UNIVERSITI PUTRA MALAYSIA

**COMPARATIVE APPROACHES IN DEVELOPING
INVENTORY OF ROLES AND COMMUNICATION
SKILLS FOR TRAINING NEEDS ASSESSMENT OF
FRONTLINE EXTENSION WORKERS**

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Abstract of thesis presented to the Senate of Universiti Pertanian Malaysia in partial fulfilment of the requirements for the degree of Master of Science.

COMPARATIVE APPROACHES IN DEVELOPING INVENTORY OF ROLES AND COMMUNICATION SKILLS FOR TRAINING NEEDS ASSESSMENT OF FRONTLINE EXTENSION WORKERS

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July, 1993

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The specific objectives of the study were to: (1) determine the appropriate approach in developing roles and communication skills required by field extension workers; (2) develop an inventory of roles of frontline extension workers using selected approaches; and (3) develop an inventory of specific communication skills needed by frontline extension workers using selected approaches.

In addition, the study also attempted to develop a prototype instrument to assess the communication skills training needs of field extension workers.

The study was descriptive in nature involving the use of three methods of data gathering namely open-ended questionnaire, individual interviews and focus group interview. A total of 39 respondents were selected to gather the data.

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The findings of the study were as follows: 23 roles of frontline extension workers were derived from the experts and practitioners through the use of open-ended questionnaire. From these 23 roles, 33 communication skills were derived. The initial 23 roles were later compressed into five major roles through the follow up interviews. Nineteen communication skills were derived from the five major roles.

Through the use of focus group interview, 14 roles of extension workers were derived. The experts and practitioners listed 21 communication skills needed to perform the 14 roles of extension workers. For each of the 21 communication skills, specific skills were again derived. The study found that the focus group interview provided the most comprehensive data among the three methods of data gathering used in the study. The 21 communication skills derived through the focus group interview could be used in determining a prototype instrument for developing training needs assessment instrument required by frontline extension workers.

Based on the findings of the study, the experience and observations of the researcher, it is recommended that focus group interview should be given priority in providing comprehensive data for developing an inventory of communication skills and roles of frontline extension workers.

Abstrak tesis yang dikemukakan kepada Senat Universiti Pertanian Malaysia sebagai memenuhi sebahagian daripada keperluan untuk ijazah Master Sains.

PENDEKATAN KOMPARATIF DALAM PEMBENTUKAN INVENTORI MENGENAI PERANAN DAN KEMAHIRAN KOMUNIKASI UNTUK PENILAIAN KEPERLUAN LATIHAN BAGI PEKERJA PENGEMBANGAN BARISAN HADAPAN

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Objektif spesifik kajian ini adalah untuk: (1) mengenal pasti pendekatan yang sesuai dalam membentuk peranan dan kemahiran komunikasi yang diperlukan oleh pekerja pengembangan lapangan; (2) membentuk inventori mengenai peranan pekerja pengembangan barisan hadapan menggunakan pendekatan terpilih; dan (3) membentuk inventori mengenai kemahiran komunikasi menggunakan pendekatan terpilih.

Sebagai tambahan, kajian ini juga mencuba untuk membentuk instrumen prototaip untuk menilai keperluan latihan kemahiran komunikasi di kalangan pekerja pengembangan.

Kajian deskriptif ini melibatkan penggunaan tiga kaedah pengumpulan data; soalselidik, temubual secara individu dan

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temubual kumpulan berfokus. Seramai 39 orang responden telah dipilih bagi mendapatkan data.

Hasil dari kajian ini menunjukkan bahawa terdapat: 23 peranan pekerja pegawai pengembangan barisan hadapan dikemukakan oleh pakar dan para pengamal komunikasi/ pengembangan dengan menggunakan soalselidik terbuka. Dari 23 peranan ini, 33 kemahiran kommunikasi diperolehi, dan 23 peranan tersebut kemudiannya dikategorikan menjadi lima peranan utama melalui temubual dengan pakar. Dari senarai peranan ini pula diperolehi 19 kemahiran kommunikasi.

Melalui temubual kumpulan berfokus, 14 peranan pekerja pengembangan barisan hadapan telah dikenalpasti. Para pakar dan pengamal menyenaraikan 21 kemahiran kommunikasi yamg diperlukan untuk melaksanakan 14 peranan pekerja pengem- bangan. Daripada setiap 21 kemahiran kommunikasi tersebut, kemahiran yang lebih spesifik sterusnya diperolehi. Kajian mendapati bahawa temubual secara kumpulan berfokus mem- berikan data yang lebih komprehensif di antara ketiga-tiga kaedah pengumpulan data dalam kajian ini. Sebanyak 21 kemahiran komunikasi yang diperolehi melalui temubual kumpulan berfokus sewajarnya boleh digunakan bagi menentukan instrumen prototaip dalam pembentukan penilaian latihan yang diperlukan oleh pekerja pengembangan barisan hadapan.

Berdasarkan hasil kajian ini dan melalui pengalaman serta pemerhatian penyelidik, disyorkan bahwa kaedah temubual kumpulan berfokus perlulah diberi keutamaan dalam pembentukan inventori kemahiran komunikasi dan peranan pekerja pengembangan barisan hadapan.

CHAPTER I
INTRODUCTION

Background of Problem

Mosher (1966) listed several factors which he called "essentials for development and modernisation of the agricultural sector". These essentials include adequate markets, new technology, supplies and input, transport and incentives for farmers. While these essentials must be present before development could take place, the rate of development is determined by the availability of other factors which he identified as "accelerators for development". These accelerators are: education for development which includes primary and secondary education, farmer education (extension), training agricultural technicians and urban education for agricultural development.

It has now been an accepted practice that all development programmes should be properly planned. One of the requirements of development plan is that the development target must be clearly defined. Presently, the importance of sustainable development has been well emphasised globally, especially by the United Nation specialised organisations such as the Food and Agriculture Organisation (FAO), the United Nations Education Scientific and Cultural Organisation (UNESCO) and the United Nations Funds for Population Activities (UNFPA) as well as the United Nations Development Project (UNDP). Sustainable development, however, could only be realised if the development

plan provides opportunities and mechanisms for full participation of the target clientele. In short, clear development target and full participation of the people in development programme are considered as basic requirements in bringing about change and sustainable development in the rural area.

The availability of effective extension service has been well recognised as an important vehicle for development. The extension service is not only instrumental in facilitating the transfer of technology to the end-users but also the changing of behaviour of the programme beneficiaries.

Rural development and modernisation involve transfer of technology from the knowledge centre to beneficiaries (Mosher, 1966) and between or from farmers to farmers. The effectiveness of transfer technology involves efforts to bring about changes in knowledge, attitude and practices of the members of the target social system. Sustainable development involves careful and strategic planning to bring about these behavioural changes. Changing in human behaviour requires time and the success of this mission could effectively be derived through planned educational approach (Chang, 1964; Savile, 1965).

It has also been recognised that the success of rural agricultural development is dependent on the availability of production credit and concerted group action by farmers (Mosher, 1966). Effective use of production credit and successful group action by farmers require strong extension service. Trained

extension workers who are skillful in social engineering processes and able to apply educational means to change people's behaviour must be available to bring about the behavioural change. Behavioural change can only be achieved through the process of communication. The importance of communication in extension or in bringing about change has been well addressed by many scholars such as Rogers and Shoemaker (1971), Havelock (1973), Haberman (1978), Beal (1981) and Sulaiman (1989).

As communication is essential to change, in order to become effective change agent, the extension worker must be able to communicate with the clientele as well as to facilitate communication among members of the client system. To what extent the extension agents employed to modernise the rural sector possess the necessary communication skills?

It is clear therefore that an effective extension service needs trained personnel. The content of training for these personnel include both technical subject matter as well as the extension and communication processes. Pre-service training and induction training are necessary to provide basic skills for the extension workers to start work as change agents in the field. Subsequently, the extension workers must receive continuing in-service training in order to maintain their effectiveness as change agents.

As training of the extension personnel is deemed necessary, massive loans from the World Bank have been given to developing countries to strengthen the extension service. In addition ,

technical assistance programmes for similar purpose have been provided by United Nations specialised agencies. The FAO Extension Project in ASEAN countries and the World Bank technical assistance to the Rubber Industry Smallholders Development Authority (RISDA) in Malaysia are examples of such programmes. These undertakings have been formulated as the result of studies which indicated that extension organisations were manned by inadequately trained personnel in the technical subject matter as well as extension/communication processes (Saidin, 1983; Pradan, 1985).

A good training programme for extension agents should be developed to enable them to carry out their roles and functions effectively. The development of an effective training programme should rely on the findings of training needs assessment. Training needs assessment should be based on sound knowledge of the roles and functions of extension agents as well as the specific communication skills needed to carry out the roles and functions.

Accepting that extension agents must have good communication skills in order to develop an effective communication skills training needs assessment, it is necessary that one must have a complete knowledge of the communication skills required by extension agents. Thus, the development of an inventory of these skills is the first necessary step for the formulation of an effective training programme. A complete inventory is needed for the formulation of instruments for the

training needs assessment exercise. How could these skills inventory be developed?

Instruments used in previous need assessment studies were generally non-standardised. In many cases, instruments were validated by panel of experts. Draft instruments were normally administered to the experts for their comments and suggestions. As there were normally no attempts to carefully and specifically define concepts used in the instruments, one could easily challenge decisions made by the panel of experts and suspect that information gathered through the use of this instruments are incomplete.

Problem Statement

The need to strengthen communication skills of the extension agent is well recognised in Asean countries (Sulaiman, 1985; Sereno, 1989). Towards fulfilling this actual training needs for the extension workers it is necessary to develop an inventory of specific communication skills needed by extension workers. The development of the inventory entails the mapping of roles of extension agents and the identification of specific communication skills needed to perform the roles effectively. In view of this, the study attempts to determine approaches in developing inventory of roles and communication skills for extension agents.

Objectives of Study

In general, the objective of this study is to determine the approaches in developing roles and communication skills for training needs assessment of frontline extension workers.

The specific objectives of the study were to:

1.   determine the appropriate approach in developing the roles and communication skills required by field extension workers.

2.   develop an inventory of roles of frontline extension workers using selected approaches.

3.   develop an inventory of specific communication skills needed by frontline extension workers using   selected approaches.

In addition, the study also attempted to develop a prototype instrument to assess the communication skills training needs of field extension workers.

Significance of Study

This study will contribute to the development of an inventory of communication skills required by extension agents and the understanding of the roles of extension agents in rural development. Information on communication skills is essential to the programme planner, decision maker and policy maker in

formulating communication skills training programme for frontline extension workers. The instruments will enable the training specialist to understand the nature of communication skills training needed by frontline extension workers.

The prototype inventory will enable a more comprehensive study on communication skills training needs among frontline extension workers to be carried out in the future. The experience gained in the process of developing the skills inventory will provide useful guidance in the development of training needs assessment instruments.

Assumption

It is assumed that a person who has knowledge and a lot of experience in the field, or who is closely in contact with extension workers will be able to meaningfully provide information in the development of training needs assessment of frontline extension workers relating to the handling of extension processes.

Limitation of the Study

The study emphasised only on the development of an inventory of communication skills that could be used in needs assessment study relating to training needs of frontline extension workers. The data gathered in establishing the prototype inventory were acquired or collected from experts/practitioners. The perspective from trained extension workers and from the study of

work environment requirements of specific community in client system has not been included in the present study.

Definition of Terms

Frontline extension worker refers to a professional who represents an agricultural agency and works closely with farmers to ensure desirable behavioural change. Extension worker consists of two categories; extension specialist and field extension workers or frontline extension workers. This study is only focused on training needs assessment for frontline extension workers.

Communication skill refers to the ability of the frontline extension worker in transferring various types of messages to his clients.

Training needs refer to expression of what additional abilities could be acquired through training in order to increase the effectiveness of the extension worker.

Roles refer to the functions that an extension worker plays in order to perform his job effectively.

Inventory of communication skills refers to a list of communication skills that must be possessed by frontline extension workers to perform their roles effectively.

CHAPTER II
REVIEW OF LITERATURE

This review of literature has been carried out to provide the existing status on knowledge and issues of concern to the study. In the context of the study, the following areas have been reviewed: (1) role of extension workers; (2) communication skills; (3) training needs assessment; and (4) development of instruments.

Role of Extension Workers.

Extension workers are individuals who represent the change agency responsible for bringing about positive changes in the lives of people. These personnel, if properly trained, are instrumental for the realisation of the agricultural development objectives. This phenomenon in ASEAN countries has been discussed by Adam (1982); Sulaiman (1985); and Sereno (1989).

The fundamental task of extension workers is to stimulate, encourage and support positive changes in rural communities for better life. This statement has been supported by Rogers (1972) and Havelock (1973). Rogers views the change agent as an individual who influences clients' innovation decision in a direction deemed desirable by a change agency. Similarly, Havelock defines a change agent as a person who facilitates the process of planned change.

Extension agents are social engineers who are concerned with changing people's behaviour. They need special training to play the vital role in influencing behavioural change of the people. Bringing about behavioural change is very difficult task which requires time and determination. Mosher (1966) significance of the roles of extension agents and the contribution of these agents of change in rural development.

The roles of extension agent have been discussed by many scholars such as Rogers (1972); Havelock (1973); Haberman (1978), Beal (1981); Sulaiman *et al.* (1986); Roling (1988); Ban (1988); and Hayward (1989). These scholars have different views on the roles of extension workers. Table 1 summarises their views.

Table 1 shows that the eight scholars have different perspectives in viewing the roles of extension workers or change agents. Rogers (1972) and Havelock (1973) have almost similar views about the roles of change agents in relation to the process of diffusion of innovation. However, Havelock's perspective is more on education. Although, Sulaiman *et al.* (1986) share Havelock's views regarding the roles of extension workers, they further add that development worker has to play the role of a communicator. On the other hand, Haberman (1978) views the role of extension agents from a communication perspective. According to Haberman a frontline extension worker is an information giver, a motivator, a legitimiser, and a catalyst. Beal (1981) regards extension workers as change agents that are able to act as researchers, facilitators, consultants, organisers and administrators.

Table 1

Roles of Extension Workers Identified by Scholars

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Authors	Year	Perspective		Role	Total
Rogers	1972	Diffusion-innovation	-	Develop needs for change	7
			-	Establish exchange relation	
			-	Diagnose problem	
			-	Create intent to change	
			-	Translated into action	
			-	Stabilise adoption	
			-	Achieve terminal relationship	
Havelock	1973	Education	-	Catalyst	4
			-	Solution giver	
			-	Process helper	
			-	Resource linker	
Haberman	1978	Communication	-	Information giver	4
			-	Motivator	
			-	Legitimiser	
			-	catalyst	
Beal	1981	Social change	-	Researcher	6
			-	Educator	
			-	Facilitator	
			-	Consultant	
			-	Administrator	
			-	Organiser	
Sulaiman *et al*.	1986	Development work	-	Catalyst	5
			-	Problem solver	
			-	Process facilitator	
			-	Resource linker	
			-	Communicator	
Roling	1988	Agricultural information system	-	Mobiliser	5
				Organiser	
				Trainer	
				Technical supporter	
				Manager	
Hayward	1989	Technology transfer	-	Diagnoser	6
				Feedback seeker	
				Message transferrer	
				Trainer	
				Motivator	
				Decision maker	
Ban	1988	Technology transfer	-	Linker	5
			-	Mobiliser	
			-	Decision maker	
			-	Teacher	
			-	Motivator	

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Roling (1988) views extension workers' roles based on agricultural information system perspective. According to him, the extension worker should perform his roles as a mobiliser, organiser, trainer, technical supporter, and manager. Similarly, Hayward (1989) states that in the process of transfer technology to the farmers, extension worker should act as a diagnoser, feedback seeker, message transferrer, linker, trainer and motivator. While Ban (1988) has the opinion that extension worker has to play the role as a linker, mobiliser, decision maker, teacher, and motivator.

Although these scholars use different terms or symbol, they have similar views on the roles of extension workers. For example Rogers' explanation of the role of extension agents in enabling the clients recognise their needs and problems, is basically similar to what Havelock and Sulaiman *et al.* explain as role of a catalyst. Similarly, what Rogers explains concerning the roles of creating intent to change is almost similar to what Sulaiman describes about the role of extension workers as problem solver. Haberman, on the other hand, explains the roles of extension worker more in micro perspective than the explanation given by Sulaiman *et al.* The role of information giver for example is basically a part of the roles of a communicator.

It can be concluded that there are some duplication in the scholars' statements concerning the roles of extension workers. This study attempts to determine the overall communication skills

including the specific communication skills based on perspective of the roles of frontline extension workers.

Communication Skills

Communication skills are necessary to perform each of extension workers roles effectively. Although Rogers (1972), Havelock (1973), Haberman (1978), Beal (1981) and Sulaiman *et al.* (1986) deliberated on the roles of extension agents, they do not provide detailed explanation on communication skills that should be possessed by the agents to perform each of the roles. Rogers (1972) states that extension agents should have the ability to select various effective media in accordance with preference of the audience, and should have the ability to gain feedback from their client for the enhancement of their field programme. Clients are basically different in term of needs, so the extension worker should be able to obtain the relevant information in accordance with the client's needs. In relation to Roger's explanation concerning the roles of change agents, the following communication skills can be generalised from these roles:

1. Ability to initiate the clients toward the change process.
2. Ability to convince the clients and make them capable of handling the problem.
3. Ability to develop rapport with the clients.
4. Ability to empathise with the client's need and problem.
5. Ability to analyse problem.

6. Ability to motivate client's interest towards innovation.

7. Ability to persuade the clients through interpersonal contact.

Similar to Rogers' views, Havelock (1973) notes that extension agents play four main roles. He deliberates on the communication skills needed but he is less specific in mentioning which skills are needed in performing each of the roles. Communication skills that could be derived from Havelocks' discussion include the following:

1. Ability to build relationship with the clients.

2. Ability to listen to the clients' problems.

3. Ability to encourage two-way communication process.

4. Ability to create and share information with the clients to achieve mutual understanding.

5. Ability to seek information that will match the problem and needs of the client.

6. Ability to seek alternative solution of the client's problem.

7. Ability to describe, discuss, and demonstrate technological know-how to the clients.

8. Ability to select the effective channel of communication in order to provide maximum information.

Sulaiman *et al.* (1986) emphasises that in order to play his roles effectively, an extension worker has to be a good communicator. His explanation of the term communicator was