block" area. This brought a net additional income of Rs. 238 per farming unit of 3.6 ha. Benefits that cannot be measured in terms of money are improved ability to make decisions, and better technical knowledge (Tropical Abstracts 1966-522).

DANTWALA, M. L. / India's food problem. Asia Publishing House, Bombay, 1960. 40 pp.

Describes the Package programme. The missing link is too little investment in education and in training farm people. Three approaches to the problem of increasing foodgrains' production are discussed, i.e. technological, institutional and organizational. Imposition of ceilings on excessively large holdings, merging too small holdings into cooperative farms and improving organizational efficiency are the author's main suggestions to improve agricultural production.

Intensive agricultural districts programme conference / Directorate of Extension. Ministry of Food and Agriculture, Govt. of India, New Delhi, 1963. 368 pp.

Some topics are: preparation of farm and village production plans, strengthening of cooperative institutions, agricultural credit, supplies and marketing, programmes relating to quality seed production, soil testing, field demonstrations, agricultural implement workshops and local works programme.

MALONE, C. C. / Some responses of rice farmers to the Package Programme in Tanjore district, Ind. J. of Farm Econ., 47 (1965) 2 : 256-269.

This study reports on the participation of Tanjore district rice farmers in India's package programme and the extent to which they are adopting the

recommended "package of improved production practices" in moving towards the use of modern farming methods. Participation in the programme by size of farm is about normally distributed among the farm population and is not limited to the larger and more progressive farmers. Progress in increasing yields and production is substantial but there is little evidence that the doubling of crop yields in a short time is a logical expectation under Tanjore conditions (WAERSA 1965-1174).

MANRAI, M. L. / Intensive approach to agricultural development. Ind. J. Agr. Econ., 21 (1966) 4 : 110-116.

A feature of India's 4th Five-Year Plan is the selection of a few areas with assured rainfall and irrigation for concentrated application of a package of practices based on improved varieties of seeds, heavy doses of fertilizers and availability of inputs. This intensive approach to agricultural development of the more fortunately placed areas has been criticized by Dr. V.K. R.V. Rao and Prof. Dandekar. The author examines the 4th Five-Year Plan in the light of these objections and concludes that the intensive approach is essentially sound. The ultimate success of the programme, however, will largely depend on adequate agricultural extension, on ensuring the supply of improved seed and fertilizers, and on speeding up the development of high yielding varieties of all major crops.

MILES, H. A. / India's Package Programme teaches farmers new ways. Foreign Agric., 2, 34, 89 and 16 (1964).

The Intensive Agricultural District Programme or Package Programme started in 1961 in seven highly productive districts of India. It aims at an increased farm output by a combination of improved farm practices, and is now showing important achievements. Yield improvements of 30-50% have been obtained in many cases. In 1962/63 about 320,000 ha were treated against pests and diseases. In the original seven districts the use of nitrogenous fertilizers was more than doubled and the use of phosphate fertilizers more than tripled since the start. For the 4th Five-Year Plan, starting in 1966, an expansion of the work to several other agricultural districts is planned (WAERSA 1966-851).

Id. / Package Programme; early experiences. Kurukshetra 12 (1964) 4 : 14-17.

A brief review of the results of the Intensive Agricultural Districts Programme (Package Programme) being conducted in each state of India. The programme includes the use of specific improved production practices supported by agricultural extension, production credit and necessary

production supplies. Many of the participants have increased their yields by 30-50%. There is a considerable increase in the use of fertilizers. Although the programme is still in its first stage of growth, the experience gained shows that the farmers do respond (Tropical Abstracts 1964-1480).

PILLAI, P. N. B. / Package Programme in Tanjore district of Madras State. Agric. Situation India 17 (1963) 12 : 1251-1254.

A review is presented of the aims and results of the Package Programme. The Package Programme includes: 1. the use of improved seed; 2. plant protection; 3. increased use of chemical fertilizers; 4. the use of green manures; 5. a suitable credit policy, and 6. suitable storage facilities. The average yield in the Package areas was higher by 43% in 1960/61 and by 18.3% in 1961/62.

RANDHAWA, M. S. / Costs and returns relations of the "package and practices" in the intensive agricultural district programme. Agric. Situation India 19 (1964) 3 : 205-207.

A new system of agricultural demonstrations in India compares the financial results of a control plot, treated by the farmer in his own way, with those of a plot treated with fertilizers, insecticides, selected seeds, etc. The costs of these treatments, which depend on quantities and prices of materials and on the cost of extra labour, are compared with the value of the additional yield obtained. Demonstrations with a wide range of important crops indicated that the extra returns of the treated plots generally exceeded the extra costs 2- or 3-fold. Despite these favourable results, the author doubts if farmers can apply the optimum levels as used in the treatments because of their shortness of cash and their inability to run financial risks (WAERSA 1965-1122).

Id. / Intensive agricultural programme. FAO, New Delhi, 1965. 114 pp.

A comprehensive description of the so-called Package Programme in India.

ROBERTSON, C. A. and R. K. SHARMA / Lessons from the Package Programme with implications for the new agricultural strategy. Ind. J. Agr. Econ., 21 (1966) 4 : 123-135.

The Intensive Agricultural District Programme as "Package Programme" has been operating in India since 1960/61. This study evaluates its results in the 7 districts where it was first introduced. The results in 3 districts are very unsatisfactory. The adoption of improved seeds, fertilizers and plant protection in some districts remains at a very low level. Some of

the chosen districts have insufficient irrigation facilities; performance of the credit cooperatives was poor; farm planning, claimed to be a powerful instrument for introducing the farmer to improved methods, "has been merely a grandiose exercise on paper", notwithstanding the fact that 680,000 farm-plans were prepared in the 7 districts. The author concludes that the present Package Programme is a watered-down version of the original concept.

SAIKIA, P. D. / Intensive area development approach. A village level plan for agricultural development. *Ind. J. Agr. Econ.*, 21 (1966) 4 : 148-153.

The annual agricultural growth rate in the State of Assam is 1.3%, which is the lowest rate of all the States in India. The growth rate in the Cachar district, where the Package Programme was started in 1963, was 21.8% in 1963/64 (the highest rate of any package district in India), 9.5% and 3.3% in 1964/65 and 1965/66 respectively. A survey conducted by the author revealed that in the Cachar district of the farmers 80% used fertilizers, 83% insecticides, 57% improved seed, and 25% improved implements, against virtually nil in the non-package districts. Since the package programme cannot be extended, a village level plan for agricultural development is recommended.

SCHILLER, O. / Die Lehren von Mandi. Ein Beispiel erfolgreicher landwirtschaftlicher Entwicklungshilfe. *Z. ausl. Landw.*, 6 (1967) 1 : 74-83.

The Indo-German Agricultural Project in the Mandi district of Himachal Pradesh (India) started in 1963 as part of the Indian Package Programme. The rapid adoption of fertilizers and other improved methods has led to a considerable increase of average yields per ha throughout the district. The author concludes that there are human resources of great potentialities in the rural areas of developing countries; rapid agricultural progress is possible on conditions that the right approach is used. The volume of foreign technical aid for agricultural development is not only a question of financing but first of all dependent upon the availability of qualified personnel. English summary (WAERSA 1967-3231).

SINGH, H. / Intensive agricultural approach to agricultural development. *Ind. J. Agr. Econ.*, 21 (1966) 4 : 141-148.

Two basic problems of India's Package Programme are discussed: 1. do high inputs lead to increasing returns; 2. do the Indian peasants have the capacity to adopt concentrated doses of inputs? Analysis of available data suggests that higher inputs are associated with constant returns in regions where less intensive farming prevails, and with diminishing returns in

regions where farming is already on a higher level of intensification as generally is the case in the Package Programme districts. Replacement of the traditional farm technology by a completely different technological system might be required. In the short run, however, the level of technology, farm structure, management skills, etc. will remain fixed. This should lead to some caution with regard to the Package Programme.

WEBSTER, R. L. and W. A. BEEGHLY / A Package Programme for India's food production. Span 9 (1966) 3 : 140-144.

The Intensive Agricultural District Programme of India is based on the fact that only the combination of improved practices supported by efficient agricultural services ensures increased food production in a reasonable time. It is of primary importance to convince the farmer that adoption of the new practices will bring about an increase of his income. To that end demonstration plots are necessary. The Package Programme has already given favourable results, including higher yields and outputs, increased understanding and skill of farmers and managers, and experience for the administrators. India has now established a modified intensive programme in 114 more districts as part of a crash campaign to catch up food production.

RESEARCH AND PLANNING IN AGRICULTURAL EXTENSION

Action research and its importance in an under-developed economy.

P.R.A.I. Planning Research and Action Institute, Planning Dept., Uttar Pradesh, 1962. Publ. no. 282. 74 pp.

ALEXANDER, T. H. / Report to the Government of Pakistan on agricultural extension. EPTA Rep. No. 1839, FAO, Rome, 1964. 32 pp.

The author reports on his activities in Pakistan from September 1960 to December 1963 to advise the Water and Power Development Authority (WAPDA) on an extension service for the Ganges-Kobadak Project and on the coordination of rural services, to assist in a training course and in the preparation of teaching material, and to collaborate with the other members of the FAO team to develop an agricultural programme for the project (WAERSA 1965-3063).

BEAL, G. M., R. C. BLOUNT, R. C. POWERS et al. / Social action and interaction in programme planning. Ames, 1966. 510 pp.

A textbook on social action in extension programme planning.

BELSHAW, D. G. and M. HALL / Die praktische Nutzenanwendung landwirtschaftlicher Versuchsergebnisse. Erfahrungen in Afrikanischen Entwicklungsländern. Z. ausl. Landw., 4 (1965) 3 : 218-243.

The authors are concerned with the difficult problem of the application of results of agricultural research in peasant farming in Africa. The characteristics of peasant farming, research programmes, and farm planning are discussed at some length. The practical results of research are generally small; there exists a wide gap between research and the application of its results. Consequently, public expenditure in agricultural research is generally small, and agricultural potentialities are often passed by. Finally, the paper discusses the implications of this unfavourable situation from the short, intermediate and long-term period of view. English summary (Tropical Abstracts 1966-238).

BOONE, E. J. (Ed.) / A research approach to programme development in cooperative extension. Report of National Research Planning Conference in Programme Development. The National Agricultural Extension Center for Advanced Study, Univ. of Wisconsin, Madison. Publ. 12. 1962. 72 pp.

BOYLE, P. C. / The programme planning process with emphasis on extension. Nat. Agricultural Extension Center for Advanced Study, Univ. of Wisconsin, Madison, 1965. Publ. 24. 56 pp.

BRIDGER, G. A. / Planning land settlement schemes (with special reference to East Africa). Agron. Econ. Bull. for Africa, 1 (1962) : 21-54.

The author concludes that settlements are only justified in case of population pressure. People should be guided by the ordinary agricultural extension service which aim should be to raise the standard of life highly.

CONROY, W. L. / Tradition and trends in agriculture. Australian Territories, 2 (1962) 4 : 21-27.

The author describes some problems with which extension workers are confronted in communities based on subsistence agriculture, where social and cultural patterns are normally interwoven with land usage. In planning agricultural extension programmes the following factors should be considered: 1. the importance of traditional subsistence production; 2. other aspects of traditional land use, such as pastoralism and hunting; 3. barter trade with other communities. The first attempts to change from production for subsistence only should make use of spare resources of labour and land, without interfering with the subsistence regime. Once cash cropping becomes firmly established, farmers are more amenable to suggestions for changes in their subsistence practices (WAERSA 1963-959).

HAAN, J. H. de / Aspects of rural development in primitive areas. Neth. J. of Agric. Sci., 6 (1958) : 222-231.

No general rule or particular programme can be indicated. A thorough survey of land and people, proper planning with on the spot control, adequate means and the right persons are prerequisites for the success of a development project.

HENDERSON, T. H. / Research in agricultural extension. Caribbean Quart., 11 (1965) 3-4 : 29-35.

Research of the efficiency of agricultural extension was undertaken by the Trinidad Faculty of the University of the W. Indies in 1962. Projects completed include investigations on the adoption of innovations by a group of vegetable farmers and a group of dairy farmers in Trinidad, and a study of the effectiveness of the Cocoa Rehabilitation Scheme in relation to factors of farm productivity. A study on pigeon pea farming is also mentioned in this connection. The studies revealed, inter alia, that the number of farmers annually adopting a recommended improvement is

usually low in the first years, increases to a peak, and then falls off. However, when a vigorous campaign is conducted and the innovation fulfills a felt need, most of the farmers who adopt the innovation do so in the first years. Among 9 sources of information used by the farmers, radio, newspaper and a farmers' almanac, occupied the first 3 places, extension personnel was only 4th in importance, and farmers' societies came last.

IGA, G. A. / Scope for research in agricultural extension. Proc. Agr. Soc. Nigeria 4 (1965) : 63-69.

Many developing countries attempt to improve agriculture by the reorganization of extension services and an increase of the staff, neglecting specific problems of extension. The author discusses the problems with reference to the situation in Nigeria and stresses the need for research in agricultural extension. Evaluation of the relative importance and influence of the general education pattern on the success of extension work is necessary; general education, agricultural training and extension should be developed harmoniously. Agricultural extension should be taught at the university. Subjects needing study include: 1. training of staff; 2. rural sociology; 3. educational aspects of extension, acceptance by the farmers, methods of diffusion and motivations of ideas; 4. relation of extension to community development; 5. coordination and integration of extension with research, and 6. value and methods of programme planning (Tropical Abstracts 1960-220).

NEZAMUDDIN, S. / Requisites of crop planning in India. Indian Agriculturist, 7 (1963) : 7-12.

In an analysis of the reasons why crop planning is so often rejected by farmers in India, the author indicates several omissions in the planning. Advance instruction of the farmers, in order to convince them of the superiority of the new planned patterns, is mostly lacking. Planners also overlook the farmers' lack of resources and the fact that new techniques are strange to them. Insufficient attention is paid to the necessity of improved marketing, storage and processing facilities; uncertain prices are another reason for rejection. Cooperative credit, guaranteed prices and well demonstrated methods of good husbandry are seen as indispensable requisites for good crop planning (Tropical Abstracts 1964-2203).

Rehovoth conference on comprehensive planning of agriculture in developing countries, August 19-29, 1963. Rehovoth, 1964. 220 pp.

SCHAPPER, H. P. / Information and computer planning for farm management extension. J. Aust. Inst. Agric. Sci., 32 (1966) 1 : 1-10.

This article points out the similarities and dissimilarities of farm management advice and technical agricultural extension. The role of the computer in an integrated system of farm management information is outlined and the necessity for a farm management centre or laboratory in each state is expanded (WAERSA 1966-2940).

SCHULMAN, S. / El reconocimiento del papel del campesino en la reforma agraria. *América Latina* 9 (1966) 3 : 75-87.

Agrarian reform in Latin America is a task both for the government and for the peasants; to be successful it requires acceptance and collaboration by the farmers. Unfortunately, the low level of education and narrow outlook of the peasants prevents them to present their views to the government, while legislation is prepared and implemented by officials having no first-hand knowledge of peasant life. The resulting situation, characterized by lack of contact and mutual understanding, should be improved by recruiting personnel charged with the implementation of agrarian reform measures from those having followed special training courses in which a period of personal participation in the peasant's life is made compulsory. English summary.

TOURTE, R. / Suggestions pour une politique d'application de la recherche agronomique dans les pays en voie de développement. *Agron. Trop.*, 11 (1965) : 1163-1176.

The delay which occurs before the results of agricultural research are applied in practice is due principally to the lack of contact and close liaison between research and extension. An attempt is made to find a solution for the developing countries where the digression of the two only serves to increase the economic gap which separates these countries from those known as developed. A proposal is put forward for creating different stages for passing progressively from research to extension: 1. research: research proper, experiments at stations, multilateral research; 2. application of research, land improvements, pre-saturation: visits, training courses, demonstrations, publications; 3. extension (WAERSA 1966-4049).

WEITZ, R. (Ed.) / Rural planning in developing countries. Report on the second Rehovoth conference, Israel, August 1963. Routledge & Kegan Paul, London, 1965. 443 pp.

The second Rehovoth conference discussed 3 main subjects: agricultural planning and rural development; the human factor in agricultural research; extension and education. This report is based on the papers presented at the conference and on the main points raised during the discussions. The

report does not follow the actual sequence of the discussion. A number of specific and well-defined subjects have been selected, and each of these subjects is represented as a summarized combination of papers, minutes of meetings and the editor's own comments and conclusions.

YANG, W. Y. / Farm planning and agricultural development. *Fm. Mgmt. Notes Asia and the Far East*, Bangkok, 1 (1965) 2 : 1-7.

The author discusses the importance of a few sound approaches to effective farm planning and stresses the strategic role of farmers in making and executing realistic farm plans. Government agencies, technicians, experts and workers at the village level can only give technical assistance and provide the essential information supplies and services required by farmers. They cannot make decisions and take action on behalf of the farmers. Thus, a farm plan must be made to achieve a goal recognized by the farmer within the limitations of his resources and ability (WAERSA 1965-1962).

ORGANIZATION OF EXTENSION SERVICES

Extension development around the world. Guidelines for building extension organizations and programmes. Washington, 1962. 30 pp.

Report of a conference held in Washington from June 5 to 9, 1961.

INFIELD, H. / Co-operative farming in low-income countries. The problem of its initial organization. *Archiv. Int. Co-op.*, 7 (1960) : 76-86.

ISOBE, H. / Why I proposed to create posts for farm management specialists in Japan. *Fm. Mgmt. Notes Asia and the Far East*, Bangkok, 1 (1965) : 32-34.

The Japanese law on improvement and promotion of agriculture of 1948 inaugurated the new extension system. This extension system is considered to be a significant democratization measure of Japan's agriculture in which the farmers' independence and initiative are duly respected and farmers are encouraged to undertake improvement voluntarily by themselves. The Agricultural Improvement Bureau was established to implement the new system and the first task of the Bureau was the creation of posts for extension subject matter specialists and extension services (WAERSA 1965-2022).

JOHNSTON, B. F. and S. F. NIELSEN / Agricultural and structural transformation in a developing economy. *Econ. Devel. Cult. Change*, 14 (1966) 3 : 279-301.

The sectoral interdependence of agriculture and non-agriculture in the course of economic growth is examined in section I. Section II states that the required increase of agricultural output should be achieved primarily by relying on an institution-building approach, aimed at increasing the productivity of the existing relatively abundant land and labour resources in agriculture. Attention should be given to inputs such as fertilizers, which, complementary to existing land and labour resources, are likely to yield very high returns. Section III examines the effects of international trade on the process of structural transformation. The role and problems of agricultural exports and of food aid, as a component of economic assistance programmes, are also examined (WAERSA 1966-2100).

KELSEY, L. D. / The challenges of starting extension work in new areas. Comparative extension publication number, New York State College of Agriculture Cornell University, Publ. no. 11, Ithaca, 1960. 15 pp.

LAL, R. / The case for agricultural extension. A.I.C.C., Econ. Rev., 11 (1959) 15 : 19-23.

The article seeks to make out a convincing case for "agricultural" extension instead of the existing overall "rural" extension in the present day conditions in India. Three arguments have been advanced in support of the case; 1. the paramount importance and adequate nursing of agriculture in the Indian economy; 2. the unimpressive record of general rural extension primarily in agricultural productivity; 3. the lessons of other countries. The first section of the article pleads for a much greater extension intensity, the second attempts a quantitative and qualitative assessment of the intensity of extension in India, the third makes an attempt at a search for solution in the prevailing circumstances in India and the last advocates the adoption of a new programme of agricultural extension instead of the existing rural extension to quicken the tempo of the community development programme (WAERSA 1960-105).

LEA, D. A. M. / Suggestions for the improvement of indigenous subsistence horticulture. Papua and Nw. Guinea Agr. J. 18 (1966) 1 : 1-4.

Traditional systems of subsistence farming in the highlands of the Territory of Papua and Nw. Guinea can probably be improved by the introduction of yam and sweet potatoe varieties rich in protein, the introduction of new found plants, improved hand implements, mechanization of post-harvest handling of produce, mulching, simple terracing, improved yam storage methods, extension of tree cultivation, pig bread improvement, and the introduction of cattle and goats. However, extension officers should bear in mind that valuable practices should be retained as much as possible, and that improvements are accepted only when they do not disturb the social organization of the people. Examples are given of some traditions militating against certain improvements.

NARKSWASDI, U. / Institutions responsible for conducting farm management programmes in eight countries in Asia and the Far East. Fm. Mgmt. Notes Asia and the Far East, Bangkok 3 (1967) 1 : 1-5.

The countries from which institutions are briefly described are Japan, Taiwan, Korea, Thailand, Philippines, India, Malaysia and Ceylon. The organizations are classified as official organs, specialized as semi-specialized institutions, agricultural experimental stations, farmers' organizations, private societies, universities and agricultural colleges and international foreign agencies (WAERSA 1967-3225).

N'DAO, A. / L'évolution de la vulgarisation agricole au Sénégal. Rev. Soc.

Belge Etudes Expansion, 62 (1963) : 714-718.

The farmers' systems of agricultural extension work in the Senegal region are briefly discussed; only incidental work could be done because of lack of trained personnel. The creation of settlement centres was only partially successful, since the mechanization which had to be introduced was un-economic. Good results were obtained with the creation of centres for rural expansion. Integrated rural development is persuaded by teams of trained officers assisted by village animators (WAERSA 1964-2826).

NEWCOMBE, F. H. / Agricultural extension. Report to the Government of Burma. EPTA 1397, FAO, Rome, 1961.

The author summarizes briefly the observations upon the completion of approximately one year of study in Burma. After a survey on the present situation of extension development the author explains the duties and activities of field officers, in-service training, extension fellowships, and pilot village projects. He then makes various recommendations for strengthening the Extension Division at the Department of Agriculture (WAERSA 1962-2545).

Report to the Government of Pakistan on agricultural extension. Expanded Techn. Assistance Progr., 1839, FAO, Rome, 1964. 26 pp.

When the major irrigation works in the Kushtia district of the Ganges-Kobadak project in East Pakistan were nearing completion, it was realized that an agricultural extension service should be organized to help farmers to adopt the new farming practices so that they would be able to take the utmost advantage of the irrigation water. Field trials had shown that yields of irrigated rice, wheat and other crops were double those obtained under rainfall conditions. The organization and activities of the agricultural extension service are discussed, the need for agricultural credit is stressed and the role of the Peace Corps volunteers is described. It is recommended to direct their future activities to irrigation development, training and experimental work providing them with the required qualifications and a background of irrigated farming.

ROSS, M. G. and B. W. LAPPIN / Community organization. Theory, principles and practices. Harper and Row, New York, 2nd ed., 1967. 290 pp.

Deals with: 1. the nature of community organization; 2. factors impinging on community organization methods; 3. principles of community organization, and 4. principles and practice. The focus of the revised edition is on practice; theory and principles are discussed in the first sections and then applied specifically to three case records: a village in Ceylon, a community centre in a changing urban North American locality, and a social planning

council.

SANTOY, P. du / Committee procedure for clubs and voluntary organizations. Oxford Univ. Press, London, 1963. 44 pp.

This paper describes in detail the formal procedures normally adopted in committees. It is designed especially to explain to anyone not familiar with them, especially the newly-elected chairmen and members, the reasons for and the practice of these procedures.

Workshop on organization and administration of agricultural services in the Arab states. United Nations, Programmes of Technical Assistance, New York, 1964. 103 pp.

The workshop stresses the need for a comprehensive approach to agricultural extension covering all subject fields, so as to avoid the danger of giving the individual farmer conflicting advice. Also the need for evaluation is underlined. Training facilities are discussed and agricultural extension recommendations are given. No agricultural programme can be effective unless it is fully related to the needs of the farmer himself.

DESCRIPTION OF EXTENSION SERVICES

GENERAL, EUROPE and NORTH AMERICA

Agricultural advisory services in Europe and North America. EPA/OEEC, Paris, 1961. 246 pp.

The conference had the following objectives: 1. To discuss important developments in agricultural advisory work in Europe, the United States and Canada since the first Conference of this kind was held by the O. E. E. C. in 1957, and to review the projects carried out by EPA / O. E. E. C. in this and related fields during the same period; 2. to delineate the role and contribution by agricultural advisory services in Europe and North America towards the solution of urgent technical, economic and social problems at present affecting agriculture; 3. to make recommendations in regard to the most effective follow-up by the O. E. E. C. of the work already under way (WAERSA 1961-2378).

ASKWITH, T. / Community development in Turkey. Community Dev. J., 1 (1966) 1 : 6-11.

A description of community development in Turkey and some remarks. The success of certain programmes is due mainly to the promotion of village councils, inspired leadership of some individual, local initiative, technical advice and the latent ability of the people to organize and undertake substantial development activities at considerable personal sacrifice (WAERSA 1966-1931)

BRUNNER, E. de S., I. T. SANDERS and D. ENSMINGER (Eds.) / Farmers of the world. The development of agricultural extension. Columbia Univ. Press, New York, 1954. 208 pp.

KIMMEL, D. C. / The need for efficient extension services. Span, 4 (1961) 1 : 43-44.

The paper examines the reasons for the lack of effectiveness in increasing agricultural production. A specially selected and trained staff is needed combined with adequate government support. The paper ends with a list of FAO-reports devoted to agricultural extension in Africa, the Middle East and the Far East.

PENDERS, J. M. A. / The role of rural extension in developing countries. In: Penders, J. M. A. (Ed.), Rural extension on the crossroads, 1963: 54-65.

Progress in a developing country is largely determined by "intellectual" investment. Extension should pave the way for vocational teaching. It has a role to play in rural development projects and in the integration of agriculture into the national economy. Extension and community development are to a great extent similar and therefore no different services would be needed. Extension and community development are different aspects of one indivisible, self-generating process.

PENDERS, J. M. A. / Rural extension in a developing country. A comparative study. *Neth. J. Agr. Sci.*, 10 (1962) 1 : 27-51.

The extension situation in Surinam is described in comparison with the Netherlands. Limitations in the former country to higher productivity are caused by the small areas of the farmers, lacking adequate water management, the non-availability of capital, the poor development of markets and the inadequate training of the rural population. Discussion of various aspects, viz. the scope of extension, the working procedures and methods in extension, the relation between extension, applied research and teaching and the organization of the extension service (Tropical Abstracts 1962-2244).

SANDERS, H. C. (Ed.) / The cooperative extension service. Prentice Hill Int., London, 1966. 436 pp.

The book, with contributions by 41 agricultural and home economics extension workers, presents a comprehensive account of the Cooperative Extension Service, its foundations, history, purposes, programmes and techniques. Part I - Foundations - contains the following chapters: 1. Why an extension service today? 2. a brief history; 3. the legal base, scope, functions, and general objectives of Extension work; 4. organization of the work; Part II presents some contributions of the behavioural services; Part III programme development. Part IV discusses planning and implementing change; Part V reporting and public relations; Part VI examines personnel training and development, and Part VII looks to the future (WAERSA 1967-906).

SIMONS, L. R. / Early development of cooperative extension work in agriculture and home economics in the United States. Ithaca, 1962. 64 pp.

TURNER, R. M. / The first 45 years. A history of cooperative extension in Washington State. Pullman, Wash., 1961. 138 pp.

The author tells of the different administrations of the Extension Service and their contributions to policies now providing the foundation of further growth and development in helping farm and rural families and the broadening influence of urban fields of activity. The approach to writing the history was

to sample different periods to show the trends and reaction to changes in farming, technology and methods and types of programmes. Biographical data on extension directors are added, including a list of extension workers through 1957 (WAERSA 1962-1748).

VERSLUYS, J. D. N. / Basic features of agriculture in underdeveloped countries compared with those of Western agricultural production and the difference between agricultural cooperation in East and West . Indonesia. 1956.

ASIA AND THE FAR EAST

Agricultural development operations in the Trust Territory of the Pacific Islands. Agr. Inform. Bull., 1 (1964) : 126 pp.

This publication provides general basic information on the islands of the Trust Territory of the Pacific Islands; a brief discussion of the over-all programme for agricultural development; and rather detailed information on the agricultural programmes and operations of the 6 districts into which the vast area of the Trust Territory is divided. This third part comprises among others, a chapter on agricultural extension programmes and operations.

Agricultural extension work among native farmers in Papua and New Guinea Australian Territories, Canberra, 1 (1961) 5 : 16-20.

Discussion of the main aims of agricultural extension among the native people of the Territory. In order to accelerate and intensify this work a 3-year development programme was instituted in Nov. 1959. The main items of this 10-point plan are: expansion of the force of indigenous agricultural assistants with the aim to provide one trained agricultural worker to every 5,000 head of rural population; completion of the training programme to the stage when more than 1,000 indigenous farmers are trained each year; completion of agricultural extension stations; development of 32 new agricultural extension centres; strengthening of the professional staff; expansion of agricultural patrolling (WAERSA 1962-857).

ANDERSON, O. B. (Ed.) / Far East agricultural extension and information workshop. April 6-18, 1959. Taipeh, Taiwan, 1959. 180 pp.

This workshop was held to review the status of extension and information workers and for the cooperative exchange of experiences in order that they might be better equipped to offer informed leadership. The country reports of the delegates from Japan, Korea, Philippines, Laos, Thailand, Vietnam

and the Republic of China show the progress each country is making toward an effective extension service (WAERSA 1960-1206).

BAN, A. W. van den / Organisatie van de Community Development in India. Landbouwk. Tydschr., 78 (1966) 12 : 397-400.

A brief review is presented of the Community Development organization in India. This organization was established in 1952; it has a personnel of 75,000 including 50,000 village level workers (VLW), more than 5,000 agricultural extension officers, and nearly 5,000 animal husbandry officers. The hierarchical structure of the organization has both advantages and disadvantages. According to the author the drawbacks are dominant; the VLW's take little pleasure in their work; the downward communication is good but the upward communication is insufficient; coordination with other organizations is very difficult; and agricultural extension finds it more difficult to overcome the distrust of the rural farmer.

BLANDY, R. and M. NASHAT / The Education Corps in Iran. A survey of its social and economic aspects. Int. Labour Rev., 93 (1966) : 5 : 521-529.

A special corps of army conscripts, the Education Corps, was formed in Iran in 1963 with the direct aim of spreading literacy in rural areas, but also to play a pivotal role in community development and rural reforms. Corpsmen serve the normal period of conscripted service of 18 months. The first 4 months are taken up in training in both military and non-military subjects including teaching methods, basic principles of agricultural extension, and sanitation. At the end of this training those who pass an examination are qualified for the army rank of sergeant, are equipped with special uniforms, and are sent to the villages to serve the remaining 14 months of their term of service (Tropical Abstracts 1966-1740).

BOSE, S. P. / The changing pattern of agricultural extension in West Bengal. Note Agriculture Change, West Bengal, India, 1960. 15 pp.

Extension began as an agency for supplying the farmers' needs but gradually developed into an organization which undertook the development of the rural people. While supplies and services were the sole objective before now, this is supplemented by an educational programme which is an essential element in agricultural extension. The expenditure on extension and research has been increased about hundred times in the course of the last 30 years.

CHANG, C. W. / The present status of agricultural extension development in Asia and the Far East. FAO, Rome, 1961. 60 pp.

CONROY, W. L. / Agricultural extension work in Papua and New Guinea. South Pac. Bull., 11 (1961) 4: 49-53.

The main aims of the extension programme in Papua and New Guinea are:

1. to raise the level of subsistence in the villages by improving the nutritional value of the foods eaten, by introducing new foods, and by ensuring a year-round supply of food; 2. to introduce the economic means of supporting a higher standard of living by introducing crops and stocks; 3. to contribute to the advancement of the people by technical training; 4. to improve the methods of indigenous agriculture including better land use, the use of better implements, animal husbandry and poultry raising (WAERSA 1962-860).

COTTRELL-DORMER, W. / Rural extension in Eastern Papua. Papua and New Guinea Agr. J., 14 (1962) : 92-112.

This article describes and discusses the work on agricultural extension carried out in a region of Eastern Papua. Starting with reconnaissance patrols, village agricultural committees were established and the agricultural extension programme was gradually broadened into a programme of rural extension. The author concludes that urgent needs in extension activities of all kinds in Papua are: 1. greater emphasis on participation by the village people in the planning and execution of programmes; 2. the stepping up of the training of native leaders, both men and women, and 3. the strengthening of the team spirit between departments at the district and sub-district level (WAERSA 1963-111).

DAYAL, R. / Community development programme in India. Kitab Mahal, Allahabad, 1966. 432 pp.

The author has tried to bring home the usefulness of the community development programme in the present day world situation. Particularly the establishment of Panchajati-Raj and the constitution of a village volunteer force have proved to be very useful. The book is divided into four parts. The first part deals with the general aspects of the programme and gives an idea about the concept, chief features, administration and progress and targets of this programme. The second part is the core of the book and deals with all aspects relating to welfare and development of the masses. The third part gives an idea about this programme in tribal, gramdan and urban areas. The last part shows the people's contribution, evaluation and a critical view of this programme.

HESS, R. / The village panchayat in India. Ind. Soc., 5 (1963) 6 : 1-3, 6-8.

KAUFMAN, H. F. / Rural community development in India. Int. Rev. Comm.

Dev., 9 (1962) : 77-94.

A concise analysis of the rural community development movement in India:

1. national setting; 2. organization of the programme at state and national levels; 3. activities and problems at local or village levels, and 4. ideology.

KOCK, W. / Wandlungen landwirtschaftlicher Beratung in Indien. Z. Ausl. Landw., 3 (1964) 2 : 121-132.

The National Extension and Community Development Programme in India did not contribute sufficiently to an increase of food production which depends principally on yield increase. This has led to the introduction of the Intensive Agricultural District Programme, through which better agricultural practices are gradually introduced in a limited number of districts. The principles, prospects, working methods and results of this programme are discussed. The results so far are encouraging. Lack of extension officers and of an administration adapted to the programme are limiting factors (WAERSA 1966-850).

LECLERC, J. / Rapport au Gouvernement des Iles Comares sur la vulgarisation agricole aux Iles Comares. EPTA Rep. No. 1830, FAO, Rome, 1964. 40 pp.

A description of the existing service and recommendations for an improvement.

Some thoughts on agricultural extension methods and community development programmes in India. Information Booklet, Dept. of Agriculture, Mysore, 6 (1959) : 1-56.

Subject-matters: Indian five year plans; extension is education for life; extension methods; programme planning, and the village extension worker in India.

TATSUNO, T. and R. KANEKE / Agricultural extension in Japan. Agriculture, Forestry and Fisheries Productivity Conference, Tokyo. FAO, Rome, 1958. 46 pp.

A short description of the agricultural extension service in Japan.

WALLIS, H. / Community development in Serawak. Commun. Dev. J., 1 (1966) 1 : 12-15.

A distinction is made between indigenous community development and community development with "outside" help (WAERSA 1966-1930).

AFRICA

Agriculture extension service in Ethiopia. / Rep. Econ. Condit. Market Trends, 57 (1963) : 9-13.

A number of 110 agricultural extension agents and about 200 community development officers and teachers are working at present in Ethiopia. Since both export and non-export crops are mostly based on small-scale agriculture, the Extension Service, in connection with an initial supply of adequate credit facilities, is mainly engaged in distributing better seeds, selected livestock and improved agricultural implements and tools among the small farmers. Cooperatives are being organized and community leadership is encouraged. The extension agents come from the agricultural schools of Ambo and Jinna, the supervisors are graduates of Alemaya Agricultural College. In-service-training is given at the training centre at Debre Zeit (Tropical Abstracts 1964-228).

ARIBSALA, T. S. B. / The farm settlement scheme in Western Nigeria. Report of the Cocoa Conference, London 12-14 Sept. 1961, London, 1962: 102-107.

Education is indispensable to development. The problem is, however, how to make farming attractive to the educated. The solution is sought in the establishment of farm settlements occupying about 2000 ha and designed to hold 150-200 farmers; 13 of these settlements are already in operation. Selected candidates are first given a training course of one to two years in one of the five farm institutes. They will then enter a settlement. During the first years they will work communally and under supervision, while credit is provided to give them a suitable income. After this period, the settlers are allocated to their individual farms and houses; they are allowed to marry, and training facilities will be provided for their wives (WAERSA 1962-1932).

HAPGOOD, D. / Rural animation in Senegal. Int. Dev. Rev., (1964) 3 : 15-18.

The technique of "rural animation" was evolved by a small international (largely French) organization, l'Institut de Recherche et Application des Méthodes de Développement (IRAM), as a means of getting illiterate, traditional societies to change their attitudes towards new or improved institutions within the social environment, and it is based on IRAM's contention that peasants in traditional societies will not change their methods until they change their wider attitudes towards life and society. In Senegal, animation has concentrated its main efforts to date on organizing human investment and cooperatives, and human investment programmes to build

roads and small irrigation works have been attempted with varying success. The author concludes that, though the technique of rural animation is highly promising, certain political barriers higher up the social scale must be broken, and in many of the developing countries such as Senegal the basic decision rests with the ruling élites (WAERSA 1965-2023).

LYNN, Ch. W. / Agricultural extension and advisory work with special reference to the colonies. A report on a tour made in 1947 to study agricultural extension and advisory work in East and West Africa, England, Canada, USA and Puerto Rico. London, 1949.

Definitions and aims of extension programme planning.

PENDERS, J. M. A. / Compte rendu de la vulgarisation agricole en Tunisie. The Hague, 1961. 22 pp.

Report on the Agricultural Extension Development Centre for East, Central and Southern Africa. FAO, Rome, 1962.

SANTOY, P. du / Community development programmes in Nigeria, Ghana and Sierra Leone. Développement et Civilisations, 21 (1965) : 25-31.

Sierra Leone is considered to be the weakest of the three countries in its development programme, largely because of inadequate finance and coordination, leading to poor coverage and a lack of concentration of effort of the various agencies which could be involved. Ghana is the strongest, but is still largely pursuing the same policies as it has done for some years with perhaps a greater coverage and more attention to establishing local committees at the village level. The more "orthodox" socially oriented community development in Nigeria had not developed in Ghana; radical new plans have therefore been prepared in which the emphasis is laid on the rural rural economy (WAERSA 1966-2969).

SELASSIE, S. G. / Das Community Development Training and Demonstration Centre in Awasa (Athiopien). Z. ausl. Landw., 5 (1966) : 143-148.

This centre, the only one of its type in Ethiopia, was established in 1961 with the aims to: 1. train staff, 2. get a research centre for community development and its application to Ethiopia; 3. improve the living standard of the Awasa population; 4. get a training centre for ministerial experts on development programmes. The centre has a two and one-year-pre-service training for men and women respectively, and refresher courses. Organization and teaching curricula are presented. The duties of the centre staff include extension work in the surrounding villages (WAERSA 1966-4052).

TAJIMA, S. / Report on agricultural education and training in Liberia; for UNESCO educational planning mission Rome, 1963. 27 pp.

VIGUIER, P. / L'Afrique de l'ouest vue par un agriculteur. Problèmes de base en Afrique tropicale. La Maison Rustique, Paris, 1961. 133 pp.

Introduction into agricultural development in West Africa. The first section deals with the place of agriculture and emphasizes the need to increase agricultural production. In the second part a description follows the traditional system of agriculture. The third section enumerates the main problems of West African agriculture and suggests how they can be solved. In the fourth part the author treats the whole question of rural development in its wider aspects, its aims, the methods which it employs, and the contribution which can be made by technical assistance programmes and carefully chosen schemes of foreign aid. Ten points are given which must be observed if technical assistance is to be effective.

CENTRAL AND SOUTH AMERICA

CHENA - GONZALES, R. / Perceptions of extension work in Mexico. Diss. Cornell Univ. 1963, 228 pp. Diss. Abstracts Ann Arbor, Mich. 24 (1964) 8 : 3190.

The findings indicated that the different statistical groups of the study (extension agents, extension supervisors, experimentalists, research leaders and professors) agreed that the specific objective of the extension service should be to concentrate its effort in promoting among farmers in Mexico a higher production of basic food crops. They disagreed, however, about functions and training needs of extension agents. From the conflicting expectations it was concluded that the dual task of defining more precisely the role and training needs of extension agents is urgent and requires research planned cooperatively by teaching, research and extension institutions in Mexico (WAERSA 1964-2822).

DRIELSMA, J. A. / De landbouwvoorlichting in Suriname van 1955 t/m 1964. Surinaamse Landbouw, 13 (1965) 1 : 12-21.

A survey of the reorganizations of the Department of Agriculture in Surinam in the period 1955-1964 is followed by a description of the task of the agricultural extension service and of the various measures taken to modernize and improve this service. In 1955 a home economics division and a 4-H youth work division were added. The reorganization relieved the officers of much administrative work, enabling them to spend more time on

the training of their staff in subject matter and extension methods, and an efficient planning. The various extension methods are briefly discussed. They all aim at attaining an independent, self-reliant peasant class. English summary (WAERSA 1966-1880).

MARQUEZ, O. S. / Estudio comparativo de métodos de extensión utilizados en Costa Rica. Turrialba, Rev. Interam. Ciencias Agr., 14 (1964) 2 : 93-95.

A study was made to determine to which methods extension agents attribute more importance in the diffusion of agricultural practices in Costa Rica. Results show that the methods most frequently used, and the most effective, are farm visits, demonstrations and farm tours. Radio and films are used with severe limitations. Circular letters and bulletins were thought to have little educational value (WAERSA 1965-1118).

NARANJO, G. E. / Estudio del Servicio de Extension de Ecuador. Thesis Inst. Interamericano de Ciencias Agricolas, Turrialba, 1963, 172 pp.

An analytical study of the extension service, focusing on the knowledge, abilities and skills of personnel. Results indicate that no staff member had received a post-graduate training in extension, education or related social sciences! A high degree of staff mobility was discovered. The personnel was found insufficient in number. It is recommended to plan short courses on extension education, post-graduate training for supervisors and in-service training agents. Effort should be made to obtain a permanent staff (WAERSA 1963-2526).

National extension services of selected countries in the Americas.

Comparative extension publication number. New York State College of Agriculture at Cornell Univ., Publ. no 8. Result of the Comparative Extension Seminar at Cornell Univ., Ithaca, 1959. 71 pp.

POSSINGER, H. / Die brasilianische Landwirtschaft und der Rural Extension Service. Z. ausl. Landw., 3 (1964) 1 : 33-44.

Brazil's rural extension service was organized in 1948 on the U.S. model. Each community has a team consisting of an agronomist or a veterinarian, a teacher for home economics and a typist. Most important working methods: visits, demonstrations, lectures, films, radio programmes, field demonstrations, excursions, exhibitions, etc. Planning and results are compared continually. Few short term improvements in farming and productivity have been realized in spite of these efforts. Farmers, although willing to accept new ideas apply them only in rare cases. But viewed from the long-term angle, the extension service can be considered a valuable and promising

instrument (WAERSA 1964-1941).

Report to the Government of British Guiana on cooperative development.
EPTA Rep., Geneva, British Guiana R., 4 (1964) : 1-70.

A description of the development of the cooperative movement in British Guiana is followed by recommendations for organizational improvement. Five appendices to the report treat the following subjects: 1. the inter-relationship of community development and cooperation and their potentiality as instruments of socio-economic development; 2. promotion and regulation of cooperatives; 3. cooperative agricultural farming; 4. the Black Bush Polder Land Development Scheme, and 5. a comprehensive system of cooperative education and training (WAERSA 1965-3067).

RIBEIRO, J. P. / Case studies of subsistence and transition: the Acar Programme in the State of Minas Gerais, Brazil. Agric. Dev. Comm., Honolulu, 1965, 60 pp.

A brief description on the main physical, economic and sociological characteristics of Minas Gerais is followed by a detailed account of the ACRA (Association for Credit and Rural Assistance) programme, set up in 1948 by agreement between one state government and the American International Association for Economic and Social Development. At first ACRA was more a supervised credit programme than an advisory service; now it is mainly advisory and educational. Information is given on the staffing of ACRA, its main functions, and the results of some of its work to date (WAERSA 1966-2943).

SAMPER, A. / Papel de la extensión en el desarrollo de América Latina. Ext. Americas, 10 (1965) : 3-12.

This article contains the text of an address given at the opening of a seminar of Latin American professors of agricultural extension, held at the Inter-American Institute of Agricultural Science, Turrialba, Costa Rica, in May 1965. A panorama is presented of the importance, recent development, and problems of agricultural extension throughout Latin-America. Impediments to a better agricultural extension in the area are the shortage of highly qualified personnel for teaching and research; the shortage of extension officers at the field level; the bureaucratic character of many extension services; and the poor integration of agricultural extension in the rural development projects of many Latin American countries (Tropical Abstracts 1966-1616).

Report on community development programmes in Jamaica, Puerto Rico,

Bolivia and Peru, by U.S. International Cooperation Administration, Commun. Dev. Div., Team no 2. Washington, 1955. 76 pp.

SMITH, T. L. / The process of rural development in Latin America. Social Science, no. 33, Univ. of Florida Press, Gainesville, U.S.A., 1967. 85 pp.

This paper contains six studies, concerned with specific aspects of the sociology of the development process as it is going on in Latin America:

1. reflections relating to the sociology of development;
2. contributions to the study of the two rural social systems;
3. the development of family-sized farms;
4. improvement of the systems of agriculture in Colombia;
5. a suggestion for rural community planning in Latin America and
6. sociology and the process of community development.

METHODS OF EVALUATION

BAN, A. W. van den / The organization of extension evaluation. Soc. Rur. Assen, 3 (1963) 3 : 281-292.

A well-integrated programme of extension evolution should include basic research as well as applied research. In order to get basic research, the research worker should have much freedom and not too close ties with the agency. For applied research, on the other hand, supervised team work and closer relations with an action agency are more effective. Some of this applied research can even be done by extension officers themselves (WAERSA 1963-2530).

BEERS, H. W. / Programme evaluation in India. Rur. Soc., 25 (1960) : 431-441.

This article annotates studies of the Programme Evaluation Organization between 1952 and 1958. Evaluation is especially undertaken in agricultural extension programmes. Each year, beginning in 1954, has brought an annual evaluation report, timed to be ready for the annual meeting of State Development Commissioners. The article ends with a list of 27 publications of the P.E.O.

Id. / Evaluation in community development. The Indian experience. Int. R. Commun. Dev. 5 (1960) : 203-219.

Evaluation in extension. U.S.D.A. Federal Extension Service, Washington, 1959. 107 pp.

A textbook on need and methods of evaluation in agricultural extension.

Evaluation techniques. Int. Soc. Sci. Bull., 7 (1955) I, 3 : 345-442.

A review written by a number of well-known specialists.

Extension evaluation. Allahabad Agricultural Institute, 1957. 56 pp.

FRUTCHEY, F., et al. / Evaluation in extension. Div. of Extension, Research and Training, U.S.D.A., Topeka, Kansas, 1959. 107 pp.

A textbook on evaluation techniques.

HAYES, S. P. / Evaluating development projects, 2nd ed. UNESCO, Paris, 1966. 116 pp.

Increasing interest in the evaluation of field development projects has led to the second edition of this manual for the use of field workers of which the first edition was published in 1959. The findings of 2 seminars convened by UNESCO at the Arab States Fundamental Education Centre in Sirs-el-Layyan (Egypt) in 1961 en 1962 have been incorporated. The book discusses ways of measuring and analysing both the results of development projects and the results of the individual operations comprising those projects. The application of social scientific research methods to the evaluation of extension programmes is discussed.

HESSELING, P. G. M. / Strategy of evaluation research in the field of supervisory and management training. Diss. Univ. of Amsterdam, Assen, 1966. 359 pp.

LEVEGUE, A. / Etude sur la marché de la vulgarisation Synergie - Roe, Paris, 1961.

An evaluation of the extension services in a country. A good example of social psychological research applied to agricultural extension.

PARASHAR, R. K. / Response of farmers to mailed questionnaires: an analysis. AICC Economic Review, New Delhi, 12 (1961) 19 : 22-27.

The author analyzes in the article the response of 172 farmers belonging to 34 villages to whom he had mailed questionnaires in connection with an investigation into the economics of well-irrigation. Prior to the mailing of the questionnaires, the author had interviewed the farmers personally. From the analysis the author draws certain conclusions regarding the attitude of the villagers towards mailed questionnaires and offers suggestions for improving their response (WAERSA 1961-811).

Promotion of work study in the agricultural and horticultural advisory services. OECD, Paris, 1962. 223 pp.

The report describes how work study can be applied in farm management work, in the future development of farm mechanization and in the design, construction and maintenance of farm buildings. It surveys the development of work in the horticultural and agricultural advisory services.

WICHES, A. J. / A manual on evaluation tested. Experiments in the U.A.R. and in the Sudan with the use of P. Hayes, Jr.; Measuring the results of development projects. Report on the UNESCO Regional Techn. Ass. Project on the development of evaluation techniques, UNESCO, Paris 1964.

RESULTS OF EVALUATION

ACHARYA, H. / Some observations on community projects. Sociol., B 8 (1959) 2 : 19-31.

The Indian Community Development Programme critically examined.

BHATTACHARJEE, J. P. / Agricultural extension inputs and community development. Econ. Weekly, Bombay, 17 (1965) 5/7 : 293-298.

The causes of the subdued progress of farm production in India, particularly in the last three years, are examined. It is maintained, firstly, that inputs have not increased as much as expected, and secondly, that the response of production to the increased use of inputs is discouraging. The idea of integrated development in community development is not at fault; the weak technological base, poor supplies and under-staffing are the main reasons for the unfavourable results of the community development experiment (WAERSA 1965-1146).

COLDWELL, M. J., R. DUMONT and M. MEAD / Report of the Community Development Evaluation Mission in India, appointed under the U.N. Progr. of Techn. Ass., 23 nov. 1958 - 3 apr. 1959. Govt. of India., Min. of Comm. Dev. and Coöpn., New Delhi, 1959. 100 pp.

An evaluation of the community development in India by a few well-known experts.

Community development and economic development. Part II A : ECAFE/FAO Agr. Division, Bangkok, 1960. 100 pp. A case study of the Ghosi Community Development Block, Uttar Pradesh, India.

The publication embodies the findings of an investigation undertaken to study the impact of community development programmes on economic development, particularly the development of agriculture. The extent of acceptance of improved agricultural practices, changes in output, level of living and capital formations, associated with community development activities in the six selected villages covered by the Ghosi Community Development Block were studied and compared to the conditions in six other villages in a similar area not covered by community development activities. The study records solid gains from the angle of changing the outlook of the individual and promoting an all-round development of village community, whereas in respect of improved techniques of production and increase in productivity the achievements are termed as modest (WAERSA 1961-841).

DESAI, A. R. / Community development projects. A sociological analysis. Sociol. B., 7 (1958) 2 : 142-165.

An examination of the Community Development Projects in India.

Evaluation of community work in Kolhapur. Artha Vijnana, Evona, 2 (1960) 4 : 263-270.

This paper is the concluding part of the report of a committee, appointed by the Poona University at the request of the Programme Evaluation Organization of the Planning Commission. The committee carried out a field survey of the project area and submitted their report in 1957. The survey has brought out the crucial role of proper indigenous leadership in rural development work (WAERSA 1961-849).

Evaluation of the Gram Sahayak programme. Programme Evaluation Organization, Planning Commission, Govt. of India, Delhi, 1962. 144 pp.

An evaluation of the training and follow-up programme for "gram sahayaks" (village leaders) in nine states and one union territory in India. The progress reports on community development programmes have emphatically stressed the role of village leaders as carriers of new ideas and initiators of new practices. This report discusses various aspects of the "gram sahayak" training programme, criteria for the selection of village leaders for training, and content of the training scheme. Suggestions are made to strengthen the programme, the most important of them being the setting up of integrated training camps of longer duration in all states.

FRANCO, J. di / Some factors that do not contribute to efficient or effective extension in Latin America. Mater Ensenanza Ext., EE/3 (1964) : 1-7.

On the basis of analytical studies conducted in 8 Latin American countries, a brief review is presented of the factors that minimize the effectiveness of agricultural extension. The principal weaknesses recorded are: 1. lack of effective supervision; 2. inadequate facilities; 3. insufficient extension training or preparation; 4. lack of technical subject matter specialists; 5. insufficient academic training of extension agents; 6. the staff has no experience; 7. the extension personnel do not effectively use the local leaders.

FRANCO, J. di and R. A. CLIFFORD / Analytical study of the extension service of Honduras. Status Report 1962. Inter-American Institute of Agricultural Sciences, Turrialba, 1962. 17 pp.

A follow-up analysis on the recommendation made in a previous report on Honduras extension services. An evaluation is made, a year after submitting

the first report, of the work achieved in implementing each recommendation. Much effort and attention has been expended toward meeting the recommendations. There have been sincere intentions to strengthen personnel and administration.

GORDON, J. / Problems of agricultural extension in the developing countries. *World Crops* 17 (1965) 1 : 68-71.

Some pronouncements of the author: Generally, extension workers are poorly paid, live in harsh conditions, away from good schools for their families, away from the amenities of town-life and with little opportunity to promotion. Hence the service is poorly fed with entrants of high quality. The extension worker is very often young, arrogant, despising all manual work and those who perform it. Defects are very conspicuous in India, where bureaucratic incompetence, maladministration and mistrust has reduced the morale of the village level workers to the vanishing point.

GUPTA, S.B. and S.B. SINGH / Impact of developmental activities on technological changes in Varanasi district. *Ind. J. Agr. Econ.*, 21 (1966) 1 : 154-160.

The impact of community development programmes on the adoption of technological changes such as the introduction of improved varieties of seeds, use of chemical fertilizers, adoption of improved cultural practices and implements was investigated in 1962-1963 in a sample in two adjoining blocks which had similar agro-economic conditions before the initiation of developmental activities. A comparison of existing methods and practices in block and non-block areas is made. Farm sizes and crop enterprises are analyzed in tables. Considerable difference is shown between the adoption of improved practices in block and non-block areas. The output-input ratio and yields per acre in block areas are a little higher than in non-block areas, and this is attributed to the favourable impact of improved practices (WAERSA 1966-4125).

HYMAN, H.H., G.N. LEVINE and C.R. WRIGHT / Inducing social change in developing communities. *An International Survey of Expert Advice*. U.N. Res. Inst. for Soc. Dev., Geneva, 1967. 224 pp.

A study by the U.N. Research Institute for Social Development in its programme of research on methods and problems of social development and planning at the local level. It gives the opinions of over 400 national and foreign experts.

ISHIKAWA, S. / Are Japanese experiences applicable? A study on some limiting factors governing agricultural development in Asian countries. *Nogyo Keizai Keukyu*, 14 (1963) 2 : 114-122.

A study of the problem suggests that the question of applicability is complex and that the Japanese pattern of input in agriculture would be relevant only to those groupings in Asia where the per-area productivity is relatively high. On the economic side, Japan's experience was fortunate in two respects; a high price-level for rice with a substantial long-run decline in fertilizer prices, while most of the rice-producing Asian countries today suffer from stagnantly low prices for rice without having the benefit of declining input prices of any significant magnitude (WAERSA 1964-1189).

JACOBY, E. H. / Report on the Centre on Principles and Policies of Land Settlement for Asia and the Far East, Inginiyagala, Ceylon 14 nov. - 5 dec. - 1958. Expanded technical assistance Program, Report 1131, FAO, Rome, 1959. 125 pp.

Origin of the failure of most of the settlement schemes in S. E. Asia are shortcomings of the agricultural extension service.

KAHLON, A. S. and S. S. GREWAL / A study of subsidized insect pest control measures. *Ind. J. Agr. Econ.*, 20 (1965) 3 : 54-62.

In Punjab State (India) the shortage of plant protection equipment was considered to be the main limiting factor to plant protection. A survey conducted in 1963 examined the use of plant protection equipment subsidized by the government, and identified the factors that limited the popularity of plant-protection measures. These factors were related to: 1. cost; 2. availability of insecticides; 3. doubt as to the merit of plant protection practices; 4. lack of sufficient technical knowledge for carrying out control measures; 5. the small effect of control measures when neighbouring farmers did not participate. Practical demonstrations in cultivators fields, adequate supply of insecticides to village cooperatives and cooperative action in combating insect pests are important (Tropical abstracts 1966-518).

LEPAGE BARRETO, R. / Evaluacion de extension en tres comunidades de Venezuela. *Agronomica, Venezuela*, 2 (1965) : 9-13.

An inquiry into the educational impact of agricultural extension was conducted in 3 communities in the State of Aragua, Venezuela. From the results presented in this paper it was concluded that communities should participate to a greater extent in the preparation and execution of extension programmes, stressing educational aspects. Problems such as the relatively small number of families that seek advice from extension officers and the limited

response to recommended practices require thorough studies. More attention should be given to work groups, training of group-leaders, and women and youth clubs. The number of extension methods should be increased and cooperation with the national agencies for rural development improved. Extension workers should have the opportunity to receive further training in matters connected with extension work (Tropical Abstracts 1966-1742).

MARTINEZ, V. G. and D. T. MYREN / Alcance e impacto de la pagina agricola de "El Dictamen" de Veracruz. Foll. Técu., Inst. Nac. Invest. Agrícolas, Mexico, 47 (1964) : 1-80.

In August 1957, a daily paper published in the city of Veracruz, Mexico, started a weekly agricultural page written by the staff of the Cotaxtla Experiment Station. Nine months later its impact was studied by interviews with 6 % of readers in the city, including 30 farmers, and with 11 % of readers in rural areas including 100 farmers. Farmers who read the paper were found to constitute a special group mainly consisting of progressive, comparatively well-educated landowners. Nearly all farmers who took the paper regularly or occasionally consulted the agricultural page; 70 % had found at least 1 recommendation that was applicable to their farms; about one-third had no other source of agricultural information. English summary (Tropical Abstracts 1966-1412).

PARASHAR, R. K. / Community development programme: a review. Aerial Econ. Rev., 7 (1965) 4 : 489-513.

The Community Development Programme seems to have had a breakthrough in changing the outlook and attitude of the rural people but has not been very successful in setting the tempo of economic growth. This is because: 1. it was never designed to do so according to a time schedule; 2. the quality of leadership was unsuitable; 3. it spread its resources and energies on a huge and widely diversified programme to change the outlook and the way of living of four hundred million agrarian people. A six-point programme for agricultural development to making the CDP more effective is suggested (WAERSA 1966-874).

PATIL, R. K. / Community development: achievement and failures. Kurukshetra, 13 (1965) 4 : 5-6.

The author presents a brief review of the achievements and failures of the Indian community development programme. On the credit side, the programme has focussed the attention on the needs of the rural areas; a development agency has been created which aims at reaching every village; and a

network of cooperatives has come into being. On the debit side, however, the development programme is still a government programme that has failed to create a genuine spirit of cooperation amongst the rural population owing to the absence of a suitable extension agency.

Report of the Team for the Study of Community Projects and National Extension Services. Vo. I/IV / Committee on Plan Projects, New Delhi, 1957. I: 175 pp. II: 172 pp. III: 281 pp. IV: 114 pp.

An elaborate report on the results of an evaluation of the community development work in India.

Report on the agricultural extension study tour for Asia and the Far East / Expanded Techn. Ass. Progr. No 892, FAO, Rome, 1958. 37 pp.

The main objective of the tour was to provide extension administrators and senior policy level officials from Ministries of Agriculture an opportunity for intensive study of extension organization, at all administrative levels in Japan, the Philippines and India.

Report on the sample survey for estimating the areas brought under improved agricultural practices in community development areas of Punjab-Kharif, 1961/1962. Econ. and Stat. Organization, Gov. of Punjab, 1963. 77 pp.

Improved seeds, chemical fertilizers, and pesticides were the three practices on which data were collected. The report also presents information on the attitudes and opinions of cultivators for better propagation of these aids. The report reveals that 63 % of the cultivators were beneficiaries. Nearly 60 % of the total cultivators used improved seeds. Fertilizers were used by 20 % only, and a very few made use of pesticides. The report stresses the need to step up the supply of improved seeds through government sources (WAERSA 1964-1329).

SINGH, H. / Strategy on the agricultural front. Kurukshetra 10 (1962) 5 : 23-25.

The article evaluates the activities of the national extension service in India. The arguments are based on field-experiments gathered in Uttar Pradesh. The author indicates how the programme-planning could be improved.

TAJIMA, S. / An evaluation of agricultural extension in Hokkaido, Rev. ed., Obihiro, 1961. 25 pp.

TAJIMA, S. / An evaluation of radio farm programmes. Research Bull. of Obihiro, Zootechnical University, Series 1, Vol. 3, no 3, 1962.

TAYLOR, C. C. / A critical analysis of India's community development programme. New Delhi, 1956. 62 pp.

TEXTOR, R. B. (Ed.) / Cultural frontiers of the peace corps. The Massachusetts Institute of Technology Press, Mass., U.S.A., 1966. 363 pp.

Now that adequate data are available and the experimental stage has been successfully surmounted, fifteen social scientists present in this volume the first critical professional assessment of the Corps programmes overseas in a variety of countries and situations. This book brings a series of analyses of overseas programmes in selected host countries, with each analysis written by an authority of that particular country. The analysis presented here suggests that the greatest strain, conflict and responsibility centre on the country representative and his staff. He must mediate not only between Peace Corps Washington and the volunteers but also between the different groups within the programme and the host country. In addition, he must deal percipiently and protectively with the problems of individual volunteers.

RELATED SCIENCES

RURAL SOCIOLOGY AND SOCIAL PSYCHOLOGY

ABELSON, J. I. / How opinions and attitudes are changed. Springer, New York, 1959.

The book gives a practical summary of the aspects of social psychological research, which have important implications for agricultural extension officers.

Die Anwendung psychologischer Erkenntnisse bei der Arbeit der Beraterin. Förderungsdienst 13 (1965), spec. no 4 : 1-82.

The following papers were presented at a seminar organized by the Austrian Ministry of Agriculture and Forestry and held in Vienna in June 1965: special features of the mental development of adults (K. FINK); applied psychology in advisory work (W. REICHERT); special features of the mental development of young people (T. SCHROM); the effects of psychological difficulties of farm girls on work with young people in rural areas (A. WEIGL); problems of the community and the family in rural areas (L. ROSENMAYR); group-dynamics opportunities for its utilization in agricultural advisory work (M. HRUSCHKA); effective methods of advisory work and the correct and methodical ways of utilizing them (H. HABERT); the methodical and correct ways of utilizing slides and films (E. KRENZIGER); the concept of achievement in out-of-school-work with young people (F. LINGER); examples from home economics advisory practice for the application of psychological knowledge (S. BAYER); the question of functional methods (H. RHEINWALD); necessary conditions and points of departure for fulfilling the educational task in advisory work (H. SCHERMER); rationalization and intensification in home economic advisory work (O. DORNIK); conclusion to the seminar (M. NEJEZ) (WAERSA 1966-1867).

ARCE, A. M. / Sociologia y desarrollo rural. Inst. Interamericanos de Ciencias Agricolas, Turruabá. 1961. 131 pp.

This book is part of the Manual and Text programme sponsored by the Kellogg Foundation, to provide teaching material in Spanish for Latin American university faculties of agronomy. It is directed to the various professional people who have a role in rural development. It gives basic knowledge in sociology for extension, rural credit, home economics and social workers. The book deals mainly with: social groups, rural

communities, population characteristics, qualities and function of rural leaders; the processes of socio-cultural changes of communication and diffusion in rural areas (WAERSA 1961-1545).

CHAUHAN, D. S. / Relationships between technology and sociology in economic growth. *Econ. Weekly*, 11 (1959) : 1709-1716.

The author points out that the real problem why a considerable increase in agricultural production has not been achieved, lies in the social and organizational spheres.

CONSTANDSE, A.K. and E.W. HOFSTEE / Rural sociology in action. *Agricultural development papers*, nr. 79, FAO, Rome, 1964. 64 pp.

The first part of the studies gives a brief survey of rural sociology as a science; its character and development, its place among the other behavioural sciences, and the nature and results of rural sociological research. The second part describes some examples which illustrate the contribution that rural sociology can make to the improvement of the economic and social conditions of rural life. The examples have been chosen to demonstrate the fields of interest, possible specializations practical significance, and the working methods of rural sociology (WAERSA 1965-1127).

EMERY, F.E. and O.A. OESER / Information, decision and action. *A study of psychological determinants of changes in farming techniques*. Univ. Press, Melbourne, 1958. 132 pp.

The study contains excellent examples of social psychological research applied to agricultural extension.

ESSER, W.M. / Development of rural social guidance in the Netherlands. *Soc. Rur.*, 3 (1963) 3 : 293-309.

Agricultural problems can not be solved by advisory work in the technical and economical field alone. Special attention should be paid to social changes with which the agricultural population is confronted. The subjects mentioned are mostly related to the processes of industrialization and exodus from agriculture as: choice of vocation, farm succession and inheritance, and financial relations in the family.

FERNEA, R.A. / Conflict in irrigation. *Compar. Stud. Soc. History*, 5 (1963) 1 : 76-83.

Within the framework of a discussion on the relationship between an irrigation scheme and the social system of the people involved, short descriptions are given of the social setting of the irrigation systems in the

Teotihuacan Valley in Central Mexico and in the Daghhara Valley in Iraq. It is explained why in the former conflicts over water appear to be endemic, whereas the division of water in the latter is subject to much less dissension (Tropical Abstracts 1964-740).

JONES, G. E. / Rural development and agricultural extension: a sociological view. Commun. Dev. J. 6 (1967) : 26-33.

Increased agricultural productivity is a process of change. It can be achieved through producing more without changing total cost; or output may be increased without an equivalent increase in inputs; or the same production may be obtained by the use of fewer inputs. A considerable amount of changes are controlled by planning. The task of agricultural extension services is to improve the well-being of rural people. To be effective, the dissemination of agricultural information needs an adequate understanding of what any changes involve. An important function of an agricultural extension service is to act as a link between the scientific, political and socio-economic systems of a society on the one hand, and the farmer and his local community on the other. Coordination with other agencies is necessary.

LARSON, O. F. / Contributions of rural sociology research and evaluation to extension development in the United States. Soc. Rur., Assen, 5 (1965) 3 : 308-332.

The development of rural sociology in the U.S.A. as a scientific discipline corresponds in time to the development of extension work (advisory services). Illustrations of sociological research and evaluation of basic experimental approaches or programmes are cited. The direction of changes made by extension has created increased need for sociological knowledge.

LOOMIS, Ch. P. and J. A. BEEGLE / Rural social systems. New York, York, 1951.

A well-known handbook describing the social systems within the agricultural population.

LIKERT, R. / New patterns of management. Mc Graw-Hill, New York, 1961.

MACCOBY, E. M., T. N. NEWCOMB and E. L. HARTLEY / Readings in social psychology. 3rd ed., Halt and Co, New York, 1958. 674 pp.

The book contains among others, the following contributions: HYMAN and SHEATSLY Some reasons why information campaigns fail (164-173); LAVIN; Group discussion and social change (197-212);

COET and FRENCH: Overcoming resistance to change (233-250).

MEHTA, B. H. / Social experiments in extension projects. Ind. J. Soc. Wk., 23 (1962) : 53-56.

MEZERIK, A. G. / Social factors in economic development of underdeveloped countries. International Review Service, 554, New York, 1959. 41 pp.

A brief but fairly complete survey of the role of social factors in the economic development of developing countries. With regard to rural development some programmes for reorganization of agricultural production are discussed. It is stated that the community approach has been by far the most successful of the methods introduced in non-communist countries.

MOSHER, A. T. / The sociologist in agricultural development. Rur. Soc., 29 (1964) 1 : 18-29.

The author states that the basic question is not how society is organized, but what stimulates change, not who visits whom, but what makes communication evocative, not how stability is maintained, but how constructive instability can be provoked, not what the norm is, but how the deviant can be more effective, how aspirations and selfconfidence can be heightened. What is needed at early stages of development is less formal organization rather than more. Change can come from persons, it can come neither from natural resources, nor from capital, nor from social organization. Sociologists must help by cognizance of the centrality of individual persons to the development process and not centre attention on the mechanics of organization (WAERSA 1964-2011).

NAIR, S. P. / Agricultural extension; its socio-psychological aspects. Kurukshetra, 12 (1964) 12 : 12-22.

NAIR, S. P. / Social factors in the acceptance of improved practices. AICC Econ. Rev., 15 (1963) 13 : 35-39.

A review of the work done elsewhere in the world on methods and processes of adopting improved technology and farm practices and the relevant factors associated with them. Traditionally accepted values and practices are challenged by the new element of change sought to be introduced. Adoption of a new technique is not a single act, but a process with a series of stages in adoption.

Research studies in various countries focus on the importance of the farmers' social characteristics in the adoption or rejection of directed change, sponsored by external agencies. The basic factors that influence

the farmers' adoption processes are: cultural background, farmers' age, education, farm ownership, farm size and finally participation in formal groups (WAERSA 1964-174).

OSTERKAMP, H. / Gahuta, ein liberianischer Dorf im Wandel. Z. Ausl. Landwirtsch., 4 (1965) 2 : 136-148, 178-190.

This socio-economic case study, based on direct questions put to different households in a village in the hinterland, revealed the following main changes in the agricultural sector: 1. a break in the predominance of subsistence farming; 2. the increased production of cash crops (since coffee, sugar cane); and 3. demand for production and consumer goods. Changes were also noted in the behaviour and attitudes of the population since the money economy created new demands that can only be satisfied slowly. Now agricultural employment is therefore spreading rapidly while the social structure of the village lags behind the new development; it is also creating social insecurity mainly for the old and dependent members of the large families (WAERSA 1965-2061).

PERK, A. / The labour pattern as a sociological aspect of agricultural extension work. Neth. J. Agr. Sci., 11 (1963) 5 : 378-386.

Economic development can be influenced to a considerable extent by local social situations, which often lead to what appears to the agricultural expert to be unconquerable opposition. The labour pattern is an important element of the social situation. Agricultural extension can only be effective when it is possible to estimate in what way and to what extent the social situation should be altered, so as to bring about changes in the economic attitude of the farmers, thus making them more amenable to the introduction of reasonable innovations.

GRABHU, P. H. / Social psychology of community development. Ind. J. Soc. Wk. 21 (1960) 1 : 1-12.

Probleme der Beratung. / Arbeiten der Landwirtschaftlichen Hochschule Hohenheim, Bd. 26, Ulmer, Stuttgart, 1964. 214 pp.

Collection of papers. H. ALBRECHT's contribution on American adoption and diffusion research is followed by A. BUHLER's, analysis of frequency and seasonal distribution of farmers' conversations in connection with demonstration and its implications for advisory work. H. ENGELHARDT discusses the development of the French state extension service since 1959 by describing the "Groupements de Vulgarisation de Progrès Agricole" in the Somme department. Other papers cover the farmers' readiness to accept given

advice (J. HARIS), the psychological bases of extension, with reference to Lewin's field theory (E. HRUSCHKA), the use of models in decision making (K. MEINHOLD), experience and methodology of agricultural extension workers (U. THOMAS) and relations and cooperation between the general agricultural advisory services and the rapidly increasing advisory activities of private firms, such as fertilizer and machinery producers and distributors (H. ALBRECHTS and A. ZÜFLE) (WAERSA 1964-1942).

ROGERS, E. M. / Social change in rural society. Appleton-Century-Crafts, Inc. New York, 1960. 490 pp.

An introduction to agricultural sociology. The author is primarily interested in agricultural extension.

RÖLING, N. G. / Towards the inter-disciplinary integration of economic theory and rural sociology. Soc. Rur., 6 (1966) 2 : 97-117.

Rural social guidance in the Netherlands / Ministry of Agr., Fishery and Food, The Hague, 1958. 17 pp.

SMITH, M. G. and G. J. KRUIJER / A sociological manual for extension workers in the Caribbean. Univ. College of the West Indies, Printers, Kingston, Jamaica. 1957. 255 pp.

The authors aim with this book to provide agricultural and extension workers with information about West-Indian folk organization, and about survey and communication techniques and problems.

STRAUS, M. A. / Cultural factors in the functioning of agricultural extension in Ceylon. Rur. Soc., 18 (1953) 3 : 249-256.

TINKER, H. / The human factor in foreign aid. Pac. Affairs, 32 (1959) 3 : 288-297.

Most development programmes have fallen short of their objectives. The author regards the main reason for this failure to be the fact that insufficient attention is given to the human factor, to the existing local social attitudes.

TULLY, J. / New concepts in extension training. J. Austr. Inst. Agric. Sci., 31 (1965) 4 : 309-310.

Traditional extension methods are invariably effective in bringing about simple changes in farm techniques, e.g. Rogos for DDT. However it is advocated that new understanding and new approaches based on the findings of behavioural sciences, in particular sociology, social psychology and

education, are needed in advisory work to handle the more complex and more important situations (WAERSA 1966-1866).

YANG, H. P. / Fact finding with rural people. Dev. Paper 52, FAO, Rome, 1955. 138 pp.

An introduction to the techniques of social investigations which can also be useful to evaluation.

AGRICULTURAL ECONOMY

DALTON, G. / The development of subsistence and peasant economies in Africa. Int. Soc. Sci. J. 16 (1964) 3 : 378-389.

To understand the social implications of rural African development, one must first understand the relation between traditional social organization and economic structure in primitive and peasant communities. Case studies show that unsuccessful development occurs where an increase in production for sale is not accompanied by technological and cultural innovations: traditional economy and society are forced to change without new modes of integration being formed and without sustained growth in income forthcoming. Successful development requires eventually reinforcing innovations in economy, technology and culture which induce sustained growth in income over successive generations, and integrate the local community with the region, the nation and the world (WAERSA 1964-2916).

DRUCE, P. C. / Rural extension and the agricultural economist. Aust. J. Agr. Econ., Melbourne, 10 (1966) 2 : 97-111.

The role of the agricultural economist in rural extension is discussed with particular reference to the changing structure of extension, exemplified by the development of private consulting services and the changing orientation of extension from purely technical considerations to problems of management. The status of the agriculturist generally and of the extension worker in particular, is also examined and it is concluded that the status of extension as a profession must be raised if the results of technical and economic research in agriculture are to be utilized effectively (WAERSA 1967-3226).

ERES, A. / Der Gebrauchswert einiger ökonomischer Methoden in der Betriebsberatung. Agrarwirtschaft, Hannover, 13 (1964) 3 : 94-97. English summary.

Various planning methods have been used in Israel in order to facilitate the decision-making process in farming. Simplified programme-planning

and linear programming have increasingly replaced traditional budgetting methods and have both been used successfully. Successful application requires close cooperation with farm managers (WAERSA 1964-2253).

ETIENNE, G. / *L'agriculture indienne on "l'art de possible"*. Collection "Tiers Monde", Presses Universitaires, 1966. 364 pp.

This analysis of the Indian rural economy, based partly on investigations carried out in Uttar Pradesh, Madras and Maharashtra, examined development in the Five-Year-Plan, and the basic factors of agricultural policy. Doubt is expressed about the reliability of the available statistics. The role of agrarian reform, community development, Panchayati Raj, cooperatives, and the Package Programme are briefly reviewed and evaluated. Irrigation is shown to be of primary importance, but the large irrigation projects have not fulfilled expectations, due to inadequate organization of the follow-up. Second in importance is the drive to increase use of fertilizers, which is limited by insufficient production and, poor distribution. Agricultural development should be organized by concentrating labour and capital on irrigated regions where food production can be increased merely by improving the organization of irrigation management, which will compensate for the inevitable deficits in the poorer regions (WAERSA 1967-2389).

FOGG, C. D. / *Economic and social factors affecting the development of smallholder agriculture in East Nigeria*. *Econ. Dev. and Cult. Change*, 13 (1965) 3 : 278-292.

The author concludes that the economic factors are of greatest importance because they are readily identifiable and more easily manipulated than the social factors. Although social barriers to development may be overriding in select cases, one can generally, at least in Eastern Nigeria, find enough economic motivated people to absorb the capital set aside by the government for agricultural development. To date, economists and sociologists have largely neglected the study of smallholder agriculture per se and concentrated on the larger and more spectacular settlement and consolidation schemes.

GROENVELD, D. / *Investment for food*. North Holland Publ. Cy., Amsterdam, 1961. 146 pp.

Special attention is paid to capital investment which the author considers essential for increasing food production to a satisfactory level in the period 1960-1980. He estimates the amount of public investments which will be necessary in the next 20 years, taking into account the supposition that the increase in production during this period will have to be 10% higher than in recent years to meet the estimated food requirements. The thesis is based

on extensive statistical material that has been obtained from several leading sources, but which is however of unequal value, while information on many places is lacking (WAERSA 1962-1125).

MOSHER, A. T. / Interrelationships between agricultural development, social organization and personnel attitudes and values. New York State College of Agriculture, Cornell Univ., Comparative Extension Publication Number. Ithaca, 1960. 40 pp.

POUROS, T. L. / Agrarian reform and the development of agricultural cooperative societies within the agrarian reform regions. Inform. Land Reform, Land Settlement Co-op., 1 (1965) : 32-37.

The initial consequence of agrarian reform in Iraq has been a decline of agricultural output, because the former tenants could not cope with their new responsibilities. In order to ameliorate this situation, agricultural co-operative societies supervised by government officials and assisted by extension officers are being established. Lack of trained co-operative personnel hampers this development. A co-operative training institute provides training at two levels for both co-operative and extension workers (Tropical Abstracts 1966-735).

EDUCATION

BARRACLOUGH, S. / Land reform and education in Latin America. In: Information on land reform, land settlement and co-operatives. FAO, Rome, 1963. 39 pp.

Land reform will not be consistent with rising farm production in the start run unless it is accompanied by immediate massive efforts of technical assistance and supervision and general education.

BHATAWDEKAR, M. V. / The role of education in economic development. Artha Vijnana, 7 (1965) 4 : 285-295.

The general belief in the importance of education in economic growth stems largely from three factors: 1. the fact that education is better and far more widespread in the advanced countries; 2. the observation that a substantial part of the increase in national income remains unexplained after allowing for the contribution of the traditional factors of production; 3. empirical data suggesting that the return on investment in education is considerably higher than that on the investment in physical capital. Here an attempt is made to place education in proper perspective in the developing countries,

i.e. by giving more adequate guidance to planners concerned with the central problem of allocating the right amount of resources to education (WAERSA 1966-1848).

BOSE, J. / Educational techniques in community development. Orient Longmans, New Delhi, 1965. 246 pp.

The success of community development depends primarily on the educational techniques it uses to bring about the necessary social and psychological change in the people. This book deals with basic techniques as group discussions, talks, audio-visual aids, results and method demonstrations, field trips, etc.

CLERCK, M. de / L'éducation des adultes en vue du développement rural. Rev. Sud-est Asiatique (Bruxelles), 1 (1963) : 1-50.

Describes a new approach to adult education, with examples from Vietnam. The attitudes and actions of the educator and person being taught a particular bit of knowledge or technique are studied from all aspects, as also their natural and cultural surroundings and their rural social group. Adult education in traditional peasant societies is not only a question of teaching people how to read and write or raising their level of education; it often means substituting new information or techniques for others which the people have known or used for generations. Some notions, for example, on how to raise agricultural production or protect oneself against contagious disease, are not only new, they are "foreign". They may class with the society's beliefs, mores, or sense of values (WAERSA 1964-1927).

Education and agricultural development / UNESCO, Paris, 1963. 62 pp.

In planning rural education constant cooperation between educators, economists and sociologists is indispensable, so that agricultural education and training will be related to the needs and characteristics of the rural social environment.

FLIEGEL, F. C. / Literacy and exposure to instrumental information among farmers in Southern Brazil. Rur. Soc. 31 (1966) 1 : 15-28.

Literacy and level of education are examined as predisposing factors in exposure to information about modern farming methods. Data from 142 operators of small farms in S. Brazil show that, except for a necessary association between literacy or level of education and reading of printed farm information, these variables do not serve in a general way to enhance exposure to information about agriculture. It is concluded that the influence

of literacy and basic education on the process of agricultural development may not be direct. Quality of education, and the articulation of education with available means of increasing economic productivity, are among the factors which should be analyzed to arrive at a sound basis for policy decisions regarding investment in education in underdeveloped areas (WAERSA 1966-2942).

GISSER, M. / Schooling and the farm problem. *Econometrica*, 33 (1965) 3 : 582-595.

An econometric analysis of the relationship between formal education of farmers and farm income, concentrated on two main aspects: 1. the effect of more education on migration from agriculture; 2. the effect of education on increasing farm productivity. Regression analysis fitted to reduced-farm supply and demand equations, using cross-section data, test the basic hypothesis. Results show the migration effect, of reducing the supply of labour, which overshadows the productivity effect of more schooling on improving farm income. Policy implications from the study are clear. A 10% increase in schooling in farm areas would induce a 6-7% outmigration of farm labour and raise farm wage rates by about 5%. Cost estimates on raising education levels are also presented (WAERSA 1966-1860).

HALMOS, P. / The faith of the counsellors. London, 1965. 220 pp.

HARMS, E. and P. SCHREITER (Eds.) / Handbook of counseling techniques. Oxford, 1963. 506 pp.

This volume contains 36 papers of competent experts in specialized fields. The editors have purposely limited the scope of this handbook to counseling in the field of human relations. The chapters are grouped under the heads: 1. children and youth; 2. family and community; 3. employments and vocation; 4. religious; 5. special problems.

MOSEMAN, A. H. (Ed.) / Agricultural sciences for the developing nations. American Association for the Advancement of Science, Publ. 76, Washington, 1964. 221 pp.

This volume contains the papers presented at a symposium held at Cleveland, Ohio in Dec. 1960 to discuss the role of agricultural science and technology in the acceleration of economic progress in developing nations. The twelve contributions are classified according to 4 main subjects, viz. 1. characteristics of agricultural systems in emerging nations; 2. research to devise and adopt innovations; 3. education and development of human resources; 4. establishing indigenous institutions to serve advancing agriculture.

Provisional report on the structure and orientation of intellectual investments in agriculture in relation to economic and social developments. O.E.C.D., Paris, 1962. 130 pp.

Important data on the costs of research, education and agricultural extension in several countries and the relation between illiteracy and agriculture in industrial level. It is concluded that intellectual investments are very valuable in agriculture.

SIZER, L. M. and W. F. PORTER / The relation of knowledge to adoption of recommended practices. West Virginia Agr. Exp. Sta. Bull. 446, 1960. 12 pp.

AGRICULTURAL RESEARCH AND EXTENSION

BRUNNER, E. de S. / An overview of adult education research. Adult Education Association of Amerika, Chicago, III, 1959. 279 pp.

Investigations on extension problems by education psychologists, sociologists and social psychologists.

ARNON, I. / The role of agricultural research in developing countries. World Crops, 16 (1964) 3 : 20-23.

On the basis of experience with agricultural research in Israel, the following principles are considered generally valid: 1. local research is indispensable for any developing country; 2. long-term basis research and short-term applied research are both needed, they should not be relegated to different institutes or teams of research workers; 3. research on new crops may be equally important as research on existing crops; 4. communication of results to farmers of different ethnic groups should be entrusted to extension officers belonging to the same group as the farmer; 5. means must be made available to the farmer, so that the recommendations of the research institutes can be translated into realities (Tropical Abstracts 1965-282).

Articulation de la recherche et de la vulgarisation au niveau des structures. Cah. Agr. Pratique Pays Chauds, 3 (1965) : 169-172.

The theme of this paper is the close collaboration between research and extension services necessary for the successful introduction of improved farming practices in tropical countries. In Madagascar and Dahomey a solution has been sought by the creation of regional units in which both services participate. A regional experiment station, a network of trial fields under the supervision of a research officer, as well as a series of

simple trials on farmers fields chosen and supervised by the extension staff, lay the foundation for the task of the extension service in popularizing the desired improvements. An important task for the research officer is the instruction of the extension personnel by means of technical publications, a joint study of extension methods, and the discussion of experimental techniques and results.

COZENS, L. E. / Production economics, averages and standards in research and extension. *Mest. J. Agric. Econ.*, 9 (1965) 2 : 111-128.

Though theoretically desirable, production functions are difficult both to obtain and to use. Farm standards have generally been the main vehicle for giving farm management advice, despite their defects. This article puts an argument for standards but concludes that more effort can be made to use standards derived from mathematically defined production functions (WAERSA 1966-2011).

FORBES, A. P. S. / Relations between extension and research services in Tanganyika. *Dept. of Tuku. Coop. Misc. 2*, London, 1962. 74-75 pp.

Although there is formal division between extension and research sources in Tanganyika, these frequently overlap. This paper describes the harmonious relations that have been established between specialists and extension workers (WAERSA 1963-2521).

Liaisons entre recherche et vulgarisation. *Cah. Agr. Pratique Pays Chauds*, 1 (1965) : 55-58.

In order to promote the adoption of the results of research in the rural milieu, collaboration between research and extension services must be strengthened. To reach this goal, the specialized institutions in the French speaking countries of Africa and in Madagascar, such as IRAT (Institute for Research on Tropical Agronomy and Food Crops) have decentralized agronomic research to the level of the agro-economic regions, and created regional units for experimentation and field research. The task of the research worker in the decentralized stations is rather similar to that of the consultant.

MONTGOMERY, G. / Farm management research and agricultural development in India. *Illinois agric. Econ. Urbana*. 4 (1964) 3 : 38-45.

Research tasks for farm management in low-income countries are identified on the basis of experience in India. The focus in the paper is on the persons responsible for such identification, the extent and nature of needed farm management research and the responsibilities of teachers in U.S. land

grant universities (WAERSA 1965-1008).

SUBRAMANIAM, C. / Farm management and accelerated agricultural growth. Fm. Mgmt. Notes, Asia Far East, 2 (1966) 2 : 1-4.

The role of farm management research and extension work in India is briefly reviewed. An important field for further investigation is the process of decision-making of the farmer. To meet agricultural shortages programmes have been given a new orientation and stress has been laid on encouraging the adoption of physical inputs in an integrated manner, i.e. new varieties, with intensive fertilizer application, plant protection etc. This involves greater risk for the small cultivator with his scarce resources and it is important for economists and management experts to evaluate the economics of such measures in terms relevant to the small cultivator with the help of related disciplines like agronomy, sociology and psychology. The development of extension work and the teaching of farm management at agricultural institutes are also problems to which more attention must be given (WAERSA 1967-669).

VERVELDE, G. J. / Relationships between agricultural research, instruction and extension. Rehovoth, (Israel); 1963. 4 pp.

Since research instruction and extension serve the farmer best if they act in combination; every effort should be made to integrate their activities. Each branch has a part in the cooperation, it is not an independent part. Each should be familiar with the philosophy, aims, and programme of the others. The field of action should be dovetailed and probably somewhat overlapping without duplication of tasks (WAERSA 1964-1031).

BIBLIOGRAPHIES

Bibliografia sobre extension agricola (Extension bibliography). / Serie Bibliografica, Institute Nacional de Tecnologia Agropecuaria, tomo 5, Pergamino, 1966. 225 pp.

The 2420 references in this bibliography are classified under four major categories: 1. general documentation; 2. specialized documentation teaching; 3. specialized documentation rural sociology; 4. auxiliary documentation. It also contains an author alphabetical index and a geographical index.

Bibliography on community development. / Bibliographical series, N.I.C.D. National Institute of Comm. Dev. Govt. of India, Mussoorie, 1962. Up to Sept. 1961.

BYRN, D. / Bibliography on foreign-based Extension Research; 1950 through 1962. Extension Service Circular no 543, U.S. Dept. of Agric., Washington, 1962. 44 pp.

An extensive survey of agricultural extension literature except the most recent. 207 refs.

Community Development / United Nations Series on Community Development, U.N., New York, 1960.

A selective booklist.

FREITAG, R. S. / Agriculture development schemes in sub-Saharan Africa. A bibliography. Library of Congress, Washington, 1963. 189 pp.

Agricultural development can be interpreted in different senses. The more important aspect for the purpose of this bibliography is agricultural development which means the improvement of the cultivators' efficiency by teaching them to adopt more advanced methods of cultivation. It contains nearly 1800 annotated titles, mostly between 1945 and 1962.

JANTZEN, C. R. and I. ISHINE / A working bibliography on community development. Bibliographic series, Institute for Community Development and Services, Michigan State University, no 2, Detroit, 1962. 33 pp.

Mc. CLUSKY, F. D. / The Audio-visual Bibliography. Brown, Dubuque.

MYREN, D. T. / Bibliography. Communications in agricultural development. Londres 40, Mexico, 1965. 101 pp.

The references have been divided into eight categories. Each category is made up of a basic list assembled in 1963, and a supplement made up of references reviewed during 1964-1965: 1. theory and case studies in economic and agricultural development; 2. processes by which knowledge is produced or organized; 3. the economic importance of communicating knowledge; 4. theory and research on the transmission of and responses to knowledge; 5. experience and research with respect to specific media, channels and messages; 6. audience studies in newly developing areas; 7. rural social change, the process and consequences of diffusion and adoption of innovations; 8. organization for information transmission: extension and information experience.

Obras básicas en comunicación para el desarrollo. / Comp. by J.D. BORDENAVE, Turrialba, Instituto Interamericanos de Ciencias Agrícolas, Costa Rica, 1965. 125 pp.

This bibliography contains long, signed abstracts in Spanish of 38 books. These books, a highly selected collection, have been chosen because they are entirely or partly concerned with the role of communication, in the sense of transmittance of information between people, in the economic and social development of nations and smaller communities. Several of them have a bearing on techniques of agricultural extension and acceptance of new agricultural methods by the farmers.

Review of Extension Research. / Washington.

Edited annually.

ROGERS, E. M. / Bibliography on the diffusion of innovations. Dept. of Communications, Michigan State University.

Annually supplemented.

Selected bibliography on agricultural extension and community development programmes with emphasis on developing countries. National Agricultural Extension Centre for Advanced Study, Publ. no 16, Madison, 1962. 35 pp.

The 265 references cited (from 1945 till 1961) are divided in: 1. wide world application; 2. Far East countries; 3. Middle and Near East countries; 4. African countries; 5. European countries; 6. Australia; 7. Central and South American countries. References are further classified according to: books, bulletins, periodicals, and unpublished theses and seminar reports. Some references are annotated, but the number of pages is not given.

THOMAS, U. / Bibliography on Agricultural Extension. FAO, Rome, 1964. 871 pp.

About 10.000 items on extension and related subjects were chosen out of more than 100.000 publications, which appeared before the end of 1960. Most of them concern countries in Western Europe and North America. It gives also an extensive list of some 750 periodicals related with agricultural extension, existing round 1960. Specially those written in German language are fairly complete.

ABSTRACTING JOURNALS

African Abstracts

International African Institute. 10/11 Fetter Lane,
London, EC 4.

Quarterly.

Sociological Abstracts

Sociological Abstracts Inc.
15 East 31st Street, New York 10016.

Irregularly.

Tropical Abstracts

Royal Tropical Institute, Mauritskade 63,
Amsterdam (Neth.).

Monthly.

World Agricultural Economics and Rural Sociology Abstracts

Commonwealth Agricultural Bureaux, Farnham
Royal Bucks (Gr. Britain).

Quarterly.

PERIODICALS

Adult Education

Adult Education Association of the United States of America. 1225
Nineteenth Str., Washington (U.S.A.).

Quarterly.

African Social Research

Institute for Social Research, Univ. of Zambia, Manchester. Univ. Press,
Manchester (Gr. Britain).

América Latina

Rio de Janeiro (Brazil).

Quarterly

American Psychologist

American Psychological Association, 1333 Sixteenth Str., Washington
(U.S.A.).

Monthly

American Sociological Review

49 Sheridan Avenue, New York (U.S.A.).

Bi-monthly.

Audiovisual Communication Review

Department of Audiovisual Instruction of the NEA, 1201 Sixteenth Str.,
Washington (U.S.A.).

Quarterly.

Behavioural Sciences and Community Development

National Institute of Community Development, Hyderabad (India).

Semi-annual, started in March 1967.

British Journal of Sociology

Routledge and Kegan Paul, 68-74 Carter Lane, London EC 4.

Quarterly.

Community Development Journal

22 Kingston Road, Manchester (Gr. Britain).

Monthly.

Economic Development and Cultural Change

Univ. of Chicago Press, Chicago (U.S.A.).

Quarterly.

Etudes Rurales

Mouton & Co., Paris (France).

Quarterly.

Extension in Asia

Food and Agriculture Organization of the United Nations, Rome.

Monthly.

Fatis

International Review of Agricultural Development, Published in English and French, OECD, Paris (France).

Quarterly.

Human Organization

Society for Applied Anthropology, Univ. of Kentucky Press, Lexington, Kentucky (U.S.A.).

Quarterly.

Human Relations

Tavistock Publications, 11 New Fetter Lane, London EC 4.

Quarterly.

Indian Journal of Extension Education

Indian Society of Extension Education, New Delhi (India).

Quarterly.

International Development Review

Society for International Development, 1346 Connecticut (U.S.A.), Avenue Washington.

Quarterly.

International Review of Community Development

2 Piazza Cavalieri di Malta, Rome (Italy).

Irregularly.

Journal of Communication

National Society for the Study of Communication.

Allan Press, Lawrence, Kansas (U.S.A.).

Quarterly.

Journal of Cooperative Extension

National Agricultural Extension Centre for Advanced Study, Univ. of Wisconsin, Madison (U.S.A.).

Quarterly.

Journal of Social Psychology

Journal Press, Provincetown, Massachusetts (U.S.A.).

Bi-monthly.

Journal of the Pakistan Academy for Rural Development

Comilla (Pakistan).

Kurukshetra

Publications Division, P.B. 2011, Delhi-6 (India).

Monthly.

Man in India

18 Church Road, Ranché, Bihar (India).

Quarterly.

Revue Tiers-Monde

Institut d'Etude du Développement Economique et Social, 58 Boulevard Arago, Paris (France).

Quarterly.

Rural Sociology

Rural Sociological Society, Univ. of Wisconsin, Madison (U.S.A.).

Quarterly.

Social Forces

Williams and Wilhous Co., Baltimore 2 (U.S.A.).

Quarterly.

Sociologi Ruralis

European Society for Rural Sociology. Van Gorcum, Assen (Neth.).

Irregularly.

Price \$ 2.50

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