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# GROUP APPROACH IN INDONESIAN AGRICULTURAL EXTENSION: A NEED FOR PARADIGM SHIFT

Pendekatan Kelompok dalam Penyuluhan Pertanian di Indonesia: Perlunya Pergeseran Paradigma

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The Indonesian government has put farmer groups in a strategic position within the system of Agricultural Extension. Farmer groups have been used to promote community participation and community learning, the key processes in sustainable agricultural and rural development. Moreover, according to the new policies of agricultural extension, farmer groups are expected to run a Rural Extension Center (REC). The focus of this paper is to discuss the existing situation of Indonesian extension, especially the farmer groups. Review of extension policies and our findings on farmer groups' role performance are presented in this paper. Based on the three years longitudinal study using Modified Participatory Action Research (MPAR) method, this study indicates that most groups failed to perform critical roles in supporting sustainable agricultural and rural development. The learning outcomes generated through the study revealed the needs for paradigm shifts in the implementation of agricultural extension policies to meet the existing demand for changes.

### **ABSTRAK**

Pemerintah Indonesia menempatkan kelompok tani pada posisi strategis dalam sistem penyuluhan pertanian. Kelompok tani telah digunakan untuk mendorong partisipasi dan pembelajaran, yang keduanya merupakan kunci dari proses pembangunan berkelanjutan. Lebih dari itu, dalam kebijakan Nasional penyuluhan pertanian kelompok tani diharapkan menjadi lembaga terdepan dalam proses penyuluhan. Fokus dari tulisan ini adalah membahas tentang situasi terkini penyuluhan pertanian, khususnya yang berkenaan dengan kelompok tani. Review atas kebijakan dan temuan penelitian tentang peran kelompok dalam penyuluhan juga dilakukan dalam tulisan ini. Atas dasar kajian longitudinal selama tiga tahun dengan menggunakan metode Modified Participatory Action Research (MPAR), studi ini menunjukkan bahwa banyak kelompok tidak mampu berperan dalam mendukung pembangunan pertanian dan pedesaan secara berkelanjutan. Hasil penelitian ini menunjukkan perlunya pergeseran paradigma dalam implementasi kebijakan penyuluhan dalam rangka menghadapi tantangan perubahan saat ini.

Key words: Group, agricultural extension, community learning, paradigm shift

Kata Kunci : Kelompok, Penyuluhan Pertanian, Pembelajaran masyarakat, pergeseran paradigma

### INTRODUCTION

Indonesian agricultural extension approaches have changed from mass approaches to participatory approaches. In the mid 1960s, mass guidance (Bimas) approach was introduced and it was considered as the most important development in rural production (Saiogyo, 1979). The approach had successfully increased Indonesian annual rice production by 4.8 percent. This approach however, failed to reach poor and smallholder farmers, and had widened the gap between the poor and the rich farmers (Sajogyo, 1973). In the late 1970s, in line with the introduction of Training and Visit system, Special Intensification (Insus) program was introduced. This program focused on group approaches to increase rice production. This group approach led to Indonesia's self-sufficiency in rice in 1984 (Ministry of Agriculture Jakarta, 1992). Because rice production reached its leveling off point in 1985, while rice demand was continuously increasing, the Indonesian government introduced Super Special Intensification (Supra Insus) program in 1987. Supra Insus program is a social and economic engineering program, which is based on intra and intergroup cooperation (Ministry of Agriculture Jakarta, 1988). This approach increased rice production by an average 0.8 tonnes per hectare in 1992/1993, with the achievement of an average rice production of 5.5 tonnes per hectare.

This success of agricultural development indicates the strategic roles of farmer groups as an approach used in agricultural extension. As a results, in 1995, about 343,490 farmer groups were established around the country. Farmer Field Schools and Income Generating programs are the other types of extension approaches where farmer groups have been used.

Although the group approaches have shown successful achievements, studies also revealed some issues of extension. Training and Visit (T & V) system could not be implemented effectively and most farmer groups were not capable in promoting sustainable agricultural and rural development (Harun, 1996). Lack of farmer participation in groups and extension were also found (Arifuddin, 1991; Muktasam, 1995; Suadnya, 1993). (Harun, 1996) also reported the poor performance of Indonesian agricultural extension organisation and management.

Agricultural extension has a strategic role in agricultural development. Extension has to be the future organisation to play significant role in sustainable agricultural development (Patton, 1993). Patton stated that the future extension should has characteristics such as response to agricultural changes, system and holistic approach, participative, close link among all the components in Agricultural Knowledge and Information System. The extension personnel should be professional in dealing with the challenging issues, capable in

handling socio-cultural issues, competence in using mass media and other electronic equipments such as computer (Hawkins, Rimmington, & Hoare, 1993; Kobayashi & Bittenbender, 1993). The extension personnel should also have a high standard of communication skills, sensitive to extension clients' needs, and be able to develop community participation and to work in a holistic team.

With the existing issues and in response to these challenges, the Indonesian government launched new policy of agricultural extension where farmer groups have been expected to play more strategic roles in the whole process of extension.

This paper focuses on policies and practices of agricultural extension in Indonesia, especially the roles of farmer groups. Review of policy statements is presented to give some ideas of how extension and farmer groups should/could play their roles in agricultural and rural development. This paper is organised into the following sections:

- Policies and practices of agricultural extension in Indonesia: An overview
- Methodological approach to study farmer groups
- Recent findings of farmer groups' role performance in agricultural extension and rural development.
- Some implications for extension a need for paradigm shift

## Policies and practices of agricultural extension in Indonesia: An overview

# Critics toward the extension practices based on Act. No. 65. 1991 (policy of Agricultural Extension)

Several issues of extension were found after the government implemented the Act. No. 65/1991. These issues are:

- One sector domination that led to the problems of information gap.
   Farmers got more information in certain crops (dominated crops) while lack in others such as animal husbandry. Extension practices should aware of variability (Beebe, 1994), because farmers often have more than one farming activities which need different types of technical information. Another problem related to the one sector domination was 'sector egoism'. This issue had led to the disintegration of extension services.
- Lack of coordination between field extension agents. This led to inefficiency and ineffectiveness of extension organisation and management.
- A 'top-down' approach of extension process. A low rate of adoption and diffusion were found as the real consequence of this approach (Muktasam, Nurjannah, & Monica, 1996) (Ogunfiditimi, 1993). This

approach is contradicted with the exisiting trend of development approaches such as community and organisational learning (Chamala, 1999; Pretty, 1995; Röling & Wagemakers, 1998), community empowerment and people's participation (Cernea & World Bank., 1991; Chamala, 1995; Chamala & Keith, 1995; Chambers, 1983; Delman & Kulander, 1993; Oakley, 1994; Rouse, 1994).

- Ineffective management functions due to the lack of farmers' participation, and lack of resources. (Slamet, 1993) argued that management problems had created ineffectiveness and inefficiency.
- Several other problems were also found such as that many farmer groups were not effective, lack of new technologies to be extended, and weak linkage between extension organisations and research and development institutions (Harun, 1996).

## New policy of Agricultural Extension - Government Act No. 54/1996

In respond to these issues and criticisms, In April 1996, the Indonesian government launched new Agricultural Extension policies. These policies expect to improve agricultural extension performance, especially in the areas of *Inter-agency coordination* and *farmer groups*.

In the new policy, All field extension agents have to be in one organisational structure to accommodate different vested interests, to avoid 'sector domination', to creat massive coordination and to improve integration of rural development efforts. The REC should be used as a front line of daily extension services. Field extension agents should improve their knowledge and skills through regular training facilitated by extension specialists from the Agricultural Information and Training Centre (AITC).

According to the new policy, an AITC has the following functions:

- Develop extension programs
- Help field extension agents in planning and implementing extension programs
- Provide agricultural information
- Help AEC management
- Facilitate effective coordination of extension activities at the sub-district level
- Undertake monitoring and evaluation functions
- Centre for agricultural development communication
- Conduct regular training for field extension agents and farmers
- Help farmer group development
- Help farmers with technical skills
- Conduct farm demonstrations
- Library management

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- Conduct test for agricultural technology adaptabilities
- Provide technical assistance to extension process, and
- Conduct administrative activities.

With these functions, the AITC uses RECs (one in every subdictrict) as the front line of the daily extension activities. In the future, these RECs will be run by farmer groups supported by an experienced field extension agent.

## Farmer Groups and their roles in Agricultural Extension

The following policy statements indicate several reasons for using groups in agricultural extension:

"Through groups, farmers are encouraged to work together - in the mode of teaching and learning process - to improve their knowledge and skills, achieve economies of scale, and for better farm management. The group may be involved in getting agricultural inputs, production process, and product marketing which in turn develops it as a commercial group" (Agricultural Extension Centre, 1996. Guidelines of Farmer Group Supervision. Department of Agriculture, Jakarta).

Group formation and membership: According to the government guidelines, a farmer group should be established on the basis of the farmers' common needs, interest, and problems. The group therefore should be established by, from, and for the farmers themselves (Department of Agriculture, 1996). In the early development of farmer groups, farmer groups were associated with groups of food crop farmers. It was a consequence of the introduction of the T & V system to increase food crops, especially rice production. However nowadays, farmer groups have spread throughout the primary production sector, such as animal husbandry, plantation and fisheries, which has then led to the establishment of animal husbandry groups, plantation groups and fisheries groups.

Group role expectations and classification: Farmer groups have several roles in agricultural and rural development:

- Developing seasonal and annual plan for the whole area within the groups' boundaries
- Establishing inter-group agreement
- Promoting capital formation
- Developing internalised relation with the Rural Cooperative Unit, and

Utilising information, adoption of new technology for productivity improvement.

Based on these five major roles (indicators of group performance according to the Ministry of Agricultural agreement no.42/Kpts/OT.210/1/92), farmer groups then are classified into four different categories, namely beginner, intermediate, pre-advanced, and advanced farmer groups.

Group competition: To encourage group development, the government regularly evaluates group performance using these five role components. Competition among the groups is regularly held by the government every year, starting from district level to national level. The first rank farmer group at the national level would be invited to attend the national celebration of Indonesian Independence Day in Jakarta.

Farmer groups association: Once farmer groups develop their economic activities where economies of scale become an issue, strong institutional support is required and this leads to the need for inter-group collaboration and coordination. According to the government guidelines (Department of Agriculture, 1996), when farmer groups developed to this point, they need a Farmer Group Association. This association is developed to promote effective distribution of agricultural inputs and the production process. Furthermore, activities such as marketing, capital formation, credit, and information management are the other tasks of the Farmer Group Association.

## **METHODOLOGY: Longitudinal study using MPAR**

Modified Participatory Action Research (MPAR) method was used in this study where three phases of fieldworks were conducted in West Lombok district West Nusa Tenggara province Indonesia. The first phase of fieldworks was carried out to collect data from farmer groups, field agents, and other government staff, while the second phase of fieldwork was carried out to bring the tentative results to the groups and stakeholders. The aims of the second phase were also to confirm and to gain further insights on various issues. Six workshops were carried out in this phase. Another objective of this phase was to use the research findings for helping groups and development agencies through action learning processes.

Participatory workshops were used to achieve these objectives. Participants were encouraged to perform critical self-reflection factors associated with group failure, find solutions, and develop realistic action plans. Brainstorming, SWOT analysis, small group and plenary discussions were used to facilitate the workshops. The researchers took facilitation roles

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and promote information flow from groups to field extension agents and to policy makers – from village to provincial level. Group workshop results were presented at the field agent workshop, and these workshop results were presented at the district and provincial level workshop involving policy makers and other stakeholders.

The third phase was carried out to examine groups and field extension agents' actions to implement their action plans. Institutional capacity building was also carried out to help the groups and the agencies.

# FINDINGS OF GROUP ROLE PERFORMANCE AND THE NEED FOR PARADIGM SHIFTS

## Role performance of successful and less successful groups

Our study on group role performance at two selected villages of West Lombok district, indicated that most groups failed to perform their expected roles. In the less progressive village, nine farmer groups were identified, however only one of these farmer groups performed substantial roles (Table 1). At the progressive village, seven farmer groups were found and not active. These less successful groups did not have any voluntary actions and demonstrated their dependency. Suadnya (1998) also found some farmer groups did not have any actions.

The first phase investigation of group members' perceptions of their groups' role performance highlighted different perceptions of the successful and the less successful groups in the selected villages (Table 1). The successful farmer group performed several roles in rural and agricultural development compared to the less successful group at the PV.

Table 1. Group Members' Perceptions of Group Role Performance (percentage of responses)

Rol	es performed by the groups	G1 (n:36)	G2 (n:30)			
1.	Agricultural inputs supply	86.1	0			
2.	Medium of TOT or extension	36.1	0			
3.	Social and economic activities	86.1	0			
4.	No role was performed	0	100			
Rol	Role performance level					
1.	No role	0	30 (100)			
2.	Low	24 (66.8)	0			
3.	High	12 (32.2)	0			

Notes: The only farmer groups presented and discussed for this paper

G1: The farmer group at the Less Progressive Village

G2: The farmer group at the Progressive Village

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The members of the successful farmer group perceived that the group performed three roles in the last few years. These roles were:

- Helped group members and other farmers with agricultural inputs. About 86
  percent group members stated that they got agricultural inputs such as
  Urea and TSP fertilisers, and seeds through their group.
- Introduced new technologies or innovations to the group members and wider farming communities at the village. This role had been continually performed by the group during the *Insus* and the *Supra Insus* programs. Later, In 1996/1997 growing season, the group introduced new rice varieties – called *Maros* and *Membramo*.
- Helped group members in fulfilling their daily needs such as raw sugar

The second and the third phases investigation identified that the group sustained its activities, implemented group action plan (developed in the second phase – group workshop), peformed continuous action learning, and expanded group actions beyond the action plan. The third phase investigation identified the following actions/changes taken by the successful farmer group:

**Formation of Farmer Cooperative and adoption of PAM model:** According to the group leaders, several driving forces for the formation of the farmer cooperative were:

- Group's action plan developed in the workshop
- Group's intentions to serve its members and wider communities better by expanding group's activities
- Supports and encouragement from village leaders, the staff of the Department of Cooperative, and Mataram University, and particularly in response to the economic and monetary crisis at the end of 1997.

The group leaders who are now taking leadership positions in the farmer cooperative claimed that they applied PAM concept in the farmer cooperative by having sections /groups based on the farmer cooperative's activities. Every section/group would perform specific activity under the cooperative umbrella - village development lens.

The third phase investigation indicated that the cooperative has acted as a 'development lens' (Chamala, 1995) by mediating any resources moving into and out from the groups. The cooperative has involved in economic activities such as farm credit scheme, supplying fertilisers, sugar, saving and credit, supply goods to its members, cattle fattening, and cattle marketing. As a 'development lens', five farmer groups and three cattle fattening groups joined the cooperative. According to the group secretary (now become cooperative secretary), any interventions promoted by the government would go through farmer cooperative before they are directed to technical groups (convergence and divergence concepts – Chamala, 1995).

Technical tasks would be the job of the technical groups, while business and economic tasks would be handled by the cooperative.

**Vertical mobility of group leaders:** Because of their success in managing the group, all leaders of this successful farmer group were collectively elected to lead the farmer cooperative. The head, the secretary and the treasurer of the group were elected for the head, the secretary and the treasurer of the farmer cooperative respectively. They are now not only responsible for farmer cooperative and the farmer group, but also to other technical groups such as farmer groups and cattle fattening groups under the cooperative umbrella - 'development lens'. This also indicates that the successful farmer had been acted as a breeding ground for village leaders.

Changes in group's tasks and activities: With the establishment of the farmer cooperative, tasks of the farmer group are no longer on business and profit oriented activities. The group is now focusing on technical issues such as in helping its members with new agricultural technologies and other types of agricultural extension services. Business and profit-oriented activities are now handled by the farmer cooperative by taking over the existing business activities of the farmer group, tractor rental, mechanical workshop, daily needs supply, cattle fattening, local chicken poultry, and nursery (horticulture).

**Changes in group size and group leadership:** Group size and leadership has changed in this successful farmer group. The members of the group increased from 36 to 66 farmers while the leaders have been reelected.

**Emerging concerns:** The group leaders and some members raised the following concerns regarding the changes in the group:

- The increase of the group size from 36 to 66 may lead to a decrease in group cohesion.
- The farmer cooperative has not been prepared well to run the activities.
- To the leaders of the farmer cooperative stated that they found more works nee to be done while they have limited knowledge and skills in running the cooperative.
- Regarding the group leadership, the village formal leaders expressed their concern about group and farmer cooperative sustainability. The head of the by the rules can be replaced by another member of the cooperative who may or may not has a strong power and influence. This may lead to decline of group and farmer cooperative's productivity or even to the termination stage. The group head is a strong influential religious scholar at the village and has a strong commitment to serve the community and the government. He is also the key person in the

village to whom government agents and village communities find advice and support.

## Why group failures: Field extension agents' perceptions

In regard to group role performance, a workshop was carried out at the Agricultural Extension Centre. This participatory workshop generated valuable learning outcomes (Table 2).

Table 2. Field Agents' Perceptions of Problems, Solutions and Action Plan to Help Farmer Groups

Problems	Approaches (Solutions)	Plan of Action		
Gov. policies     (implementation)	<ul> <li>Avoid "target"</li> <li>Better coordination</li> <li>Based on real situation</li> </ul>	These solutions would be proposed to the upper level staff at the regular meeting with "FEA supervisor" in REC or in upper level.		
2. Group leadership & management	Training for group leaders (in group establishment & group management, entrepreneurship).	Training will be held at REC, every Friday and Saturday, focus on these subjects. Trainers would be Agricultural Extension Specialists, University staff and others. Training for group leaders will be carried out after FEA training.		
3.  Coordination	Better environment for coordination     A need for simple bureaucracy and coordination.     A need for better understanding of coordination it self.     Real actions from related departments	Inclusion of "coordination" as a topic in REC training (stakeholder identification, reasons for coordination, coordination mechanism, interagency relation).      Reference on PAM model (available in the Faculty of		

						Agriculture Library).
•	4. Resources feasible activity	&	•	Training to improve skills of group members. Group saving. Conduct Feasibility study. Cooperation with technical department. Management training.	•	Group training on relevant subject matter. Field agent training on group resources mobilisation - use Chamala's books documented in the Faculty of Agriculture Library-Mataram University.

Solutions developed through small group discussion demonstrate some expectations of the field extension agents.

- The policy makers should not impose targets in many cases were unrealistic and difficult to achieve
- To improve field extension agents' knowledge and skills in group management.
- To get a comprehensive understanding about coordination. The workshop participants wanted policy makers to know these expectations.

However, a *learning disability* (Senge, 1994) was found in the workshop where field extension agents and their coordinator asked the authors not to tell "duty overloaded" to the policy makers at the district and the provincial levels. This is against the idea that ability to learn from experiences is the key to the success (Pretty, 1995). One of the reasons for this organisational learning disability was job security/promotion. In regard to organisational culture, the term *ABS* (*Asal Bapak Senang* – just to make boss happy) is very well known in Indonesia. Field extension agents have to report their "success" only if they want to be promoted. This may be one major obstacle to create learning organisation as the culture might have developed throughout the organisational line, from field level, district, province and to the national level.

# A Need for a Paradigm Shift in Policy Implementation: Participatory action learning utcomes

The learning outcomes generated through the workshops conducted in the second phase of the study demonstrated a need for paradigm shift in promoting groups for effective and sustainable agricultural and rural development.

**Shift from instruction to social learning:** Groups and government agencies perceived the needs for effective socialisation of groups and programs. Workshop participants realised that most group members were not aware of groups, groups' roles and the general objectives of government programs.

Group members' lack of knowledge, both about the essence of the groups and government programs, had led to people's misperception of the groups and the program. They perceived the group as a government instrument to deliver the credit and the program was perceived as a kind of government charity.

The workshops have prompted the community and the organisation to learn. They have consciously developed their expectations to the government to promote paradigm shift, moving from "blue print group establishment" to "normative, effective socialisation groups" through social learning processes. The partipatory workshops practiced during the second phase of the study, and the workshops outcomes show how group members, field agents and policy makers performed "critical self-reflection". This social learning approach become a critical departing point toward organisational success and sustainable agricultural and rural development (Bond & Hulme, 1999; Chamala, 1999; Cornwall, Guijt, & Welbourn, 1993; Farrington & Bebbington, 1993; Pretty, 1995; Pretty, 1998; Somers, 1998; Woodhill & Roling, 1998). (Pretty, 1995) states "it is incresingly recognised that organisations that succeed in a changing and increasingly complex world are also those that have the ability to learn from their experiences, and adapt quickly" (pp.191).

**Shift from dependency to people's empowerment:** Workshop outcomes generated at group and agency level showed that government approaches to the groups were characterised by "dis-empowerment" process. The used of terms such as "top-down", "targeting", "object", "...do not want to share of responsibility", and "lack of community participation" reflect this process. The workshops generated a common desire from the groups and the agencies (especially expressed by their field agents) to shift the approaches, from "disempowerment" approaches to "empowerment" approaches.

Learning outcomes generated in the groups, field extension agents and policy makers workshops indicated the needs for skill development, not only for the group members, but also for the group leaders, and the field extension agents. The two major expected skills were group management skills and technical skills. These changes are crucial to paradigm shift in extension approaches, from Transfer of Technology (TOT) to human resource development, from advisory to facilitation (Coutts, 1994; MacPherson, 1993; Pretty, 1998; Somers, 1998), from teaching to learning style (Muktasam & Chamala, 2000; Pretty, 1995). Training was expected to improve group members and group leaders' knowledge and skills.

**Shift from amateur to professional field extension agents:** The workshops also generated a general expectation for professional field extension agents. The farmer group workshop for example expressed their desire to get more qualified field extension agents because the existing agent was not committed to take more action with the group. Evaluation of development program failures in some developing countries indicated that lack of

government commitment was the important cause of group failures (Crown, 1992).

The third phase fieldwork - meeting with field extension agents at the Rural Extension Centre - and a reflection on the existing concept of extension and found that the extension as a 'delivery system' was no longer effective to facilitate sustainable changes. Extension should be seen as a profession in which continuous action learning should be done to accommodate the fast changes in all aspects of people's life (socio-cultural, economic and natural environment). Field extension agents, therefore should put and place themselves within the context of social learning process (Fisk, Hesterman, & Thorbun, 1998; Thompson, 1995).

Shift from parallel approach to Participative Action Management (PAM) approach: Learning outcomes generated through the field agents and policy makers workshops demonstrated their needs to develop effective interagency coordination to improve group role performance. Government approaches to group and rural development have been dominated by disciplinary and parallel approaches that had led to overlapping of rural institutions, groups and programs. To develop effective interagency coordination, the field agents' workshop suggested four main approaches (Table 2).

Shift from supervision to facilitation: The use of 'supervision' term indicates top-down approach dominancy. Group workshop outcomes revealed the need for a paradigm shift, from group supervision to group facilitation. The group members for example asked their field agent to facilitate to their learning to improve knowledge and skills. These desires coincide the following statement: "we are no longer in the realm of the transfer and utilization (adoption and diffusion) of scientific knowledge...what we are after is the facilitation of learning through making things visible, helping people to reconstruct realities through experimentation, discourse, observation and meaningful experience" (Woodhill & Roling, 1998). The strategic role of facilitation as an approach to promote learning for sustainable development is also expressed by (Pretty, 1995; Pretty, 1998) and (Cornwall et al., 1993).

Shift leadership style from individual to group commitment: Field extension agents suggested a paradigm shift in group leadership. Effective group leaders should have commitment, knowledge, and ability – demonstrated by the leaders of the successful group. Commitment to work in groups would lead to group leader willingness to develop their ability. Once group leaders committed to their groups, more time and efforts would be spent for the group in expense of individual interest. The leader of the successful farmer group provided an example of this type of leadership, who voluntarily gave his land to the group for group's activities.

### CONCLUSIONS

This study shows that sound policies of agricultural extension were not effectively translated into practices. Most farmer groups failed to promote voluntary actions to support sustainable agricultural and rural development. However, there are some successful farmer groups that one of them investigated in this study.

This successful farmer group has not only performed strategic roles in agricultural and rural development, but also has succeed to sustain and to develop voluntary actions to fulfill group members and wider village communities' needs.

The groups and field extension agents' learning outcomes indicate their needs for paradigm shifts, especially in the policy implementation side. The sound policies of farmer groups and extension could only be implemented properly when the approaches to policy implementation are shifted from instructional to social learning approach, from dependency to people's empowerment, from amateur to professional field extension agents, from parallel approach to participative Action Management (PAM) approach, from supervision to facilitation, and shifting leadership style from individual to group commitment.

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