

*The communication of new farm practices in the Netherlands**

A. W. VAN DEN BAN

Although the study of the communication of new farm practices of which this article is an account was undertaken with the object of enhancing the effect of the agricultural extension service it is of importance not only to officers of that service but to all who are interested in the dissemination of new ideas. For one of the most conspicuous characteristics of the contemporary culture of Western civilization is the fact that it is constantly changing. Many of the products which are now part of our daily life were still rarities ten years ago – if they existed at all. We need only think of synthetic fibres or the medicines that the doctor prescribes. Associated with the adoption of these new products are numerous changes in the social institutions. The study of these processes of change is an important task for sociologists. Rogers' recent book *The Diffusion of Innovations*² demonstrates that the communication of new farm practices can often serve as a model for processes of change in other fields, such as the dissemination of new teaching methods, industrial production techniques, new medicines or elements of Western culture in the developing countries.

The communication of new farm practices has been studied more extensively than other processes of change. It is not entirely clear why this should be so. One of the reasons will be that farmers cannot expect to keep up with international competition if they do not change to new methods without delay. In various other sectors of our social life, such as education, the difficulties which occur if scientific development is followed only slowly are much less evident. Most large industrial concerns keep abreast of scientific development, and yet one gets the impression that less research is done on the introduction of these changes than in agriculture.

This could be attributable to the fact that research into the adoption

* This article has been adapted from an introductory address given at a meeting of the Netherlands Sociological Society. The author wishes to express his gratitude to Dr. E. Abma and Mr. A. T. J. Nooij for their critical comments on a draft of this article.

¹ New York, Free Press, 1962.

of new practices is easier in farming than in industry. For on a farm the decision to adopt a new practice is usually taken by one man, whilst in an industrial concern this power of decision may be shared by a large number of persons. Perhaps even more important is the fact that the communication of new practices entails more difficulties in farming than in the large industrial concerns, which have their own research organizations. Most farms being much too small for this, agricultural research is carried out almost exclusively in research institutes run by the Government and a few large concerns. About 1% of the gross turnover of agriculture is devoted to this research in the Netherlands.

All such research would be pointless, however, if its results were not applied in practice, which in turn would not be possible without proper channels of communication between the research-workers and the farmers. In the Netherlands this is the task of the agricultural extension service, which operates with about one man to every 200 farms and market gardens. If they are to do their job properly these extension officers must know not only *what* information to give the farmers but also *how* to give it. The aim of the study discussed here was to help discover the latter.

The research on which I have been engaged in recent years² was directed towards gaining some insight into the channels of communication used by the farmers in their adoption of new farm practices. It did not seem advisable to interview a random sample of Dutch farmers for this purpose, since previous studies had shown clearly that farmers' decisions in this field are strongly influenced by those of their colleagues. Consequently, we interviewed all the farmers in a number of villages in order to obtain information both on farmers who exert influence and on those who are influenced. On the other hand, it did not seem advisable to confine the survey to one village, since the course of these communication processes is probably partially dependent on the culture pattern of the group. So the investigation was conducted in three widely different areas, *viz.* Noord-Beveland, an island in Zeeland, Milheeze in the south-east of the country and Dwingeloo in the north. In the first two areas the farmers are much more progressive in their farm technology than in Dwingeloo, whilst the farmers of Noord-Beveland also have much greater contact with urban culture than those of the other two villages, which a century ago were barely producing for the market. Altogether 303 farmers were interviewed; only six refused or were not at home.

² A. W. van den Ban, *Boer en landbouwvoorlichting. De communicatie van nieuwe landbouwmethoden* (The Communication of New Farm Practices; Assen, 1963).

The adoption process

Before attempting to discover what sources of information are important as a means of inducing the farmer to use new farm practices, it is as well to study this process of changing over to new farm practices somewhat more closely. For it is not unusual for a number of years to elapse between the moment when a farmer first hears about a new method and the time when he decides to adopt this method himself, which makes it by no means unlikely that sources of information which were important at the beginning of the process have lost their impetus towards the end.³

It is therefore a minimum requirement that a distinction be made between two stages, *viz.* one in which the farmer first hears of the existence of new practices and one in which he decides whether or not to adopt them. This essential difference is one which has been overlooked in many previous studies, both those on the communication of new farm practices and those on changes in political views. The distinction was first made in a study by Ryan and Gross on the diffusion of hybrid corn⁴

Table 1: The percentage of farmers who attach the greatest significance to the various sources of information as a means of 1. learning of the existence of new practices and 2. deciding whether or not to adopt those practices.

<i>Source of information</i>	<i>Learning</i>	<i>Deciding</i>
Farming papers	16%	1%
Radio	13%	0%
Mass communication media + something else	5%	
Mass communication media in general	41%	3%
Demonstrations, meetings, trial fields, etc.	6%	12%
Local extension officer	3%	20%
Other farmers	11%	43%
Other farmers + something else		12%
Dealers	3%	4%
Tried it personally	0%	3%
Other combination	2%	3%
No answer	0%	4%

³ See *inter alia* H. Albrecht, 'Zum heutigen Stand der Adoption-Forschung in den Vereinigten Staaten' (Current Adoption Research in the United States), *Berichte über Landwirtschaft*, Vol. 41 (1963), No. 2, pp. 233-282.

⁴ B. Ryan and N. Gross, 'The Diffusion of Hybrid Seed Corn in Two Iowa Communities', *Rural Sociology*, VIII (1943), pp. 15-24.

which was published in 1943, but as late as 1957 Elihu Katz neglected this study in his article on the 'two-step flow of communications' hypothesis, to which he gave the subtitle of 'An up-to-date report on a hypothesis'.⁵

It is evident from Table 1 that about three-quarters of the farmers first learn about the existence of new farm practices via the mass communication media. But those media have lost all their importance by the time the decision is actually made. Three-quarters of the farmers say that they go by what they hear and see in personal contact, which is largely a matter of contact with other farmers. The progressive farmers, however, also occasionally decide to adopt new practices on the basis of discussions with extension officers.

Although both the opinion leaders among the farmers and their followers usually learn of the existence of new practices via the mass communication media, the actual decision to adopt them is attributable to discussion with others. This is at variance with the picture presented by the 'two-step flow' hypothesis, which states that ideas often reach the opinion leaders via the radio and the printed word and are then passed on to the less active sections of the population via these leaders. Our findings do tally with those of the American study, however, in that the opinion leaders make more intensive use of mass communication media than their followers. But that does not mean that they allow themselves to be influenced exclusively by those media, for they also make more intensive use of all other sources of information, with the exception of discussions with the neighbours. The difference between the leaders and their followers is that the leaders as a rule use sources which provide a good deal of information on new practices. This is true both as regards their selection of farming papers and their choice of persons with whom to discuss such matters; they talk a lot to extension officers, especially to the specialists of the extension service, and to farmers from other districts.

Table 1 also shows that three separate sources of information are particularly important in the adoption of new methods: the mass communication media, the extension service and other farmers. Each of these sources will be discussed in greater detail, especially the 'other farmers'. True, the way in which the information provided via the mass communication media is absorbed by the public and the manner in which the public reacts to the various methods of conveying that information

⁵ *Public Opinion Quarterly*, XXI, pp. 61-78.

are also of considerable practical significance, but it is much more difficult to make certain hypotheses about this on the strength of sociological and psychological theory than it is about the influence exerted by other farmers.

The mass communication media

The radio is probably of particular importance to the less educated, conservative farmers, while the modern farmers attach more value to their farming papers. We still know next to nothing of the way in which articles should be written for farming papers to ensure that the farmers read them and grasp the writer's meaning. The Flesch-Douma readability scores⁶ for Dutch farming papers do, however, convey the impression that the articles in these papers are often too complicated. This impression is confirmed on comparing the words used in these papers with the terms which a study by the *Nutseminarium voor Pedagogiek* showed to be intelligible to groups of townspeople.⁷

It is not yet entirely clear how the rather difficult style of many articles in farming papers affects the efficacy of agricultural extension. On the one hand there is no doubt that these articles are read by fewer people for this reason. On the other hand Festinger's dissonance theory suggests that the farmers who do read these difficult articles also attach particular value to them; something which requires an effort to acquire is valued all the more.⁸ Further research will have to discover the effect of these two opposite tendencies.

The agricultural extension service

The numerous means employed by the extension service to reach the farmers include publications, lectures, demonstrations, excursions, discussion evenings, farm visits and sometimes even stage performances. Many farmers are convinced that the recommendations of this service have considerably improved the results of their farming and consequently they seek contact with the extension service in all kinds of ways. But one difficulty is the fact that the farmers who make least use of the extension service are the very ones who, considered objectively, are most in need

⁶ R. Flesch, *The Art of Readable Writing*, (New York, 1949).

⁷ P. Post and M. C. J. Scheffer, 'De verwerking van het lezen bij schriftelijke cursuslessen' (Reading Assimilation in Correspondence Course Lessons), *Mededelingen Nutseminarium voor Pedagogiek*, Socio-Pedagogical series No. 6, (Groningen-Djakarta, 1954).

⁸ Our attention was drawn to this point by J. A. A. van Leent.

of it. For instance, the farmers who seldom adopt new practices prove to make less use of all the information media examined than the farmers who apply many of the techniques recommended by the extension service.

This is because the farmers who have considerable contact with the extension service are quick to apply the recommendations of that service and also because those who are prepared in general to contemplate changing their farming methods seek considerable contact with the extension service. As regards the latter point, the conservative farmers think quite differently from the extension officers, who have had a modern training in agricultural technology and economics. These officers have confidence in the results of experiments and in the analysis of farm book-keeping systems. The conservative farmers, on the other hand, learned their profession on their fathers' farms, so that they tend to trust only what they can see with their own eyes. They distrust all book learning on principle.

Furthermore, they view the results of their farming differently from an extension officer with a sound training in farm economics. The conservative farmers look at the liquidity and therefore do not regard their own labour, the interest on their capital and the produce of their own farm which is fed to their stock as costs. The extension officer, on the other hand, regards these precisely as very important cost elements, while he does not regard investments as costs – though of course this is not the case as far as the interest and depreciation on investments are concerned. The economically-minded extension officer has no objection to making use of credit, while the conservative farmer would feel guilty if he were to get into debt to improve his farm. Consequently, the reaction of many conservative farmers to the extension service is: 'You shouldn't listen to those extension people too much, or they'll have you in trouble. You should go by the size of your purse'. But they prefer not to tell an outsider, e.g. an extension officer, just what the size of that purse is, which complicates any discussion of their farm management.

When asked how these farmers can best be approached, some extension officers will answer: 'Don't approach them at all. Many farmers will have to leave agriculture in any case. If we don't help the people who won't listen to us, they'll automatically end up in financial difficulties and have to give up their farms. In any case, we haven't enough time to attend properly to all the farmers who ask us for advice'. But the result of this 'survival of the fittest' system is that those who have to give up their farms leave agriculture in an embittered frame of mind, which makes their adjustment to another occupation very difficult.

Yet other extension officers are particularly concerned to make contact with those farmers. They listen first to the way in which they see their problems and then try to help them find a solution.⁹ One difficulty here is that the extension officers are often insufficiently trained in conducting conversations or leading group discussions. In general they have learned reasonably well what they should tell the farmers, but it is only in recent years that their training has given any attention to the question of how they should tell it. Consequently, the extension officer is generally more inclined to tell the farmer how he sees the solution to his problem than to help the farmer discover that solution for himself.

A study carried out by the Allahabad Agricultural Institute¹⁰ indicates that the latter is the more effective method. The Institute conducted a field experiment whereby the extension officers tried to improve the agricultural techniques of the farmers in one area and tried to help the farmers in another area to solve their problems themselves. The result was that the farmers in the latter area proceeded to adopt more than twice as many new farm practices as were adopted in the area where the advice had been aimed at effecting those very improvements. True, objections can be made to the research method used, but it is hardly likely that the widely contrasting results could be ascribed solely to the imperfections in those methods.

Much more could be said about ways of influencing the culture pattern of these conservative farmers¹¹ and about the whole technique of extension work, but we shall confine ourselves to a few points.

As the reader will be aware, experiments conducted by Lewin and his associates have shown that well-conducted group discussions can lead to greater changes in people's behaviour than lectures or individual advice.¹² As far as we are aware these experiments have not yet been repeated in the Netherlands, but it is probable that their conclusions apply here too. The agricultural extension service uses both lectures and group discussions, usually in the form of a discussion evening at a farmer's home. When we asked the farmers which method of information they thought

⁹ See for instance J. P. A. van den Ban, 'Ervaringen en inzichten van de Komgronden-gebieden' (Experience and Insight Gained in the Basin Soil Areas), *Landbouwvoorlichting*, 1961, pp. 706-710 and 765-768; 1962, pp. 28-34 and 72-77.

¹⁰ *Extension Evaluation. Report on the Relation between Worker Performance and 1) Level of Education of the Extension Worker, 2) The Method of Approach* (Allahabad, 1962).

¹¹ See for instance B. Benvenuti, *Farming in Cultural Change* (Assen: 1962).

¹² K. Lewin, 'Group Decision and Social Change' in Maccoby, Newcomb and Hartley, *Readings in Social Psychology*, 3rd ed. (New York, 1958), pp. 183-197.

Table 2: The difference in innovativeness between Milheeze and Dwingeloo, and some factors which may explain that difference.

	Milheeze	Dwingeloo
Adoption scores: 35 or less	21%	43%
70 or more	23%	0%
Contact with extension scores: 4 or less	13%	32%
10 or more	37%	25%
Percentage of farms larger than 25 acres	46%	49%
Agricultural training: none	11%	43%
evening course	78%	26%
school	11%	31%
General education after primary school	0%	7%
Percentage older than 50 years of age	41%	43%
Average socio-economic status score	16.7	17.6
General attitude toward innovators:		
favourable	45%	10%
favourable in some circumstances	6%	12%
unfavourable	14%	49%
no general opinion	30%	20%
no answer	5%	9%
Attitude towards credit: favourable	65%	14%
doubtful	27%	31%
unfavourable	6%	50%
no answer	2%	6%

would have the greater effect on their farming, it proved that two thirds regarded discussion evenings as much more effective than lectures, while only one tenth were of the opposite opinion. The others had no opinion.

One good reason why discussion evenings are so much more effective than lectures is that they are far more suitable for changing the group norms. Table 2 lends support to the view that these group norms may have a considerable effect on the adoption of new farm practices. In the first place it reveals that the farmers in Milheeze do in fact have a higher adoption score¹³ and more contact with the extension service than those in Dwingeloo, but this cannot be accounted for by differences in farm size, educational background, age or socio-economic status¹⁴, although

¹³ The adoption score is the percentage of a number of new farm practices recommended by the extension service and applicable on the farm which are adopted.

¹⁴ The socio-economic status is a measure of the farmer's interest in affairs outside his own farm and village.

in a given environment these factors are related in a certain way to the farmers' innovativeness.

There are, however, big differences in the group norms with regard to the adoption of new methods and the use of credit. An investigation by Rogers and Burdge, which was influenced by the results of this study, found with multiple correlation that 20% of the variation in the adoption scores could be explained by the differences in such group norms. This was a larger percentage than the part of the variation explained by any one of the other variables.¹⁵

Rogers and Burdge's work marks an important advance. For they no longer try to explain the differences in the adoption of new practices solely by the qualities and attitudes of the individual farmers; they also take into account the norms of the groups to which these farmers belong.

The influential farmers

If the decision to adopt new practices is greatly influenced by other farmers, and if group norms are highly significant here as well, it would seem to be most important that the extension service know which farmers possess such influence. We posed three sociometric questions in order to identify these farmers. The respondents were asked to list the farmers to whom they turned for advice on new farm practices; those whom they regarded as good farmers and those to whom they talked a lot. Moreover, a number of local experts were asked to assess and score each respondent's influence in discussions about farming.

Table 3 gives an idea of the type of farmer whose influence is great. The number of times that a farmer was chosen as an adviser is used here as an indication of his influence; but much the same result would have been obtained had one of the other three criteria been used. It is apparent in every case that the farmers who have considerable influence on their colleagues are well informed on new farm practices and do not hesitate to adopt them.

It is important not only to ask which farmers are influential but also to note what differences there are in this respect between the places surveyed. Attempts have been made in the past to identify those qualities which distinguish the leaders at all times from their followers. None of them have succeeded. This is now thought to be because the influential

¹⁵ E. M. Rogers and R. J. Burdge, 'Community Norms, Opinion Leadership and Innovativeness among Truck Growers, *Research Bull.* 912, (Ohio Agr. Exp. Station, 1962).

Table 3 : Percentage of the total number of respondents chosen by one or more colleagues as an adviser on new farm practices.

Category of farmers		N. Beveland	Milheeze	Dwingeloo	
Adoption score: lower quartile		15	9	38	
	upper quartile	78	86	68	
Extension contact: lower quartile		14	29	26	
	upper quartile	64	72	67	
Assessment by local extension officer: 6 or less		17	20	35	
	8 or 9	72	85	75	
Membership of farmers' association: no		21	31	38	
	yes	49	59	52	
Attitude towards credit: unfavourable	}	31	40	41	
		doubtful		48	61
		favourable		41	47
Agricultural training: none		25	*	35	
	evening course	33		57	
	school	54	*	53	
Reading proficiency: score 5 or less		27	48	30	
	score 11 or more	50	60	54	
Socio-economic status: lower quartile		30	30	35	
	upper quartile	56	64	65	
Annual visits to a city: 0		33	27	40	
	1	25	67	59	
	2-5	48	52	50	
	6 or more	50	50		
Farm size: 0-25 acres		18	38	35	
	25-75 acres	42	60	57	
	75-125 acres	38			
	125 acres or more	65			
Offices held: none		21	36	36	
	one or more	64	76	63	
Age: below 40		42	60	52	
	40-50	68	52	61	
	50-60	31	41	33	
	60 and over	19	35	31	
Total		40	48	47	

* N < 10

members of a group are those who are willing and able to help the other members of that group to solve their difficulties.¹⁶ It seems probable that the farmers in a progressive place will attach more value to assistance in the proper application of new methods than will those in a conservative place. It may therefore be expected that there will be a closer relation between the influence of the farmer and his innovativeness in Milheeze and on Noord-Beveland than in Dwingeloo. This does in fact prove to be the case. For instance, the average correlation coefficient between the number of times that someone is chosen as an adviser and three of the criteria of the farmer's innovativeness (adoption score, contact with extension score and assessment of farming ability by the local extension officer) is 0.45 on Noord-Beveland, as high as 0.54 in Milheeze, and only 0.35 in Dwingeloo. The relation becomes even more evident if the four criteria of the farmer's influence are not used separately but are combined to form one index by a factor analysis of these criteria and the principal variables from Table 3. If this method is applied to each of the three places examined, we find the same major factors on each occasion one of which gives an indication of the farmer's influence. 25% of the variation in the adoption score on Noord-Beveland is associated with this factor, and 26% in Milheeze, but only 10% in Dwingeloo. Similar differences have also been found in comparisons of more and less progressive areas in Kentucky¹⁷, Broek in Waterland (near Amsterdam)¹⁸ and Ohio.

It might be expected that in a highly traditional farming community there would be no connection at all between the farmers, influence and their innovativeness since such a community attaches no value to aid in the application of new practices. It is not yet entirely certain that this is in fact the case. In an investigation in East Pakistan three criteria were used for the farmers' influence and two for their innovativeness. Those same criteria were used in our survey.¹⁹ In general the interrelationship discovered there was indeed weaker than that found in the Netherlands. One exception, however was the number of times a farmer emerged as

¹⁶ For instance G. C. Homans, *Social Behavior: Its Elementary Forms* (New York and Burlingame, 1961), p. 314.

¹⁷ C. P. Marsh and A. L. Coleman, 'Farmer's Practice Adoption Rates in Relation to the Adoption Rates of Leaders', *Rural Sociology*, XIX (1954), pp. 180-183.

¹⁸ A. W. van den Ban, *op. cit.*

¹⁹ S. A. Rahim, *Diffusion and Adoption of Agricultural Practices. A Study in a Village in East Pakistan* (Techn. Publication No. 7, Pakistan Academy for Village Development, Comilla, 1961).

someone to whom the others talked a great deal and his inovativeness; the connection between two variables was stronger in East Pakistan than in Dwingeloo. The farmer's inovativeness and his influence were also found to be more strongly interrelated in the Andes of Colombia²⁰ than in the Netherlands and the American state of Ohio.²¹ It is not clear whether this stems from a marked interest on the part of the farmers in improving their farming methods or whether it is attributable to some other cause.

It is not infrequently assumed that new ideas are first introduced into a group by the members whose status is low.²² For they will often be less satisfied with the existing situation than the innovative members and it is therefore thought that they will be more inclined to welcome change. But this theory fails to take into account the fact that in many groups the prominent figures are the ones who have many contacts outside their own group, which means that they soon become acquainted with these new ideas. Moreover, it is the special task of the leaders to see to the introduction of innovations.

With these two conflicting theories in mind, we went into the matter of which farmers in the villages examined were the first to adopt various new farm practices. Ten such practices proved to have been introduced by influential farmers; only one had been introduced by farmers with little influence. In general, therefore, the view that new ideas are first introduced by low-status group members seems to us to be erroneous. There are, however, some indications from studies by Menzel²³ and Rogers²² that really sweeping innovations are first introduced by persons who are emancipated from the local group norms, for instance by farmers who have friends in other parts of the country or among townspeople. It cannot be said of them that their status among their fellow villagers is low; they are more or less outside the status structure of their village. Their number is so small that research methods other than those employed in this investigation will have to be used if this hypothesis is to be verified under Dutch conditions.

²⁰ P. J. Deutschmann and O. Fals Borda, *Communication in an Andean Village* (Stencilled paper to the Association for Education in Journalism, Chapel Hill, N. C., 1962) Table 2.

²¹ E. M. Rogers, 'Characteristics of Agricultural Innovators and Other Adopter Categories', *Research Bull.* 882, (Ohio Agr. Exp. Station, 1961), p. 64.

²² H. G. Barnett, *Innovation: The Basis of Cultural Change* (New York, 1953), Chapter 14.

²³ H. Menzel, 'Innovation, Integration and Marginality: A Survey of Physicians', *Am. Soc. Review*, XXV (1960), pp. 704-713.

We wished to discover not only which farmers have considerable influence in a village, but also who influences whom. So we analysed the differences in innovativeness and in influence between the farmers who chose each other in the sociometric questions. The result was roughly comparable to what can be observed among sociologists. On social occasions, e.g. during the luncheon break at a meeting, people who do not differ all that much as regards influence and ability are often seen together. But if a young and not very influential sociologist encounters a certain difficulty in his work, he will often ask the advice of someone whom he regards as an expert in this field, even if he is diffident about inviting him out to lunch. It is likely, however, that he will still be rather hesitant about bothering experts of such renown with his not very weighty problems.

The answer to the question of who influences whom therefore depends on the extent to which it is either a matter of deliberately asking advice or of more or less chance influence. As a result the manner in which new farm practices spread within a certain group depends on the need felt by the farmers for those innovations. If that need is felt very strongly, they will often obtain the required information from the most expert members of their group. But they often decide to adopt new methods because of what they hear about them in chance conversations. Such conversations are usually held with farmers who are only slightly more innovative than they themselves. So there are not certain leaders who influence the whole group, as the original 'two-step flow of communications' hypothesis presumed; many intermediary links are required before a new practice is adopted by the whole group.

These ideas regarding the existence of influential farmers are utilized by the extension service, among other things by working with pilot farms. These farms cooperate very closely with the extension service with the object of encouraging other farmers to adopt the new practices demonstrated there. In other words they are not experimental farms which occasionally risk using new techniques which the extension service itself is not yet certain will be satisfactory in practice. Their use sometimes gives rise to a number of interesting socio-psychological difficulties.²⁴ The extension officers often tend to select for this purpose competent farmers who are prepared to try out new methods. In conservative regions however, these people often tend to be low-status

²⁴ G. Bareiss, E. Hruschka and H. Rheinwald, *Probleme des Beispielsbetriebe* (Problems of the Pilot Farm; Stuttgart, 1962).

farmers which means that the other farmers take relatively little heed of the example they set.

Moreover, it is the intention that a certain state of tension be created amongst the other farmers on their noticing the difference between their own indifferent farming and that of the pilot farm, so that they will be induced to improve their own farming. But often they reduce this tension in another way, viz. by finding their own reasons for the fact that the pilot farm is going ahead more quickly than their own. Not infrequently this is the favourable financial position of the pilot farmer, for farmers in a strong financial position are often prepared to experiment with a new method. Often, too, the extension service itself offers an easy way of reducing this tension by paying the pilot farmer a small sum for receiving excursions, extra clerical work, etc. By attaching a highly exaggerated importance to these payments, the other farmers can find a simple explanation for the progress of the pilot farm. Finally, things may sometimes go wrong on any farm, even on a pilot farm. The other farmers like to attribute great importance to this, too, in order to be able to deny that the model farm is better run than their own.

La diffusion de nouvelles méthodes d'agriculture

Cet article est le compte-rendu d'une recherche sur la diffusion de nouvelles méthodes d'agriculture dans différentes régions du pays. La diffusion de ces méthodes apparaît comme un modèle valable de la diffusion d'idées nouvelles en général.

L'acceptation d'une nouvelle méthode est généralement un processus qui s'étend sur plusieurs années. A l'origine de ce processus, le paysan, à travers les moyens de communication de masse, prend connaissance des nouvelles méthodes. Ce n'est que plus tard que, à la suite de contacts personnels avec des vulgarisateurs agricoles et avec d'autres paysans, il prend la décision d'appliquer ou non ces méthodes.

A l'encontre de ce que l'hypothèse du 'two-step flow of communications' ferait supposer, ceci est valable tant pour les 'opinion-leaders' que pour ceux qui les suivent.

Les paysans, qui se décident aisément à appliquer les nouvelles méthodes, utilisent généralement des moyens de masse leur fournissant rapidement des informations au sujet des idées neuves et ont de nombreux contacts avec des gens qui connaissent bien ces idées: vulgarisateurs, paysans d'autres régions du pays, et même parfois chercheurs.

En général, ces paysans exercent aux Pays-Bas une grande influence sur la façon dont les autres paysans du village gèrent leurs affaires; ceci est plus vrai dans les régions progressistes que dans les régions où les paysans sont généralement conservateurs.

D'une façon générale, on ne peut pas dire que ce sont les membres marginaux d'un groupe qui adoptent le plus aisément les idées nouvelles.

Les normes de groupe exercent une influence marquée sur la façon dont les paysans gèrent leurs affaires. De ce fait, les services de vulgarisation pourront atteindre de meil-

leurs résultats par des discussions de groupes que par des conférences, et probablement aussi que par une information au niveau individuel.

Le service de vulgarisation agricole a principalement contact avec les paysans qui, vu objectivement, en ont le moins besoin puisque ce sont les paysans dont l'intérêt est déjà éveillé.

Il est probable que les revues agricoles néerlandaises sont rédigées dans un langage difficilement accessible aux beaucoup de paysans.

Die Verbreitung neuer landwirtschaftlicher Methoden

In dieser Abhandlung wird über eine Untersuchung der Verbreitung neuer landwirtschaftlicher Methoden in verschiedenen Teilen der Niederlande berichtet. Die Verbreitung dieser Methoden, so zeigte sich, kann überhaupt als Modell für die Verbreitung neuer Ideen gelten.

Die Annahme einer neuen Methode ist gewöhnlich ein Prozess, der mehrere Jahre dauert. Im Anfang dieses Prozesses erfährt der Bauer durch die Media der Massenkommunikation das Bestehen neuer Methoden und erst später kommt er auf Grund persönlichen Kontaktes mit landwirtschaftlichen Beratern oder anderen Bauern zu dem Entschluss, diese neue Methode wohl oder nicht selbst anzuwenden.

Anders als man aus der 'two-step flow of communications'-Hypothese schliessen sollte, gilt dies sowohl für die führenden Meinungsvertreter wie für ihre Anhänger. Die Bauern, die schnell zur Anwendung neuer Methoden übergehen, bedienen sich meistens der Media der Massenkommunikation, wodurch sie über das Bestehen neuer Ideen informiert werden, und sie haben viele persönliche Beziehungen zu Menschen, die gut mit den neuen Methoden bekannt sind, wie landwirtschaftlichen Beratern, Bauern aus anderen Teilen des Landes und manchmal selbst Forschern auf landwirtschaftlichem Gebiet.

Diese Bauern haben in den Niederlanden im allgemeinen auch einen grossen Einfluss auf die Betriebsführung ihrer Dorfgenosser; in den fortschrittlichen Gebieten gilt dies in viel höherem Masse als in den mit vorwiegend konservativ eingestellten Bauern.

Im allgemeinen kann man nicht sagen, dass die marginalen Gruppenmitglieder die ersten sind, die sich zur Uebernahme neuer Ideen entschliessen.

Die Gruppennormen haben einen grossen Einfluss auf die Betriebsführung der Bauern. Hierdurch können die Beratungsstellen mit Gruppendiskussionen oft grössere Veränderungen erreichen als mit Vorträgen und vermutlich auch als mit individueller Aufklärung.

Der landwirtschaftliche Beratungsdienst hat vor allem mit den Bauern Kontakt, die objektiv gesehen diese Aufklärung am wenigsten nötig haben, vorwiegend dadurch, weil es die Bauern sind, die das grösste Interesse für Beratung haben.

Wahrscheinlich werden die niederländischen landwirtschaftlichen Zeitschriften in einer Sprache geschrieben, die für viele Bauern schwer zu verstehen ist.

La divulgación de nuevos métodos agrícolas

Este artículo contiene el informe de unos estudios sobre la divulgación de nuevos métodos agrícolas en diferentes regiones del país. La divulgación de tales métodos se considera como modelo válido de la difusión de ideas nuevas en cualquier terreno.

La aceptación de un método nuevo constituye, por lo común, un proceso cuyo desarrollo se extiende por varios años. En la fase inicial el agricultor se informa de los nuevos métodos a través de los medios de comunicación de masa. Sólo más tarde, como consecuencia del contacto personal con divulgadores agrícolas y con otros agricultores, toma la decisión de aplicar o no aplicar estos métodos.

A diferencia de lo que induciría a suponer la hipótesis del 'two-step flow of communications', esto es aplicable tanto a los 'opinion-leaders' como a los que siguen a éstos.

Los agricultores, que se deciden fácilmente a aplicar métodos nuevos, utilizan por lo común los medios de masa que les proporcionan rápida información en cuanto a las ideas nuevas, y mantienen contacto intenso con gentes que conocen bien tales ideas: divulgadores, agricultores de otras regiones del país y, a veces, hasta con investigadores.

En general, estos agricultores influyen decididamente en Holanda sobre la forma en que los demás agricultores de la localidad llevan su explotación; esto resulta más evidente en las regiones progresistas que en las regiones en que predomina el elemento conservador.

En términos generales no cabe decir que son los miembros marginales de un grupo los que adoptan más fácilmente ideas nuevas.

Las normas de grupo ejercen marcada influencia sobre la manera en que los agricultores llevan su explotación. En estas condiciones, los servicios de extensión agrícola podrían conseguir mejores resultados mediante la discusión en grupos que por medio de conferencias, y probablemente, mejor que por la información en plan individual.

El servicio de extensión agrícola mantiene contacto principalmente con los agricultores que, considerado objetivamente, son los menos necesitados de él, puesto que son precisamente los agricultores cuyo interés ya ha sido despertado.

Es posible que las publicaciones agrícolas holandesas estén redactadas en un lenguaje poco accesible a buen número de agricultores.