RELATED SCIENCES

RURAL SOCIOLOGY AND SOCIAL PSYCHOLOGY


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


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 (P. 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).


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).


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.


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).


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


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.


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 Daghghara 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).


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.


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.


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


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).


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.


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 self-confidence 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).


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).


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).


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.


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).

RÖGERS, E. M. / Social change in rural society. Appleton-Century-Crafts,
An introduction to agricultural sociology. The author is primarily interested
in agricultural extension.

RÖLING, N. G. / Towards the inter-disciplinary integration of economic

RURAL social guidance in the Netherlands / Ministry of Agr., Fishery and Food,

SMITH, M. G. and G. J. KRUIJER / A sociological manual for extension
workers in the Caribbean. Univ. College of the West Indies, Printers, Kingston,
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 exten-

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.

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).

An introduction to the techniques of social investigations which can also be useful to evaluation.

AGRICULTURAL ECONOMY

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).

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).

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).


This analysis of the Indian rural economy, based partly on investigations carried out in Uttar Pradesh, Madras and Maharashatra, 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).


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.


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 inequal value, while information on many places is lacking (WAERSA 1962-1125).


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


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.


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).


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.


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).


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.


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).

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).


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.

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.

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.


AGRICULTURAL RESEARCH AND EXTENSION


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).


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.


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).


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).


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.


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
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).

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


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.


Up to Sept. 1961.


An extensive survey of agricultural extension literature except the most recent. 207 refs.


A selective booklist.


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.


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.


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.


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.
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
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
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
    Quarterly.

Indian Journal of Extension Education
Indian Society of Extension Education, New Delhi (India).
    Quarterly.

International Development Review
    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 Wilhuis Co., Baltimore 2 (U.S.A.).
Quarterly.

Sociologi Ruralis
European Society for Rural Sociology. Van Gorcum, Assen (Neth.).
Irregularly.