

DE TOEPASSING VAN SOCIOLOGISCH ONDERZOEK

A.W. van den Ban, afdeling voorlichtingskunde, landbouwhogeschool, Wageningen.

Samenvatting

Naast zuiver sociaal-wetenschappelijk onderzoek, dat er op gericht is de wetenschappelijke theorie en onderzoeksmethoden te verbeteren, bestaat er behoefte aan toegepast onderzoek, dat tracht de informatie te leveren, die nodig is om verantwoorde beslissingen te nemen t.a.v. konkrete problemen. Voor dit toegepast onderzoek is een nauwe samenwerking wenselijk tussen de onderzoeker en de beleidsfunktionarissen, vooral over de formulering van het onderzoeksprobleem en de analyse en interpretatie van de onderzoeksresultaten. Een goede samenwerking vereist dat de beleidsfunktionaris tracht nauwkeurig te formuleren welke informatie hij nodig heeft om verantwoorde beslissingen te nemen en de onderzoeker er zich voor inzet om zo mogelijk deze informatie te leveren. Niet voor alle problemen kan een specifiek onderzoek ingesteld worden. Vaak zal men zijn beslissingen moeten nemen op grond van de bestaande sociaal-wetenschappelijke kennis. Bij de mobilisatie van deze kennis kunnen sociaal-wetenschappelijke adviseurs een zeer nuttige functie vervullen. Helaas ontbreekt mij de tijd om specifiek voor deze konferentie een paper te schrijven. Daarom heb ik gebruik moeten maken van een paper, dat ik anderhalf jaar geleden voor een ander doel heb geschreven. Herziening was vooral wenselijk, omdat het onder leiding van Ronald Lippitt staande Center for Research on the Utilization of Scientific Knowledge aan de Universiteit van Michigan inmiddels op dit gebied enkele belangrijke studies heeft gepubliceerd.*

* R.G. Havelock et.al., Planning for Innovation through the Dissemination and Utilization of Scientific Knowledge, Ann Arbor, 1969 en A Guide for Innovation in Education, Ann Arbor, 1970.

RELATIONSHIPS BETWEEN THEORY AND PRACTICE IN RURAL SOCIOLOGY)¹

Paper presented at the seventh congress of the European Society for Rural Sociology, Münster, Germany, August 12, 1970
Workshop 10

A.W. van den Ban, Professor of Extension Education,
Agricultural University, Wageningen, Netherlands.

1. INTRODUCTION

Quite a number of rural sociologists all over the world believe that their research reports could be utilized more effectively in improving the decisions made by practitioners. What can the rural sociologist do to stimulate the utilization of his research findings by practitioners? This question will be discussed in this paper in a rather hypothetical way, whereas the other papers in our workshop will give some case studies of this problem. Probably they will indicate the need to revise some of our hypotheses. The difficulty is that rural sociologists have given considerable attention to the factors influencing the adoption of agricultural research findings)², but as far as I know they never studied the adoption of their own research by practitioners carefully. Therefore the main objective of this paper is to stimulate discussion.

The approach I take in this paper is based on a collaboration between rural sociologists and practitioners. I realise that a different approach is possible on the basis of the sociology conflict. In some situations rural sociologists can do research in order to force the practitioners to change their behavior. I will not discuss this approach here, because

- 1. lack -

)¹ This paper draws heavily on: A.W. van den Ban, Utilization of Findings by practitioners, Ch. X in: G.D. Hursh, Survey Research Methods in Developing Countries, Praeger, New York, in print.

Other important publications in this field are: T.L. Eidell and J.M. Kitchel eds., Knowledge Production and Utilization in Educational Administration, Eugene, Oregon, 1968,

M.F. Millikan, Inquiry and Policy: The Relation of Knowledge to Action, in D. Lerner, ed., The Human Meaning of the Social Sciences, World Publishing Cy., Cleveland, 1958, pp. 158-180 and

L.S. Cottrell and E.B. Sheldon, Problems in the Collaboration between Social Scientists and Practising Professions, The Annals of the American Academy of Political and Social Science, 346 (1963) pp. 126-137.

)² See E.M. Rogers, Communication of Innovations, Free Press, New York in print.

1. lack of knowledge on the conditions in which the sociologists achieve their goals by creating such a conflict,
2. I believe that creating a conflict is only in exceptional cases the most effective way in Europe to achieve the goals of the rural sociologists,
3. space limitations.

Some people believe that the problem of underutilization of behavioral science research findings could be solved by writing better reports in a non-technical language, drawing better charts, making more and better teaching films and cranking up transmitters in the mass media. Without denying that this approach can be of some help, I believe that the real problem is more complicated. I assume that practitioners will only use research findings to solve their problems in a new way if:

1. they realize that they have a problem;
2. they define their problem in such a way that it can be solved;
3. they believe that research can provide them with the information they need to solve this problem;
4. they have confidence in the capability and the motives of the researcher;
5. they know and understand the findings;
6. they are willing to experiment with new solutions to the problem;
7. they are in a social position to do so;
8. they believe that they can obtain the money and other necessary resources to do so.

The probability that these conditions are fulfilled will be greatly increased by: (1) keeping the practitioner adequately informed at each significant step in the research process; and (2) by involving the practitioner in the construction of the research design and general interpretation of the results as far as mutually is desirable.

2. PURE AND APPLIED RESEARCH

I am not saying that all behavioral science research should necessarily be done with future application in mind. Undoubtedly there is an urgent need for pure research, which only aims to contribute to the theory and techniques of the discipline. Sometimes researchers, overaware by this need, apply funds, received for applied research, on pure research. Consequently the practitioners may become dissatisfied with the return on the money invested in behavioral science research. Usually research by commercial research agencies is not done in this way. However, at universities the

-prestige-

prestige frequently goes to those who have build a new theory and not to those who have helped practitioners to solve an important problem. Rural sociology is, in my opinion correctly, mainly an applied behavioral science. As an applied science it should select the problems with important social consequences and attempt to find a solution. This means that frequently individual cases have to be studied without the objective to generalize just as an engineer is doing in building a bridge. To solve this problem different disciplines often have to collaborate and non-scientific information will be used, e.g. on political forces affecting the problem. To what extent are we providing the practitioners with the important information they need for their decisions? At this moment the most important social problem in West-European agriculture is probably that a number of farmers will have to choose another occupation in the near future. Can we tell the policy makers how they can stimulate this and decrease the troubles for those involved in this process?

3. COOPERATION BETWEEN RESEARCHERS AND PRACTITIONERS IN THE RESEARCH PROCESS

This section will discuss cooperation between researcher and practitioner, whose problems the former attempts to solve. In section 5 we will give attention to the dissemination of research findings to other practitioners.

Sometimes the rural sociological research is done for one practitioner, e.g. an extension officer, who is responsible for the extension program in a certain area. Sometimes for an organization, e.g. the national extension service. Here it is impossible to cooperate with all members of the organization. However, a committee could be formed of staff members at different levels with whom the research worker could discuss the problems. This committee should be responsible for the communication with the staff of the organization.

3.1 Formulation of the research problem

Cooperation between the rural sociologist and the practitioner can increase the chance that the findings will be utilized, because (1) it enhances the probability that the information obtained will be valuable for the practitioners' decisions and (2) it decreases the psychological distance between the researcher and the practitioner.

It is an exception that valuable research can be done by accepting the formulation of the research problem by the practitioner. Frequently he is so personally involved that he cannot dissociate himself sufficiently to appreciate the major aspects of his problem. In other situations the problem is so wide that it is impossible to give reliable answers to all questions in one study. In a whole set of studies many aspects of the life of the group in which the practitioner is interested could be investigated. When the researcher formulates the research problem himself, the research is often not relevant to policy decisions. For instance about 200 studies found that there is usually positive correlation between education and the adoption of innovations. In the long term the extension administrator can use this result to increase the adoption level of his clients by improving their level of education. I know of only one study investigating the relationship between the educational level of the extension officers and the adoption of innovations by their clients.)¹ These findings are much easier implemented by an extension administrator, especially if he is increasing the size of his extension staff. In discussion with the practitioner of the decisions he will have to take, together with information available, the researcher can discover the major gaps in this information. Some of these gaps might be filled by research, but we cannot hope that this will be the case with all of them in the near future, due to lack of time, money and the present state of the behavioral sciences, which does not allow us to obtain reliable information on important topics. An example of the latter is the relative importance farmers will attach to income and leisure. 10 or 20 years from now. This information is essential for decisions regarding the future structure of family farms.

The cooperation between researcher and practitioner in the formulation of the research problem can cause a number of difficulties. Due to internal friction in an organization a practitioner may encourage a research worker to investigate his specific problem in order to improve his (the practitioner) position in this struggle. It also happens that one asks for research as window dressing; for prestige reasons, but not to use the findings. Counseling by the researcher on the way in which the practitioner views his problems might bring such points out in the open.

)¹ Extension Evaluation, Allahabad Agricultural Institute, 1957.

Whether or not research findings will be utilized depends to a large extent on the consequences they have for different practitioners. Application of market research findings often increases the income of the decision makers in the business firm which asked for this research. Rural sociological research is often done for government agencies, where such an increase in income is improbable. It might have other advantages for the officers involved such as pride in the accomplishment of a better service to their clients, or a decrease in the uncertainty of their decision making. However, it is also quite possible that the research findings only involve more work for the officers who are expected to utilize them. It is useful to explore these consequences at the formulation stage of the research problem, in order to exclude the possibility of the findings never being applied.

It is no exception that the practitioners ask only for research when they face difficulties in their work. Often by this time trouble shooting is the only possibility left, whereas trouble prevention might have been much more effective. It seems that there are two ways in which one can stimulate requests for research being made at the right time: (1) informal personal relations between the rural sociologist and the practitioner, enables the former to direct the attention of the latter to the possibilities of research, and (2) training of the practitioner which makes him appreciate the possible help he can get from rural sociological research.

3.2 Deciding on research methods

Decisions regarding research methods are usually considered to be the province of the researcher, because of his professional training. However, I believe that here advice from the practitioner can be useful (1) to be certain that the research remains focused on the problems of the practitioner; (2) to profit from the information on the local situation that the practitioner has, (probably the local staff of the organization can do this better than the director), and (3) to convince the practitioners of the reliability of the data gathered.

3.3 Gathering data

The data are usually gathered by the researcher and his staff. Efficiency bureaus, worried by the lack of implementation of their recommendations to improve organizations, increasingly involve the practitioners in the gathering of data. Perhaps this is also possible in some rural sociological studies.

In regional planning for instance it might be useful if the planners themselves interview some of the people for whom they make the plan, thus bringing the planner in direct contact with his subject. The data are perhaps less reliable than from professional interviewers, but might be accepted better by the planner than a research report.

Also the community self survey has a potential to activate the local population to the problems of their own community.

3.4 Analyzing and interpreting data

Involvement of practitioners in the analysis and interpretation of the data can have advantages. Firstly, in this way they get earlier information about some research findings. It is no exception that the final report is only published more than two years after the data have been gathered. By this time the practitioner might have new problems and is no longer very interested in the report, or he might have been transferred. He is appreciative of a frequency count as early as a month after the interviewing is ended. At that stage he can also discuss the further analysis of these data with the researcher. Secondly, this involvement in the research process increases the motivation of the practitioner to apply the research findings.)¹

3.5 Publication of the research report

To prevent difficulties it should be decided in advance who has the right to publish (a part of) the research findings. Pure research has little value as long as the research findings have not been published. In the case of applied research, it is not always desirable to publish the findings. Also the medical doctor does not publish his report on the condition of his patient. The desirability of a publication depends on: (1) the possibility to generalize the research findings to other situations; (2) the effect which the publication can have on the willingness of the practitioners to apply the research findings; (3) the protection of the personal interest of the persons studied, who can not always be kept anonymous, and (4) the interest of the sponsor of the research.

Reporting is usually done by the researcher, but when the practitioner has participated in writing the research report, he might be more inclined to apply the findings. He should however be asked to criticise the report before it is published. With his knowledge of the local situation he can often improve the report. Minor errors can greatly decrease the confidence in the research findings.

¹ L. Coch and J.R.P. French, Overcoming resistance to change, in E.E. Maccoby, Th.M. Newcomb and E.L. Hartley eds., Readings in Social Psychology, Holt, New York, 1958, pp. 233-250 and J. Tully, Changing Practices: a Case Study, Journal of Cooperative Extension III (1966), pp. 143-153.

One should be clear about the audience for whom the report is written. Attempts to write for both rural sociologists and practitioners simultaneously are usually a failure. It might be better to mimeograph a research report for other researchers interested in similar problems, publishing a summary for practitioners. Usually they find little time to read a long report in technical language.

3.6 Drawing conclusions for action programs from the research findings

The responsibility for action programs remains with the practitioners. The researcher however, might help the practitioner to draw the right conclusions. Most people try to forget the unpleasant information received. This may also occur with research findings which threaten the practitioner. An adroit researcher can help the practitioners to overcome the emotional implications of his research with group techniques and counseling methods.

Our conclusion is that for an effective utilization of rural sociological research a closer cooperation between practitioners and researchers is desirable as we find nowadays in most studies. This is especially desirable if:

- (1) the researcher has little previous knowledge of the problems of the practitioner; and
- (2) the practitioner is not yet prepared to accept the views of the researcher and to apply his research findings.

3.7. Tensions between practitioners and researchers

It is easy to say that people should cooperate, but it is difficult to realize. Researchers and practitioners being no exception. Some practitioners see scientists as people proving the obvious, as impractical, bothersome and nosy, always speculating and hypothesizing, but never able to answer specific questions regarding problems in the field. These opinions are sometimes valid. In order to work with enthusiasm the practitioner should be convinced that he is doing a good job, but the researcher's task is to question this in order to find better ways of solving the problems. The researcher is trained to hold in high esteem those people who make their decisions carefully. The practitioners often have to make decisions the consequences of which they cannot predict with any degree of certainty, due to lack of information. This information is sometimes not available, at other times the practitioners lack the time or training to gather the information.

Therefore the mutual respect, required for fruitful cooperation is not always available. This respect can grow, if both parties see the need for cooperation and are willing to work towards the same goals, appreciating the difficulties with which the other has to contend. As soon as one is willing to express that one does not understand the behavior of the other party, without blaming him, a big step has been set on the road towards fruitful cooperation. Many business firms train their staff to learn to cooperate with each other.)¹ Perhaps government agencies and universities will have to do the same.

4. SOME CONDITIONS FOR APPLIED RURAL SOCIOLOGICAL RESEARCH

At the beginning of this paper we discussed some of the conditions which have to be fulfilled before practitioners will utilize research findings. It should be clear by now that a similar set of conditions has to be fulfilled before the rural sociologist will do his research in such a way that his work is of real help in solving the problems of the practitioners:

1. the researcher has a sincere and lively interest in the problems of the practitioners and their clients;
2. he develops a full awareness of the problems of the practitioners and of the practical alternatives available to them;
3. he takes time to build an empathic personal relationship with the practitioners, educating himself to their point of view and them to the value of good research;
4. he is sensitive and able to cope with the anxiety he might arouse with his research;
5. he cares that his findings are utilized, but accepts that the practitioners may make other decisions than he would have made himself;
6. he is willing to invest time in developing better practitioners, who can make future program decisions in anticipation of problems and relevant to their causes - decisions which are attuned both to the organizational policy and the principles of social science;
7. his superiors and sponsors allow him to spend sufficient time in helping the practitioners draw the correct conclusions from his study and ideally, in guiding the initial implementations of the results vis-à-vis the problems studied.

¹ e.g. C. Argyris, Interpersonal Competence and Organizational Effectiveness, Irwin, Homewood, 1962.

Whether these conditions are fulfilled depends partly on the organizational structure and partly on the norms of the group in which the rural sociologist is working. In universities the prestige might go to those who publish the most important theoretical publications. In some research institutes or rural sociology branches of action agencies one gets more prestige for the contribution one makes to the solution of field problems. Frequently interaction with practitioners enhances the chance that research develops in the applied directions. Isolation from other rural sociologists, and perhaps more important, from other behavioral scientists, makes it difficult for the applied researcher to keep well informed on new scientific developments. It is not yet clear how this dilemma can be solved, perhaps through sabbatical leave in other surroundings.

5. SOCIAL SCIENCE CONSULTANTS

Cooperation between researchers and practitioners will not always solve the communication problems between both groups. Firstly, there might be a large number of practitioners for whom the research findings are valuable. As is the case with research on the effects of occupational choice, which has important implications for a large proportion of farm families. Secondly, the researcher might have a high psychological investment in his own research findings, leading him to neglect solutions based on other research findings.

In agricultural research the extension officers solve these problems pretty well. They gather the information from various researchers and convey this to the farmers. Additionally they consult these farmers helping them to identify their problems and resources, and analyse objectively the different solutions possible. In some cases they even train the farmer to use new techniques. Their job is not to be a leader, who directs the decisions of the farmers, but this does at times occur.

In the social sciences a similar task could be fulfilled by a social science consultant, who is now emerging in some countries in the socio-economic advisory service. The behavioral changes which are developed on the basis of social science research findings are often complicated. As an example this paper, in which we urge closer cooperation between researchers and practitioners. One cannot expect every researcher or practitioner, having read this paper, to change his behavior in this way immediately, even though he accepts my arguments as correct. Intellectual knowledge and emotional
-experience-

experience influence this behavior. Therefore one might expect that a serious attempt to change their behavior pattern will be made after the researcher and practitioners have been confronted with a situation where they discovered for themselves the need to change their behavior, e.g. through sensitivity training. Also if one agrees to cooperate, and does not yet know how to cooperate or how to overcome the tensions that will arise in the process. Here the social science consultant could help.

In other situations implementation of scientific advice might be difficult, due to conflicting political pressures. This is clearly the case with some of the agricultural policies of the European Common Market. Can we tell the practitioners how to follow scientific advice in such a situation?

6. TRAINING OF PRACTITIONERS IN RURAL SOCIOLOGY

I feel that there are two problems involved in the training of practitioners in rural sociology. Firstly they need a different kind of training to researchers, whereas most of the university training is directed towards producing researchers. It is not important that the practitioners are will acquainted with modern social theories, but that they should learn to analyse more accurately situations in which they have to make decisions.)¹

Secondly after training and several years experience in technical agriculture they may achieve a position involving decisions on policy, their training in rural sociology being 10 or 20 years out of date. It is my opinion that it is necessary for our universities to give post-graduate courses for these people, not a conference of a few days, but courses lasting at least three months. This idea of "education permanente" is generally accepted in the United States, but not yet in Europe. Accepting this idea in government circles could help to adjust policy making to the rapid development of the social sciences. The universities will have to make time for these post-graduate courses despite of their difficulties in handling the rapidly growing number of students.

)¹ A good example of how this training can be given is provided by D. Kahnemann and E.O. Schild, Training Agents for Social Change in Israel, Human Organization, 26 (1966) pp. 71-77.

7. SOCIAL ENGINEERING

In the natural sciences there is a clear distinction between pure sciences, such as physics or biology, and applied sciences such as engineering and medicine. The object of the pure sciences is to build a scientific theory which explains natural phenomena. The applied sciences try to indicate how certain individual situations can be improved; how a bridge can be built over a river, a patient cured, etc. There is no doubt that both applied and pure sciences are necessary.

In the social sciences there is not such a clear distinction. A good deal of the rural sociological research takes an intermediate position between pure and applied science. This might be a reason that it fulfils neither task adequately, neither the development of a scientific theory, nor the solution of certain problems. In general sociology there is a pure branch which contributes to the development of scientific theory, However, I think we have reached the stage that some kind of social engineering be developed to help solve the urgent social problems of our time.

8. ETHICAL ASPECTS OF AN APPLIED RURAL SOCIOLOGY

The development of an applied rural sociology and social engineering raises important ethical questions. Under what conditions are we entitled to use our scientific tools to change the life of others? We can not cooperate with all practitioners, because they do not all have respectable goals. On what grounds do we make our selection?

The social scientists ethical code often is that he should prevent his research being used against the interests of the subjects he has studied. In that case it would become difficult for other social scientists to do research among these people. Therefore it is in the interest of the whole scientific community to obey this code. The question remains who decides what are the interests of these people. Are the people themselves always capable of judging this? What can the scientist do after he has published his research findings and these are misused by others?

The ethical questions are quite serious if the research is not published. In this case a government agency or business firm can use these findings against people studied who will have little defence, as the research results are not available to them.

Scientific development is becoming the most powerful force in shaping the society of the future. In the past most scientists have stuck to their research and left the decisions regarding the development of our society to the politicians. Can we continue to do this when a method of social engineering is developed, which gives the politician more opportunities to change our society?

In my opinion everybody should find the answers to these kind of ethical questions for himself, but a defense that he has never thought about it is not acceptable.

SUMMARY

This paper discusses what the rural sociologists can do to get their research findings utilized by practitioners. Close cooperation is desirable between researcher and practitioner. What exactly each responsibility is depends on the stage in the research process:

<u>Stage</u>	<u>Responsibility</u>
Formulation of research problem	Jointly researcher and practitioner
Deciding on research methods	Researcher, advice from practitioner desirable, e.g. on formulation of interview questions
Data gathering	Usually researcher, sometimes for educational reasons practitioner under guidance of researcher
Analysing and interpreting data	Researcher but for educational reasons desirable to involve practitioner
Reporting	Usually draft written by researcher and criticised by practitioner; tendency towards involving practitioner also in writing
Drawing conclusions for action programs	Practitioner with advice from researcher

Discussed are the conditions under which the practitioner will utilize the research findings and the researcher will do research, which helps the practitioner to solve his problems. It is desirable to develop both theoretical sociology and social engineering. Social science consultants can help to integrate and communicate the findings of rural sociological research.

Under what conditions are we entitled to use our research tools to change the life of other people?