

#### ***IV Recommendation for Participatory Agricultural and Rural Development***

## IV Recommendation for Participatory Agricultural and Rural Development

### 1. Participatory methods and their importance

#### 1.1. Participatory development

Participatory development (PD) is an important method for propagating the benefits of economic growth and development to poorer and weaker strata of society. The key concept of participatory development is that the allocation of development investment is not determined by the government, but rather by the communities concerned. The communities order the priorities of development needs and conduct the operation and maintenance management of the assets produced.

In particular, the agricultural and rural sectors have large numbers of poor people, so their full participation in development projects is important. Organization of the participating residents is also necessary for expanding their social and economic activity through the process of the project. Figure 4 - 1 below is a schematic diagram of participatory development.

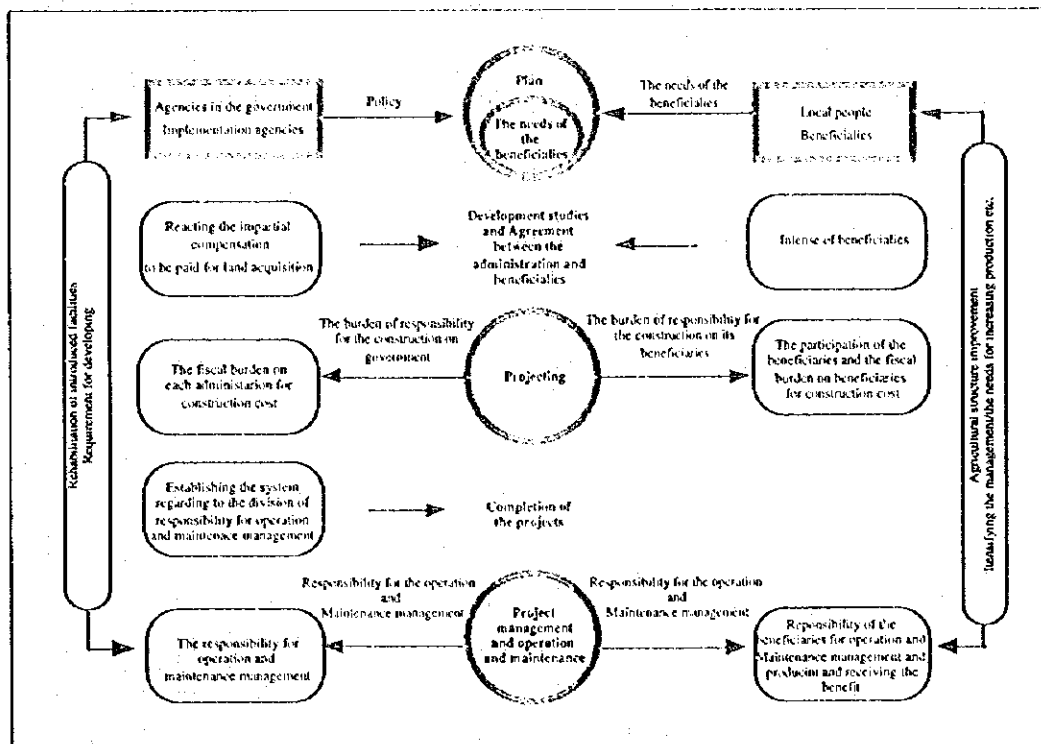


Fig. 4 - 1 Schematic diagram of participatory development

As the above framework for participatory development clearly shows, if the development concept, which is usually policy driven (the "Top-down" approach) in developing countries, can

#### *IV Recommendation for Participatory Agricultural and Rural Development*

be made to reflect the needs of the beneficiaries and other local people, the development is much more likely to gain their approval. A rational plan can also be developed which greatly reduces the social impact of population displacement and the amount of compensation to be paid for land acquisition. The agreement of the beneficiaries will clearly define the "burden of responsibility for the project on its beneficiaries" at the next stage. This makes it easier to set up the "responsibility system", which is usually the most difficult point in developing countries. It can also reduce the fiscal burden on the administration imposed by World Bank/IMF structural adjustment measures. This approach is very valuable as a means of simplifying the arrangements for a maintenance management system for the facilities and the division of responsibility for the system.

##### *1.2. Organization and system building*

Community organization and the building of systems are important points in participatory development. Particularly in projects targeting newly-formed or immature communities, measures to strengthen organizations and set up systems are indispensable. Such measures build the structures and frameworks of functions which help the project to attain its objectives efficiently and develop sustainably. Organization and system building are vital elements in realizing project effects (chance of successful implementation, fairness, degree of resident participation, sustainability of effects) and forming and enhancing abilities which are needed for sustainable and independent social progress. They also enhance the effects of aid.

##### *1.3. Methods of participatory development*

In this section we will examine survey methods related to public participation in development projects. This participation is an important element which should be considered when the results of social analysis are reflected in the determination of plans. Public participation means that the people who will be affected by the project start the changes for themselves, rather than passively receiving changes that are carried in from elsewhere, or standing against the changes. Thus the people of the community recognize the aims of the project, they are empowered and are able to contribute to the decision-making process. For this to work, the ideas, wishes and concerns of influential people in the community must be heard and reflected in the plan. Participation at the implementation stage of the project helps the community to adapt smoothly to the changes which result, and gives it a sense of responsibility for the maintenance management of the facilities which received the investment. Complete participation must start from a blank slate, rather than from a number of proposals from which the beneficiaries must choose. Therefore, rather than sticking to the familiar "blueprint approach", complete beneficiary participation requires a new "process approach". The participation of the beneficiaries divides the project between phases in a more effective kind of development plan, which makes it easier to revise the plan partway through the

#### *IV Recommendation for Participatory Agricultural and Rural Development*

development process. This approach also requires strong leadership to overcome obstacles and forge a consensus. Seminars timed to coincide with the start of development surveys for the project are an important way of promoting participatory development by telling the residents what the project is about in a clear and effective manner. The distribution of pamphlets etc. introducing the project to all the people involved can be used as an opportunity to review the content and concepts of the project and also to check whether everybody concerned has a full and accurate idea of the project's aims, plan and process. This approach is also valuable as a means of giving the project staff, and the residents who will play an important role in the success of the project, a sense of commitment. Seminars at the start of the development survey have become increasingly common practice in all sectors over the last decade.

The following are specific examples of the processes of participatory development.

- 1) Dialog between the target group and the executing agency is encouraged so that the target group can provide meaningful input to the creation of the plan.

Examples: Selection of suitable farming techniques and the locations for subprojects, definition of the necessary educational services and definition and approval of water channel designs for irrigation subprojects, etc.

- 2) Establishing mechanisms for target group participation in the processes of planning construction and operation.

Examples: Discussions between the government and the community. Training education staff in the approach the target group want their education to take, strengthening the roles of local leaders, creating forums and revising traditional communication channels for exchanges between people of differing languages and literacy levels, trials of application exams, sharing of the work of monitoring development effects with the farmers, the organization and formation of new target groups to meet the needs of differing groups, the strengthening of existing organizations, training in management, finances and techniques for local groups, etc.

Dialog with the people of the project area is the starting point for an accurate grasp of the beneficiaries and their community, which forms the foundation of participatory development. To put it another way, the question of "what kinds of people should we contact?" at the development survey stage leads on to "through what social groups should we encourage participation in development?".

**IV Recommendation for Participatory Agricultural and Rural Development**

**(1) Approaches to participatory development according to the scale of the plan area**

As Table 4 - 1 shows, the term participatory development can be applied in a range of situations, and what it actually means varies with the scale and type of the development and the scale of the area concerned. For example, projects such as the development of a nationwide distribution system or a master plan survey for fund conservation would cover a wide area over the whole of a developing country. In the case of distribution systems, there are many social groups involved in a distribution system and many which have a variety of interests in the system. These social groups include the representatives of economic groupings, agricultural producers, transport businesses, market managers, market users and the general public. A wide range of groups concerned should be found and their views heard in as much depth as possible from a range of viewpoints. If information is lacking when the plan is devised, there is the risk of unfairness, where only certain groups from among those concerned will benefit from the development and only certain groups will bear the burdens. In such cases, balanced, sustainable development is unlikely to result. Appropriate methods for the developing country concerned, such as interviews with individual groups or collective meetings, should be used to gather views.

**Table 4 - 1 Assessment of needs**

Survey scale	Participants	Methods of dialog with participants
Large-scale development survey e.g. Improvement of national distribution systems	Persons concerned in central government Representatives of the local authorities concerned Various representatives of national organizations Chambers of commerce Economic groups Industry organizations (of shipping companies etc.) National-level NGOs	Public meetings Interviews of various types Seminars PCM
Medium-scale development survey e.g. Integrated regional development	Persons concerned in central government Representatives of local authorities Chambers of commerce of the region Main industrial groups of the region NGOs of the region Residents of a number of villages	Interviews of various types Seminars PCM Rapid appraisal methods
Small-scale development survey e.g. Model village developments	Persons concerned in central government Representatives of local authorities Members of the village chamber of commerce Workers in the main industries of the village NGOs operating in the village The villagers themselves	Interview surveys (structured interviews) Rapid appraisal methods

#### *IV Recommendation for Participatory Agricultural and Rural Development*

##### (2) Survey methods for participatory developments

Other than the approach described above, opportunities can be devised for the people of developing countries to get involved in the creation of development plans within master plans and feasibility studies. In recent years, a number of participatory rapid appraisal methods have been proposed.

Rapid appraisal has been called Rapid Rural Appraisal in the past. It is a means of finding the social groups in the subject area and studying its economic and social activity for social analysis work. The survey approach has its anthropological aspects, but where a cultural anthropological researcher would spend years of field work living in the subject area, this approach gathers accurate information without spending the time. That is why this method is termed "simple" or "rapid". It may be called rural, but this method would also be applicable to slum communities in urban areas. The method of rapid appraisal is now shifting from the structured interviews, which survey staff have used in the past, to participatory rural appraisal, which gives the residents the dominant role in the analytical process. In this process, graphical presentation (graphs, maps etc.) is used to enable full participation in areas with low literacy rates. When used in development projects which do not cover large areas, such as small-scale rural village developments, this method can gather all types of information with a level of accuracy as high as that of sample surveys. In the future, this method should be developed to make it easily applicable to wide-ranging surveys such as master plans.

##### (3) Survey methods for participatory development in rural development which is limited to certain areas

Where the content of a rural development survey is restricted to considering a certain, defined area, the participation of the area's residents consists of direct hearings of their opinions. This is close to the participatory approach taken in small-scale development projects which have mainly been handled by NGOs in the past. Initially, social organizers are dispatched to the villages of the area to make repeated contacts with the residents over time. The social organizers gain an understanding of the various needs of the residents, the social groups which exist in the village and the relationships between their interests. This understanding allows a decision on whether or not development activity will be effective. The content of the kind of participation described above varies according to the objectives of the development survey, but this does not mean to say that "participatory development is inappropriate because this is a macro-scale survey". What is needed now is ideas on how to effectively apply the methods which have already been developed.

#### *IV Recommendation for Participatory Agricultural and Rural Development*

- (4) Formation of consensus regarding development (Dialog with the residents is the beginning of good government)

Figure 4 - 2 is one conceptual example of a pattern of participation. It starts from agreement between the administrative agencies involved in the progress of participatory development and the local residents on the development plan, and continues through the implementation of the development project and the organized involvement of the residents in the operation and maintenance management of the development project. In this process the government side presents its policy needs, and the residents of the subject area collate their opinions in forums at the individual village and regional levels to produce a complete picture of the residents' needs. The government and residents sides then exchange views (through dialogs and meetings) and adjust the plan concept. Once the plan concept has been adjusted satisfactorily, the local residents organize a development executive union and clarify the responsibilities and obligations of the beneficiaries in its articles of association. This provides a system for full participation in the development project. However, the general situation in developing countries is that the administrative functions of government are immature, and there are still many problems to overcome in the regional administrative agencies in charge of development. On the residents' side, they may not have enough ability to fulfill the role described in the diagram. Under such conditions, the more times survey groups (consultants) and NGOs enter into discussions with the residents, the better these groups will be able to act as their representatives. They can also serve as representatives for the administration side, explaining its position so that it is not entirely at the beck and call of the residents. This "pig in the middle" position actually be viewed as giving the NGOs, the aid agencies and the survey groups (consultants) a valuable role in smoothing the channels of communication and building trust relationships between the administration and the residents. This building of trust relationships is what is really essential to "securing sustained aid effects". Therefore the development survey should be grasped as an opportunity for mutual understanding of the views of the administration, residents and aid agencies and, by extension, a mutually agreeable development scenario. Participatory development should not be avoided as a time-consuming practice, but rather embraced as a consensus-forming process.

IV Recommendation for Participatory Agricultural and Rural Development

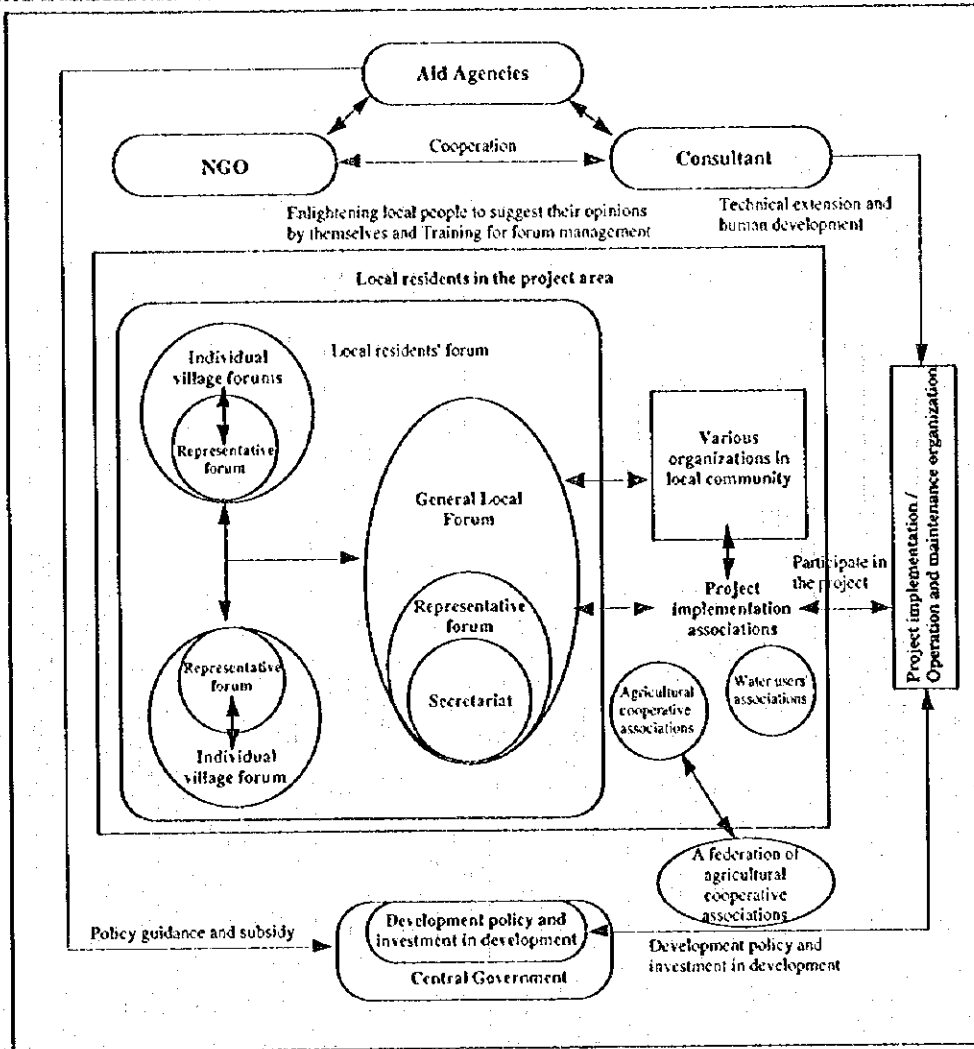


Fig. 4 - 2 conceptual example of a pattern of participation



**2. Actual state of farmers' participation**

**2.1. Record of participation in agricultural and rural development**

According to the Indonesian Government's Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province (GERSAMATA), the mechanism employed in the devising of plans is a "bottom-up" approach. This approach gains the broad-based participation of rural society. The village head, village hall officials and the education worker who is assigned to each village give advice, support and other contributions. At the sub-district (Kecamatan) level, this role is taken by sub-district offices and Agricultural Education Centers (BPP). In the case of this project, the "broad based participation of rural society" at the planning stage should be the direct participation of farmers' groups.

The Village Social Activities Group (LKMD) are village organizations which have been involved in rural infrastructure improvements and other works. The Family Welfare Organization (PKK) is one section of the LKMDs. We have studied these organizations' experience in a small-scale irrigation plan as an example of their experience of participatory development and the participation of farmers' groups in the planning stages of projects.

**(1) Village Social Activities Group and the Family Welfare Organization**

In Ranometo village, the entire budget for the Village Social Activities Group (LKMD) for FY1990/91 was allocated to its eight development sections.

This budget is a fixed sum of two million Rupiah (increased from 1.5 million Rupiah in 1989/90. The sum includes the budget for the PKK. The figures are taken from the 1990 Ministry of Information Handbook) paid annually as a subsidy from the provincial government to the LKMD. In addition, a separate sum of Rp500,000 is paid to the PKK as a subsidy from the Ministry of the Interior.

The LKMD for Lanometo allocates construction funds to each section within the village (Lingkungan) for each to build one road, one small-scale bridge and one irrigation water intake.

In the village of Paranga, which has five lingkungan, the two million Rupiah budget was allocated to the construction of 4km of village road in the first and second Lingkungan. Of the four kilometers, one was built using the voluntary labor of the villagers.

The Rp500,000 PKK budget (1990/91) was allocated to training (Rp110,000 for non-

#### *IV Recommendation for Participatory Agricultural and Rural Development*

agricultural training), a general center for rural children (a "posiando") (Rp110,000), income improvement projects (Rp130,000), a Family Welfare Organization Garden (Rp100,000 for the purchase of fruit trees, vegetable seeds etc.) and other projects. The Rp300,000 received in the preceding year (1989/90) bought 25 hoes for use in the Family Welfare Organization Garden.

The village of Kiaca allocated its Rp1.2 million LKMD budget for the preceding year to the construction of a village hall. The other Rp2.8 million of the four million Rupiah total cost was paid by the residents themselves. The Rp300,000 budget for the PKK in the same year was allocated to buying 25 hoes for the members. All other projects were accomplished through the participation of the residents. The projects include the placing of five boundary posts around the edge of the village (Rp400,000), small-scale bridges in twelve locations (Rp720,000), 5km of village roads (Rp2.5 million) and two general centers for rural children (healthness of mothers and children)(Rp110,000).

These projects illustrate how limited budgets are applied with priority at the village level to projects, particularly rural infrastructure, which are planned to improve the people's way of life.

#### (2) Plans and projects by Water Users' Associations

Two water users' associations (P3A) have formed in Ranometo (the Sri Mangiyub Water Users' Association and the Makmur Jaya Water Users' Association). These associations build and manage the earth canals and intakes needed for irrigation. The Sri Mangiyub Water Users' Association was formed in 1986 with a total of 3.5km of water channels. It has seven channel branches and irrigates 100-150ha of land, depending on the season. The association comprises three groups totaling 51 farmers and is managed by a committee formed of the three group chairmen. Makmur Jaya Water Users' Association has a total of 1km of water channels with three channel branches and irrigates approximately 40ha. Its area includes four farmers' groups.

The village of Jati Bali lies outside the scope of the project, but it has built up a body of experience in the planning, maintenance and management of its entire irrigation system which contains many instructive points. There is the experience of independent water associations known as "sebak", which are rooted in the traditions of Bali, the farmers' homeland, and backed by the people's religious convictions and cohesiveness.

These farmers were resettled in 1968 in one of the government's settlement projects. They were settled in a new village with 200ha of paddy fields, with each family receiving 2ha of land. The design of the main and branch water channels was completed two years later, in 1970. This plan was the basis for an irrigation network with a total length of 8km, comprising 3km of main channels and six other channels, which was completed ten years later. Of course, the network was

#### *IV Recommendation for Participatory Agricultural and Rural Development*

built around earth canals, so in the right season of each year the residents repair and weed the canals to keep them operational.

The key principle of this sebak approach to water management is that irrigation water is provided fairly, so that all fields receive equal amount of water at the same time, allowing all farmers to transplant their rice seedlings at the same time. Distribution is managed to ensure that even in years when water is scarce, no disputes over unfair distribution arise. The village as a whole selects six water managers, one for each branch channel, to manage water distribution. Each farmer using a branch channel gives 10kg/ha of his crop to these water managers to maintain the system. Half of this payment is retained for management and cleaning of the water channels and for use in religious ceremonies. Thus the sebak plays a strong role in the maintenance and management of the irrigation system and its water channels, as well as in the planning stage.

#### *2.2. Organization building*

Organization is essential to secure the participation of the farmers in projects. The success of this project as an example of participatory development is due to the strengthening of farmers' organizations. Between 1992 and 1994 a fact-finding survey was conducted on the farmers' groups operating in the eight villages involved in the project. For each group the survey found its name, the group's directors and membership, its family composition, its landholdings and the names of its ethnic groups. This data enabled an appropriate approach to later activities, including the organization of various farmers' groups and agricultural guidance to farmers.

In 1996 a brief baseline study of farming women in the eight villages was conducted by specialists in the field. This study revealed the nature and structure of women's organizations in the eight villages included in the project. A detailed study was made of the women in farming women's organizations in four of the villages (Ranometo, Onewila, Kiaea and Lalobao), which examined their family composition, landholdings, crop planting, way of life, education, ethnic group of origin, group memberships and main activities.

Also in 1996, a supplementary survey was conducted to strengthen farmers' groups in Sabulakoa and Ranometo villages, which had been the center of project work. This survey expanded on the range of points covered in the earlier baseline study of farmers' groups, adding the ownership of livestock, agricultural machinery and tools, home appliances and other devices and also the sale of agricultural produce and farmers' incomes. This survey showed the true state of farmers in the eight villages involved in the project and assisted in the strengthening of farmers' organizations.

#### IV Recommendation for Participatory Agricultural and Rural Development

Rural infrastructure improvements such as land reclamation, irrigation facilities and farm roads lead to the creation of new groups for farmers, women and young people, or the strengthening of existing groups, in each affected village. The construction of irrigation canals leads to the formation of Water Users' Associations (P3As) in each affected village. The representatives of each village-level group come together to form larger farmers' groups and unions and these organizations are able to manage the operation of rice polishing stations, the use of agricultural machinery and other functions. These unions become the core for the formation of village cooperative societies (KUDs) in each village.

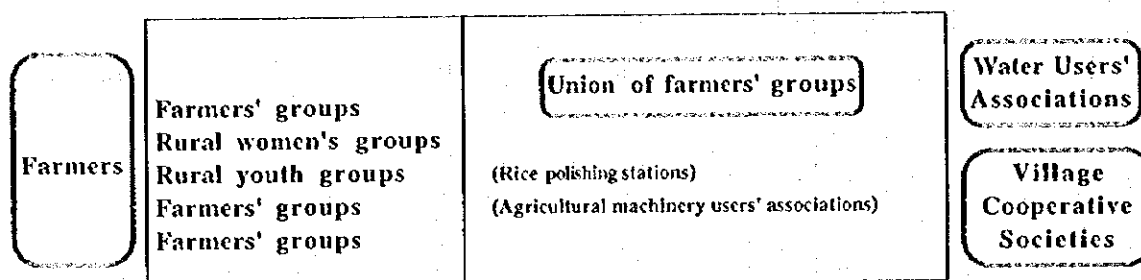


Fig. 4 - 3 Chart of Project-Related Organizations

##### 2.2.1. Farmers' groups: *Kelompok Tani*

The farmers' groups are the key organizations of the village, with one group usually comprising 20-30 households. In the case of rice cultivation using irrigation, groups may also be created among the users of each single channel. In general, farmers' groups act as single units for the sharing and communication of techniques, crop planning, joint operations, water management and other functions. Therefore in projects, each farmers' group holds stock funds which are determined according to its excavation of water channels etc. The group can use this fund according to its own plans for productive purposes (buying seed, fertilizer etc.). When individual members make use of the fund, they pay interest of around 10% per year on what they use.

The number of farmers' groups in the eight villages concerned in the project increased from 46 in 1992 to 68 five years later. The farmers' groups now store their funds in local banks or post offices. For farmers this is usually their first contact with a bank. The experience of using this kind of fund to implement projects which they have planned for themselves, rather than relying on loans or aid, is often the first step in a farmer's development to future independence.

##### 2.2.2. Rural women's groups: *KWT*, Rural youth groups: *KTT*

Project activities in the eight villages, and particularly small scale ("mini") and other aid-related projects are often the starting point for the formation of farmers' groups. There are now 29

#### *IV Recommendation for Participatory Agricultural and Rural Development*

KWT groups and 13 KTF groups. Mini projects usually involve the technical guidance provision of seeds, fertilizer, chemicals, small tools and other equipment and materials for activities such as market gardening, small-scale chicken farming and cashew-nut processing.

The groups learn to work together in planning and carrying out projects through shared activities of this kind. A number of KWT groups have taken to vegetable cultivation, which improves the standard of nutrition of the women's families and gives them produce to sell at the bazaar. From this income they are able to build up their own savings and start "arisan" activities, which are a kind of credit union or mutual loan association.

In 1995 and 1996, three KWT representatives and one female field education worker from each village participated in on-site training events at Lombe, Buton prefecture in the province to train them to shell cashew nuts. The trainees returned to their own villages to pass on their new skills to other group members. This method propagated the skill of cashew nut shelling quickly, and the shelled cashew nuts were sold in bazaars in the region.

With practice, one worker can shell around 3kg of cashew nuts in a day for a processing charge of around Rp.1,000/kg. This gives a considerable advantage over selling the nuts unprocessed. This training has had an enormous impact and given a short period of support and aid with wages and sales, the people will be able to proceed with this business independently.

#### *2.2.3. Water users' associations: P3A*

In the seven villages other than Raca, which has no irrigated paddy fields, the building of irrigation and drainage facilities has been followed by the formation of P3As, which have been maintaining the facilities and managing water supplies under the guidance of the Provincial Public Works Office. The villages of Lalobao, Sabulakoa and Onewila, which are home to large populations of indigenous Tolaki people. The Tolaki had no experience of irrigation of rice cultivation, and all the field education workers were also native Tolaki people, so it was very difficult to teach the techniques of water usage and wet rice cultivation in a short period. For the villagers the introduction of the new technique system of wet rice cultivation, and the accompanying changes in social customs and organizations, was nothing short of a social revolution.

#### *2.3. Counseling*

Counseling, including long-term guidance and follow-up, is essential for the smooth and efficient running of projects using the organized activity of farmers. In particular, the management of organizations which handle stock funds and other cash funds is extremely difficult for those

#### *IV Recommendation for Participatory Agricultural and Rural Development*

with no experience of such matters. Those in charge must receive counseling.

Methods of counseling include regular tours or visits to each village by experts who will answer questions and give advice as necessary on matters such as the operation of rice polishing stations or agricultural machinery users' associations. These visiting experts can be village education field workers, the accountants of farmers' groups or unions, are made when a problem is indicated by farmers' groups, project experts, counterpart staff and other people concerned.

Counseling is gradually yielding results in matters such as problems with uncollected fees, advances from stock funds to buy machine parts, correction of book-keeping, and the introduction of a card system for each farmers' group's use of rice polishing stations.

#### *2.4. Expert's view of the state of farmers' participation (Extract from an expert opinion report)*

The general pattern of technical assistance to date has been the transfer of skills from experts to their counterparts. In this kind of participatory development, however, the counterparts are the farmers' groups and the project is explained to them at meetings before the construction, or even the planning begins. The farmers' constructive ideas are built into the project from the planning stage. In such projects, the three groups of experts, counterparts and farmers are replaced by a single discussion group uniting the three parts. Matters concerning the project are determined by this discussion group as the project progresses. This discussion group is modeled on the Indonesian *Musyawah*, which is a traditional consensus-forming method. These groups are formed on the level of the hamlets, which are the smallest units of Indonesian rural society. Each has 20-30 members, which is the optimum size to exercise the functions of the hamlet.

The opinion of the women's groups is given the greatest weight in the selection of locations for shared wells because the women are the main users of the wells. The formation and management of stock funds, is based on the agreement of all the farmers concerned, although some guidance is provided. This provides good motivation for participation in other projects.

Another way that farmers participate is by providing their labor for the construction of irrigation canals and other elements of the agricultural infrastructure. This form of participation strengthens bonds within farmers' groups and heightens their awareness of ownership of the land they have worked hard on and participation in its upkeep. When making design decisions on aspects of agricultural infrastructure improvement works, such as whether to build small structures for irrigation facilities of stone masonry and whether to use logs in building the bridges for farm roads, the maximum use should be made of locally-available, low-cost materials which can be

***IV Recommendation for Participatory Agricultural and Rural Development***

repaired easily if the need arises later.

The work of farmers' groups should start if the need arises later. The work of farmers' groups should start from small-scale, short-term projects which create bonds within the group and have little chance of failure. This experience of success will stimulate further group activity.

3. Ideal for participatory development in the future

3.1. Key concepts in future agricultural and rural development

The attitude to aid for agricultural and rural development in developing countries is shifting to reflect the bitter experiences that developed countries went through in the course of their development and the lessons learned from previous development aid to developing countries. Themes such as "highly-sustainable development" and "development in harmony with the environment" are being taken up, and questions such as "who is in charge of the project?", "what are they trying to do?" and "how are they going to do it?" are being re-examined in detail as the emphasis shifts to "participatory development in which the farmers of the project area have the central role". Table 4 - 2 summarizes the historic trends in development since the 1960s.

Table 4 - 2 Lessons to be Drawn from Historic Trends in Development

Time period	Development strategy	Problems
1960s	Led by infrastructure improvement Introduction of external funds Introduction of external skills Reliance on the trickle-down theory Nationalism	Rising poverty Increased income disparities
1970s	Meeting basic human needs Development coexisting with the environment Comprehensive rural development Targeting the poor	Rising poverty Inadequate ability of executing agencies Lack of commitment from counterpart governments Inadequate macroeconomic policies Environmental damage Low growth
Early 1980s	Structural adjustment Market economics and privatization Reduction of the state's economic role NGO participation Targeting the poor	Debt accumulation and low growth Worsening economic position for the poor Environmental deterioration
Late 1980s	Structural adjustment Shift to labor-intensive market economy Building a safety net NGO participation Targeting the poor	Debt accumulation and low growth Poverty increasing and localizing Environmental deterioration
1990s	Structural adjustment Market economics and privatization Participatory development Environmental conservation and population control Guaranteeing human safety Emphasis on the development process Targeting the poor NGO participation Good government	Debt accumulation and low growth Poverty increasing and localizing Environmental deterioration Deteriorating fiscal position of donor countries Ethnic strife



**IV Recommendation for Participatory Agricultural and Rural Development**

The table above illustrates the way that experience is accumulated as aid agencies' aid policies and developing countries' development strategies are applied to real projects. The policies and strategies are gradually improved in the light of this experience and applied to later projects, where suitable. The key mottoes of the development strategy of the 1990s are "Privatization and the market economy", "participatory development", "empowerment that can support good government" and "Human development that emphasizes the development process". Therefore, the "Objectives of agricultural and rural development surveys" that are to follow will follow these key mottoes, giving special consideration to three key points, which embody the basic development strategy:

- Measures for the elimination of poverty, including Women in Development (WID) and gender-related issues
- Environmental conservation
- Support for sustainable economic growth

The form of development aid will shift from the old "government-led development centered on infrastructure improvement" in the direction of "participatory development". This move will be supported by development that emphasizes market principles (supply and demand and price competition) and private-sector activity centered on human development.

The World Bank, the Asian Development Bank and other international aid agencies emphasize the points listed in the table below in their surveys for agricultural and rural development. The most important points include "consideration for WID and the poor", "the approach to participatory development", "the strengthening of organizations and training of related personnel" and "consideration of environmental impact". The lessons of experience on these points will be of great importance in future surveys to help devise development plans which are highly sustainable, readily acceptable to the beneficiaries and solidly practical.

Table 4 - 3 Key Tasks Emphasized by International Aid Agencies in Agricultural and Rural Development Surveys

1) Consideration for WID and the poor	Ambition to reach targets Organization of women Improvement of nutrition Finance to women Financial support for finding employment Monitoring the state of poverty Education and training of women
2) Participatory development	Organization of beneficiaries Expenses borne by beneficiaries Increasing the numbers of beneficiaries at all levels Implementation of social analysis
3) Training personnel	Training in skills Training in management skills

**IV Recommendation for Participatory Agricultural and Rural Development**

	<p>Agricultural educational services in the field</p> <p>Applied research</p>
4) Strengthening organizations	<p>Building data processing systems</p> <p>Establishing and strengthening organizations</p> <p>Defining rules and standards</p> <p>Restructuring</p> <p>NGO participation</p> <p>Establishing and strengthening agricultural research organizations</p> <p>Establishing and strengthening water users' associations</p> <p>Establishing and strengthening communities</p> <p>Strengthening of training organizations</p> <p>Establishing and strengthening of farmers' groups</p> <p>Establishing and strengthening of agricultural cooperatives</p> <p>Privatization</p> <p>Building the legal framework necessary for the market economy</p> <p>Building accounting and auditing systems</p>
5) Consideration for the environment	<p>Soil conservation</p> <p>Environmental assessment</p> <p>Strict observation of environmental standards</p> <p>Campaigns of education about environmental conservation</p> <p>Environmental monitoring</p> <p>Selection of safer agricultural chemicals</p> <p>Restrictions on grazing</p> <p>Protection of water resources</p> <p>Comprehensive pest eradication</p> <p>Drawing up environmental guidelines</p> <p>Employment of environmental "G-men"</p> <p>Tree planting</p> <p>Agroforestry</p> <p>Improvement of land registration systems</p> <p>Building environment information systems</p> <p>Drawing up master plans for environmental improvements</p>
6) Rural finance	<p>Defining rules and standards</p>
7) Monitoring and evaluation	<p>Surveying the effects on beneficiaries</p> <p>Baseline studies</p> <p>Intermediate evaluation</p>

A further point that must be constantly borne in mind in development planning in the future is the organization of local people for the implementation of the project.

The organization of the beneficiaries for the implementation of development projects is an essential precondition for their participation and empowerment, and for the sustainable realization of the project's effects.

The support of external organizers (social organizers etc.) is essential for the organization of residents. This support targets people in the community who have the potential to become community activists. If the community does not accept the efforts and suggestions of the external organizer as the basic development strategy, there is no need to proceed any further with the

*IV Recommendation for Participatory Agricultural and Rural Development*

development. The assent of the community for development is one of the prime conditions for community-centered development.

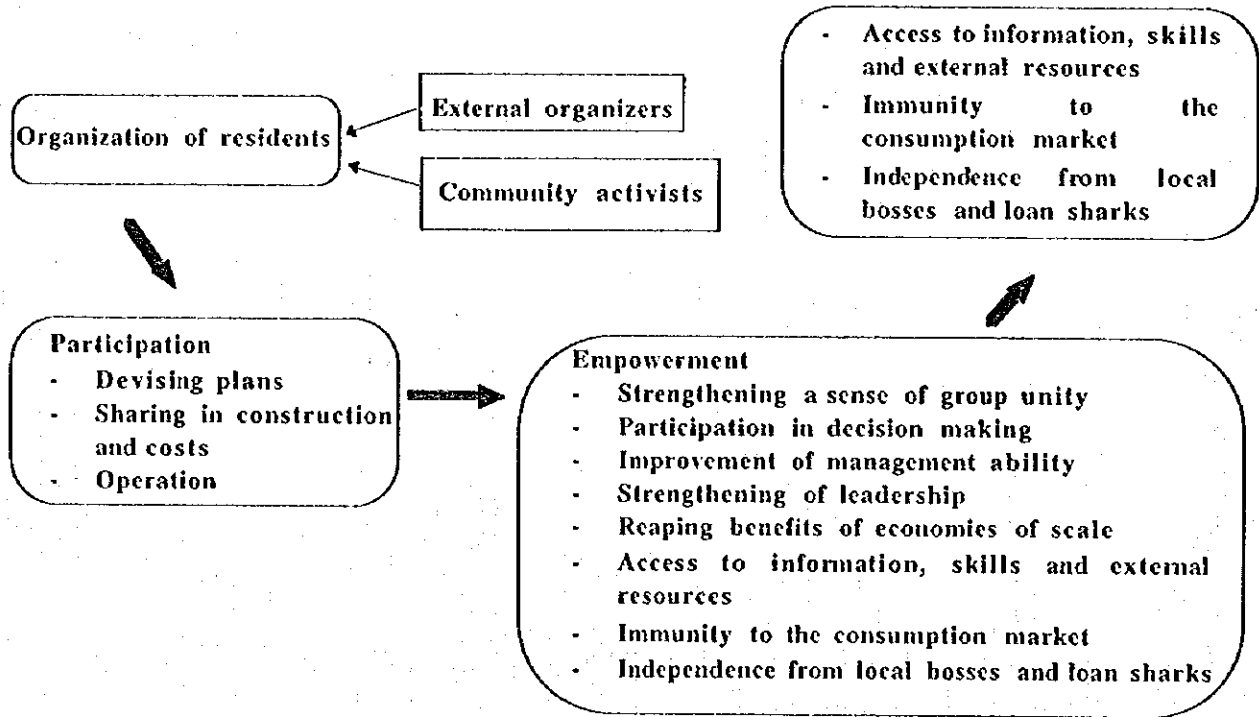


Fig. 4 - 4 Basic Development Process as it Concerns Organization of Residents

If this kind of organization is successful, it smoothes the residents' participation and allows them to assume their central role in matters of planning, construction, sharing of costs, operation and maintenance management and other aspects of the project. Successful participation by the residents builds their sense of unity, and improves their leadership, management ability and access to resources, among other benefits. Their socio-economic independence becomes a possibility and they are empowered as a result. This empowerment, which means fostering the independence of the residents, builds their socio-economic self-sufficiency, involves them actively in work for environmental conservation and, as a result, supports the sustainability of the project. The Basic development process, as seen in the organization of the residents, is illustrated in Figure 4 - 4.

In general, it is rare for the approach to development planning to involve forming the project starting from a blank sheet in a country which has absolutely no experience in the type of project being studied. In most cases, some project of that kind has been implemented somewhere and at some scale through aid to developing countries since the Second World War. Therefore when the development planning survey is conducted, it should study what the problems are and

#### *IV Recommendation for Participatory Agricultural and Rural Development*

what measures would be effective, and the process should reflect the experience of the government and beneficiaries of the developing country. Technical improvements drawn from such experience must be built into the basic framework of the project.

### *3.2. Confirmation of government commitment and evaluation of reliability*

The questions of "who is the project for?" and "who should implement the project", which is to say, the question of "who is the most important body in the project?" must usually be clearly defined as the most important element of the "project concept" when the project is taking shape.

There used to be the reasonable suspicion that the only criteria for gauging the counterpart government's commitment to the project were "do they have the money for the project development or can they get it?" and "are the personnel who will work on the development adequate?". In future, evaluation should be based on much broader judgements, including elements such as "are the policies and systems for development appropriate?", "is development included in public programs?", "is there a clear political will to implement development?", "does the development adequately reflect the needs of the intended beneficiaries?" and "has anybody obtained the agreement of the residents for the development, and have they been able to express their demands?".

In the past, the mainstream in development was the "top down" approach, which was led by governments and their policies, so the beneficiaries' commitment to development was not given much attention. In the future, this commitment is a factor which will have a decisive impact on the implementation of development plans. Therefore, in the implementation of future development plans, the independent participation of beneficiaries in development, and the government's attitude to promoting such participation, should be taken as critical indicators of the government's positive commitment.

### *3.3. Points to consider in fact-finding surveys*

#### *3.3.1. Accurate grasp of problems and needs*

The development plan must set a framework for meeting the needs of the beneficiaries, based on an understanding of the political needs of the counterpart country's government. It must also be based on mutual understanding or agreement between the executing agency which is going to implement the development and the people of the area concerned. In the past the full implementation of this principle to produce agreement between government and beneficiaries was very time consuming and it was often extremely difficult to solve all the issues within the period of

#### *IV Recommendation for Participatory Agricultural and Rural Development*

the survey. As a result the needs of the beneficiaries are emphasized to match them to policies which are based on the government's political needs.

In a basic study to discover the needs of the beneficiaries, the real needs may not coincide with the situation as perceived by the executing agency in the field. Therefore, rather than adhering to the information and judgements of the authorities, the survey group should preserve its independence and use the survey to reconfirm the facts through interviews with residents, baseline studies and other methods. The following survey methods are available:

- 1) The orthodox social survey and problem census by random sampling (gaining an understanding through hearings from residents of the project area concerning recognized problems and needs, or group discussions with residents).
- 2) Rapid Rural Appraisal, which is a simplified appraisal method. Rather than using statistically-correct sampling methods, it allows various experts to sample at will, using hearings and other methods to gain an understanding of social conditions in the subject area.

3) Long-term resident study

The right method can be chosen to suit the situation. There is a fourth method which is valid for this kind of survey:

- 4) Project Cycle Management (PCM). This method is tailored to assist the progress of participatory development projects. In the early stages of a project it establishes communication with the residents through workshops and other events. One advantage is that it establishes a common perception that the residents (beneficiaries) themselves are involved in the project and are helping to build it.

The way needs are ascertained by the development survey largely controls the flow of development assistance. Therefore, the most important point to consider is what method to employ to find those needs.

In this process, it is most important that the examination of real needs should be comprehensive and balanced from a range of perspectives. The survey must find out what the local people themselves consider to be their needs.

#### *3.3.2. Needs of participatory development*

The greatest merit of participatory development is the repeated dialog with the residents,

#### *IV Recommendation for Participatory Agricultural and Rural Development*

starting from the development survey stage, which gives a balanced understanding of diverse needs. This process leads on to the building of a consensus at the planning stage between all those concerned (government, residents and aid agencies) on the most desirable development scenario. The beginning of this process for the residents leads to their growing empowerment. In many cases, development needs arise from the kinds of situation described below.

- 1) Lack of funds for facilities and consumables
- 2) Lack of physical and human services (including training)
- 3) The existence of unused, or underused, physical or human resources
- 4) Relief from the effects of natural disasters
- 5) The imperatives of national policies, such as food self sufficiency

#### *3.3.3. Social surveys and social considerations in the devising of plans*

In the past, development studies were mainly concerned with infrastructure improvements, so they concentrated on "hard" technical matters. This resulted in development without the involvement of beneficiaries, which was of low sustainability. As has been noted above, development in the future must be based on meeting basic human needs, and a proper forecast must be made for the people of the region (the beneficiaries) of what effects of the project will reach the beneficiaries and what the impact will be. This makes "the study of linkages between society and the environment" and "analysis and evaluation of social elements" indispensable elements of development surveys.

The purpose of social surveys and the analysis and evaluation of social elements within development surveys is to determine what impact a requested development project will have on beneficiaries (and the wider community) in the project area, and then, how can the project be implemented effectively.

- (1) Content of a social survey
  - a) Identifying community groups

In many cases societies in developing countries are taken to be single, completely homogenous social groups. In fact, they are made up of various communities and there are many internal factors which can spark antagonism between these communities, depending on the method of project implementation.

Therefore, this point requires close consideration when working on a development survey. The types of communities which may be present fall largely into the six models listed below. Clearly, local societies are not simple, homogenous structures.

#### *IV Recommendation for Participatory Agricultural and Rural Development*

- 1) "Landowning and sharecropping groups", "managers and laborers in rural industrial factories" etc., classified according to differences in ownership of resources and assets, including land.
  - 2) Farmers' groups and small and medium business groups, classified by occupation.
  - 3) Men's groups and women's groups, classified by gender differences.
  - 4) Ethnic groups, formed according to ethnic differences.
  - 5) Christians, Muslims, Buddhists and other groups classified by religion.
  - 6) Elderly, middle-aged and young strata, classified by age.
- b) Definition of beneficiary and community groups
- 1) Identify all the beneficiaries who will be affected by the development.
  - 2) Define subgroups with differing needs, development demands and levels of receptivity (e.g. large-, medium- and small-scale landowners, sharecroppers, landless agricultural laborers, fishermen, traders, agricultural businesses, factory workers etc.).
  - 3) Prepare socio-economic profiles of the above sub-groups (population, needs, development demands, receptivity, gender differences, employment, assets, income, level of education, literacy rate, family size, culture, religion, ethnicity etc.)
- c) Identify the needs of the sub-groups which should benefit
- The needs (job creation, increased productivity, diversified production, increased added value, sustainable productivity, transport, storage of agricultural produce, processing etc.) of the sub-groups which will benefit from secure food supply and increased income due to the agricultural development should be identified and verified through discussions with these sub-groups.

#### *IV Recommendation for Participatory Agricultural and Rural Development*

- d) Determine the receptivity to development among the beneficiary sub-groups
- 1) Evaluate whether or not each sub-group is prepared to accept the burdens of operation and maintenance management costs etc. which accompany the benefits of development (assets and services such as irrigation water, improved crop strains, education services, agricultural finance, fertilizers and agricultural chemicals, amplifier organizations). Also, evaluate whether or not the sub-groups have the will and the ability to adopt or agree to new production systems which may be introduced (production-related skills and rules for use of resources, such as planned cropping systems).
  - 2) Study the improvement efforts which the community is already making, and investigate their effects.
  - 3) Estimate what kind of changes will be brought by development, and study the likely impact of these changes on the beneficiaries' production systems (hours of labor, degree of intensification, energy consumption, potential for sustainable land use, water and forest resources, use of machinery, use of fertilizers and agricultural chemicals, use of seeds). The study should cover the impact on the processing and marketing of produce.
- (2) Analysis and evaluation of important social factors
- a) Predicting the reactions of each group to the project

In a village society in a developing country comprising the kinds of community described above, even in a planned project to spread irrigated agriculture, all possible reactions from interest groups in the community must be predicted and countermeasures prepared.

There is a wide range of possible reactions to the project depending on factors such as the scale of irrigation, the planned locations of channels and the types of agricultural produce which will be planted after the land becomes irrigated. These differences in reactions can arise between, for example, landowners and sharecroppers. Access to social services differs economically with the level of assets owned, and this difference can easily lead to a situation in which the "haves" find the project advantageous while the "have nots" find it to be against their interests. Similarly, buying agents are able to get loans from commercial banks, but farmers, and particularly sharecroppers, in developing countries find it very difficult to get such loans. If such conditions do exist, sharecroppers will not benefit very much from the implementation of an irrigation project. Furthermore, the benefits of a project can easily become skewed as most of the benefit from selling the increased quantity of agricultural produce will go to the landowners and buying agents, who are able to secure bank loans and expand the development. Even if the project serves to improve the lives and socio-economic position of the landowners and buying agents, it



#### *IV Recommendation for Participatory Agricultural and Rural Development*

will not do the same for the sharecroppers.

In this way, if it is judged that the proposed content of the project only benefits certain groups and does not deliver any benefits to other groups, there is little likelihood of obtaining the cooperation of all concerned in the subject area.

If a project is implemented under such conditions, the "beneficiaries" who receive no benefits, and those who receive inadequate benefits, will be dissatisfied, and this dissatisfaction may well lead them to obstruct the implementation of the project, or at least take an unhelpful attitude to it. This could even put the success of the project in doubt. Therefore a consensus on the project must be reached as quickly as possible between the groups which receive differing impacts from the project. This is a further reason why social analysis of an essential element of the overall evaluation and analysis conducted within the development survey.

- b) Evaluation of the receptivity of beneficiary sub-groups
  - 1) Confirm whether or not development will have a major impact on existing social customs and production structures (e.g. shifts from stock raising by free grazing and farming by shifting cultivation to intensive agricultural in fixed fields). Also, check whether or not similar communities in past cases have successfully adapted to such changes. The existence of low-risk alternatives based on existing systems must also be examined.
  - 2) The sub-groups' perceptions and attitudes to the changes development is expected to bring should be sounded out through meetings and discussions. Check whether or not the groups concerned have ever been provided with all the information they need for an accurate understanding of the changes the project will bring (the extent of changes, the increased costs development may bring, the benefits, risks and obligations). The best mechanisms for training and the right media for the transmission of information must be determined in order to spread new skills to both literate and illiterate people.
  - 3) Confirm whether or not the proposed crops and production skills and the expected market demand are certain enough to justify the farmers' investment.
  - 4) Check whether or not farmers' organizations and other regional organizations exist. Evaluate whether sub-groups with different types and levels of organization are adequately represented and whether or not these organizations have the strength and management ability needed to support agricultural and rural development services.
  - 5) To confirm that religious leader still support the development or not. The reasons why the development is not supported and the effects expected from that not supported shall be analyzed and evaluated.

#### *IV Recommendation for Participatory Agricultural and Rural Development*

- 6) To evaluate socio-cultural belief and custom, such as alternation of cropping pattern due to ritual meaning of some crops, land ownership and responsibility by relatives resistance to the private credit related to the tradition of mutual help, which may restrict the development requirement.
  - 7) To study the rate of loan user their community and the cost recovery rate.
- c) Gender analysis
- 1) Status of sex role and division of work in the field of agricultural production system, at the community in different sub-groups, employment in non-agricultural sector, family budget or small scale processing of agricultural production and its marketing, food security in family budget and agricultural production system shall be studied. There is some necessary to presume how the development will alter these roles.
  - 2) Conditions of relative access to the resources and services such as credit, machinery, land, water, forestry, resource, training opportunity between both sexes shall be studied.
  - 3) It is important to define and analyze the restrictive conditions of women such as time, money, literacy, financial right and cultural and religious restrict to face obtaining of the access to resources and services.
  - 4) Applicable technology shall be studied considering the objective is defined either male or female or both sexes.
- d) Latent negative impact
- 1) To define any group which might have damages, such as residential move, loss of leasehold, loss of income and loss of ancestral land and grave, by the development.
  - 2) Development impact to the weak in terms of quality and quantity providing socio-cultural profile shall be quantitatively studied as much as possible.
  - 3) Any group which might suffer from negative impact shall be studied remedial options to avoid, eliminate and secure from the negative impact.
  - 4) To supply the development information to the community as early and much as possible, and to reflect the results obtained through dialogue to the plan.
- e) Consideration to the poverty and women

Consideration to the poverty and women often stood on social weak situation in various community is important at the project planning stage in case of socio-analysis. That is, an effort

#### *IV Recommendation for Participatory Agricultural and Rural Development*

on proper grasp of what kind of benefit might be secured to the poverty when predict the project impact to the different social group, what kind of burden shall be taken and what is a particular difference comparing with other social strata in the extent of the benefit and burden is very necessary.

The poverty, who has less opportunity to receive social services without special production resources, has low capacity of the burden. For there, the designed project implementation method shall be mad clear that the burden either can be accepted or can expect any subsidy from administrative policy.

In that sense, proper grasp of the condition of women's status is essential, because women have much burden compare with men contrary with less opportunity to receive a benefit. Careful study on impact of the project to women shall be never forgotten. The study method on this point can be applied to aforementioned "Gender analysis". Further more, analysis method of gender in recent years is called "Socio-gender analysis", because the majority social group consist of the poverty strata are women and the analysis method is also applied to impact evaluation and analysis in the common poverty strata.

#### *3.4. Suggestions for strengthening and building of rural woman organization*

##### *(1) Current status and problems related to rural women's organizations*

The most important fact to consider in relation to problems affecting these organizations is that there are two types of rural women's organizations, DWs and KWTs, within the framework of public programs. The problems that are affecting these tow types of organizations derive from insufficient awareness of policies and unclear positioning at the level of villages, which results in duplicated activities of these organizations. DWs are terminal organizations of the comprehensive life improvement and social welfare promotion program called PKK, and they cover an extremely wide range of activities. Moreover, DWs are linked to a national organization that goes all the way up to the central government level. As a result, guidelines for activities and directives regarding the course of these organizations tend to be passed down from the top. To the extent that it was possible to observe in the villages participating in the project, the activities that were conducted the most actively included development (beautification) of the living environment, healthiness of mothers and children (Posiyando), which rather than activities conducted individually by single DWs, are larger-scale activities performed by PKKs at the village level. Activities that are conducted autonomously by single DWs are limited to Alisan and joint garden plots, and such activities generally overlap the activities of KWTs.

On the other hand, KWTs are positioned as organizations whose principal objective is

#### *IV Recommendation for Participatory Agricultural and Rural Development*

agriculture. However, they do not organize activities or guidance for major agricultural fields such as paddy cropping and upland field cropping, and are instead observed promoting activities limited to the like of vegetable plots and small-scale poultry farming, in other words supplementary areas. In reality, women are also charged with many tasks in paddy and upland field cropping, and are handled by women is an important issue for the regional development of agriculture, but such elements are actually not incorporated within the scope of activities of KWTs. At the same time, KWTs are complete organizations onto themselves that depend almost exclusively on extension workers for external help. Such positioning of KWTs contrasts with that of KT, which have access to higher organizations such as KUD nad P3A, which are more official and have a stronger organizational base. In this sense, the organizational development possibilities of KWTs are inevitable limited.

Another problem affecting women's organizations is the insufficient positioning of women's organization activities based on the socioeconomic characteristics of each village and differences in agricultural conditions. In the case of Dws, programs that have been drafted at middle levels will be implemented in steps, and even though they are left at the discretion of working groups, their implementation actually follows entirely directions from higher organizations, and thus activities at the village level are almost identical among the villages. With regard to KWTs too, it is also believed necessary to develop techniques and activities that match the conditions of areas whose agricultural conditions differ, but original activities that reflect the characteristics of each village are not particularly visible. Only a few areas reported activities using crops specific to their area, such as cashew nut processing. In particular with regard to KWT activities, it is necessary to consider operations including aspects such as processing and distribution in addition to production. Having policies for activities that are adapted to the characteristics of the area is thought to be extremely important for the future.

#### (2) Recommendations for education and strengthening of rural women's organizations

As mentioned earlier, the scope of the conducted survey that very limited, and the obtained information in a sense superficial. Therefore, the recommendations presented here apply only to the organizations currently existing in the eight villages of the project, and are suggested measures for the strengthening of women's organizations in a general sense only. Further detailed surveys are emphasized to be needed in order to suggest detailed as well as concrete alternatives.

##### a) Education and strengthening of Desa Wisma (DW)

DW are the terminal organizations of the PKK movement, and in order to educate and strengthen them, it will be necessary to devise comprehensive activation measures taking PK at the

#### *IV Recommendation for Participatory Agricultural and Rural Development*

village level as the unit, rather than each DW organization. In the project implementation district, the organization of Dws has recently become an endeavor of its own, and it is believed that experience is still insufficient for PKK programs at the village level. Therefore, the first thing expected to be accomplished is the penetration of the PKK program itself. 10 program activity guidelines have been set for PKK at the province level, for which guidance is provided at the district level, and strengthening of these programs and full promotion of the contents of the program are thought to be the most realistic course for the time being. Of course, since PKK itself encompasses a broad range of contents and is positioned as a program, there is the risk that only activities whose results are readily perceivable will be promoted at the terminal level of village women. However, considering that activities such as healthness of mothers and children that are directly linked to profits are taking hold, it should be possible to devise long-term measures for strengthening organizations using such so-called "bait" programs as an entrance. PKK itself has a support system organized in steps that is supported by activity wages, so that the establishment of clearly defined policy directions, organized activity monitoring, and periodic guidance and feedback systems will be future issues.

b) Education and strengthening of women farmers organizations (Kelompok Wanita Tani: KWT)

With regard to KWTs, it is necessary to clarify their positioning as organizations designed specifically for agriculture. At the village level, defining the relationship between the poultry farming programs of PKK with those of KWTs, which are currently being implemented in overlapping fashion, as well as clarifying the division of roles, are the measures to be taken for the time being to activate KWTs. At the same time, more high-level studies with regard to the question of how to set policy directions for incorporating KWTs into the mainstream of agricultural development are required.

Furthermore, for the long term, in addition to technical guidance for existing vegetable plots, small-scale poultry farming, processing of agricultural products, and life improvement, it will be important to conduct guidance for agriculture and production techniques across a wider range, as well as guidance on how to run organizations, for KWTs.

For this purpose, the first thing that will be needed is to provide sufficient opportunities for guidance by extension workers, who are the only existing channel for KWTs. In addition to programs related to agricultural and production techniques, the implementation of training programs for raising the level of knowledge and technical expertise of extension workers with regard to extension techniques and organization should also be considered.

Moreover, in parallel with strengthening guidance by extension workers, studies regarding

#### *IV Recommendation for Participatory Agricultural and Rural Development*

how to improve the support system for the operation of organizations are also required. The development and securing of activity funds and equipment supply channels will certainly become necessary in the medium-and long-term. Also, devising system providing access to easy and low-cost financing such as farm loan associations, as well as access to information regarding agricultural organization support programs through other institutions and organizations, and enabling cooperation among the above, would enable strengthening and educating KWTs from an organizational perspective. One way to achieve these aims would be to establish a higher organization similar to KUD for Kts, or a coordinating organization for KWTs at a higher administrative level.

#### *3.5. Direction of the development planning based on the results of this participatory approach (extracted from the record of 2nd Project Supporting Committee 1996)*

Valuable presentation from professor of Agricultural institute of Bogor made at the final seminar of the project on Feb. 17, 1997, Kendari was reported in the above committee as follows.

Agro-business cooperative approach including an idea to increase the share of benefit for farmer is very important, under the reflection and future projection of agricultural development in Indonesia. In this new point, appropriate activities such as set up of mini-project of cashew-nut processing system has been rooting as one of successful example.

One question was raised from the Project Supporting Committee (PSC) that "Was the agricultural development cooperation form also good for participatory development approach, because of rear experience before?" The team leader of the project answered that " This project type technical cooperation collaborated by three parties consist of expert, counterpart and farmer is verified to be effective approach to the participatory development".

Besides, following comment was made from the member of the PSC that prevailing conventional method for development planning is apt to require more detailed works on such as topographic map, soil survey, cropping plan and, study of water requirement. While, the reliable data and information necessary for the planning is very hard to obtain in that countries, and there are very rare eligible counterpart available in that local areas.

Under this hard situations, it would be allowed that a rough and non-quantitative, non-academic planning methodology for agricultural and rural development for LLDC. There would be no engineer who understands planning and designing criteria of Japan, but there would be some elders and the wise who are natives and know everything in that are, and who can give relevant

#### *IV Recommendation for Participatory Agricultural and Rural Development*

advises on the rural development project to farmers together with engineers from local administration agencies who can closely contact to the project. General development idea shall be initiated by the local people, who are the men of the most acquainted with local facts, under the leadership of the the wise.

Before the development of the planning, study of social system such as what is the village, what is the composition of the village, what is the source of the leadership in the rural community in where area and blood relations are exist, what is relationship in terms of status and extent between the leader and the local administration agency shall be conducted to formulate some study method to be a kind of manual. Thus procedure will be a model for further village development project in LLDCs.

There will be much value to bran an adventure based on and beyond the successful experience in the Southeast Sulawesi Province, making radical change of the previous conventional development approach.

#### *3.6. Suggestions of final evaluation team*

##### *(1) Summary and suggestions from each field*

##### *a) Integrated agricultural and rural development plan / agricultural and rural infrastructure*

- The ripple effects of this project are starting to encourage nearby farmers to build their own paddies and dry fields. Development methods for such situations should be devised, which take into account the limitations on water, land and human resources.
- One problem of these developments is that they go beyond those directed at food within the range enabled by the available human resources, raising the problem of unrestrained development motivated only by the availability of land. A development plan must be put forward which makes rational use of the land, water and human resources available in the area.
- Further technical transfer is required for quality and construction management for concrete and earthworks.
- The maintenance management of equipment could face increasingly common breakdowns. The check system developed for this project must be used in suitable operation management.
- In the cause of independent development, the provincial government should take a central role in project operation with support from central government-related agencies. The "Kendari District Office for Integrated Agricultural and Rural

#### *IV Recommendation for Participatory Agricultural and Rural Development*

Development" should be enhanced to take on this role.

- Shallow shared wells which are around 5m deep run the risk of pollution from the permeation of residual fertilizers and agricultural chemicals used in farming. These wells should be improved to allow their safe and sustainable use.

#### b) Construction management

- Further technical transfer is required in connection with the judgement of site conditions, including complex technical specifications, slopes and soil properties, and for estimation based on calculations of soil haul distance etc.
- The counterparts are now able to perform for themselves construction management tasks such as the preparation of implementation plans for simple facilities and earthworks etc. Further technical transfer is needed to enable them to handle the full range of construction management, including planning the implementation of advanced and complex works, estimation of construction costs and the direction of heavy equipment operation.
- Technical transfer is necessary for the basic elements of the quality control of concrete works related to land improvement, the rolled compaction of farm roads and other construction management skills.
- The developed methods of farmers' participation and the transferred techniques for eliminating along-alang grass can be propagated for application in other developable areas, so they should be promoted further with the aid of the provincial government and other related agencies.
- The inconvenience of communications caused by the isolation of the project office from the sites should be alleviated.

#### c) Operation and maintenance management of machinery

- The farmers' skills in the operation and management are still at the early stages and many breakdowns still occur in the field. Training and guidance in day-to-day operation are required to raise farmers' skills to the level where they can diagnose problems.
- Model villages which are far away from Kendari city lack workshops or other facilities to make repairs. The village level maintenance management system must be strengthened to at least the level of that in Ranometo. In comparison with Ranometo, the skills and gifts of the farmers in other villages are at a much lower level. Technical guidance for these farmers will need to carry on for a long time.



#### IV Recommendation for Participatory Agricultural and Rural Development

##### d) Demonstration of farming and cultivation techniques

- The unit yield of rice crops has been around 1t/ha. Improved farming techniques could raise this to 3~5t/ha. Most notably, it has been proven that two crops per year is a possibility.
- The locations of model fields were selected appropriately so that they fulfill their demonstration purposes. The area converted to cash crops nearby is expanding.
- Upland paddy rice is the staple food of indigenous peoples who are a majority in the project area, and they also use it for religious events. Improved techniques for the cultivation of upland paddy rice is essential if development is to be fairly balanced between the various peoples and regions of the project area, so this crop has been incorporated into the scope of technical assistance.

##### e) Reinforcement of farmer's organizations

- When future projects of this type are implemented, the basic survey of the farmers should be conducted at the earliest possible stage out of consideration of its effects on specific activities within the project.
- Current farmers' organizations exist independently with one for each function. In place of these, the Indonesian side should establish KUDs which can exercise integrated management functions.
- As farmers' organizations develop independently, their stock funds will become their economic base, so methods for the stable continuation of these funds should be studied.
- In future, guidance should be focused on technical transfer at the level of educational field workers, and particularly on counseling activities. Furthermore, all report documents should be translated into Indonesian and working manuals should be completed to assist in improving organizations.

#### (2) Suggestion

##### i) Development of management techniques which are acceptable to the farmers

Ordinarily, technical transfer targets the counterparts as the first step. In this project, technical transfer direct to the farmers is necessary for the maintenance management of agricultural and rural facilities such as roads and irrigation channels which were constructed through the farmers' participation. Therefore, from the point of view of independent development after the end of Japanese assistance, it is extremely important to devise management techniques, including farming guidance, which are acceptable to the farmers. The farmers must also receive continuing training to enhance their command of

#### *IV Recommendation for Participatory Agricultural and Rural Development*

these techniques.

##### *ii) Project's future (potential for independent development)*

If the project is to be capable of independent development in the future, it must have high-quality staff and a budget at least sufficient to cover the costs of the materials now supplied by Japan.

Furthermore, after the end of Japanese assistance, some kind of agency should be set up within BAPPEDA and the other provincial governmental agencies to carry on the project. This agency should, of course, work with the assistance of the Ministries of Agriculture, Public Works and the Interior and other related agencies.

##### *iii) Necessity of Japanese assistance in the future*

According to the record of deliberations (R/D) signed on 26th January 1991, this project was to end on 29th February 1996, but the fact that the work of land reclamation can only proceed in the dry season, and other problems, delayed the completion of agricultural facilities, probably until December 1996. Further work is still needed to devise management techniques which are acceptable to the farmers. Therefore the joint survey team suggests that the Japanese assistance for this project be extended and full follow-up provided.

The joint survey team suggests one year as a suitable extension period, but further assistance should be considered later in the light of progress in the strengthening of farmers' organizations, particularly for water management, in the development of cultivation and farming techniques, and in other work stipulated in the TSI.

***Attachment***

## *Attachment*

<b>1. List of Authorities Concerned</b>	
1.1 Basic Survey Team of JALDA Overseas Village Development in Southeast Sulawesi Province .....	AT - 1
1.2 JICA Experts (Long-term/Short-term) and Counterparts No.1 .....	AT - 2
1.3 Members of Supporting Committee for Overseas Agricultural Development Project .....	AT - 5
1.4 Counterpart Trainees in Japan .....	AT - 6
1.5 Members of the Indonesian Authorities concerned .....	AT - 7
<b>2. List of Supplied Equipments, Machinerles and Materials</b>	
2.1 Provision of Equipments and the Expenditures from JICA .....	AT - 8
2.2 Supplied Equipment and Machinery in the Project .....	AT - 9
<b>3. Record of Discussions and other papers</b>	
3.1 The Record of Discussions .....	AT - 36
3.2 Tentative Schedule of Implementation (TSI) .....	AT - 49
3.3 Indonesian Request on Dispatch of Experts in Agricultural Field .....	AT - 53
3.4 Japanese Response to the Request on the Experts in Agricultural Field .....	AT - 55
3.5 Terms of Reference on Local Energy Training provided to incorporate to this project .....	AT - 58
3.6 Address on the Signing Ceremony of the Record of Discussion and Press-Release Paper .....	AT - 61
<b>4. Organization Chart (Indonesian Side)</b>	
4.1 Ministry of Agriculture (MOA) .....	AT - 67
4.2 Organization for Project Implementation (National, Provincial and Kabupaten Level) .....	AT - 68
4.3 Flowchart of Project Activities .....	AT - 69
4.4 Chart of Indonesia - Supporting System .....	AT - 70
<b>5. Project Evaluation (Results of Survey and Evaluation Missions)</b>	
5.1 Plan discussion survey (April 1992) .....	AT - 71
5.2 Interim evaluation (October 1993) .....	AT - 75
5.3 Final evaluation (November 1995) .....	AT - 81
<b>6. Drawings</b> .....	AT - 95
<b>7. Documentary Photographs</b> .....	AT - 106
<b>8. Tables</b> .....	AT - 119
8.1 The Progress of Activities on the six (6) years flame work plan .....	AT - 120
8.2 Implementation plan, target and performance of the cooperation project .....	AT - 121
8.3 Japanese Contribution / Indonesian Responsibility .....	AT - 132
8.4 Development of Mode Infrastructure .....	AT - 133
8.5 Technical Support Tasks .....	AT - 136
8.6 Infrastructure development results by village wise with work type in the project .....	AT - 138

## ***1. List of Authorities Concerned***

**1.1 Basic Survey Team of JALDA Overseas Village Development  
in Southeast Sulawesi Province**

Name	Field	Period	
Nobuyoshi Kayano	Team Leader	First	7 Aug. 1989 - 31 Oct. 1989
	Regional Planning	Second	23 Dec. 1989 - 25 Mar. 1990
Koji Hattori	Project Manager	First	7 Aug. 1989 - 12 Aug. 1989
Tatsuo Matsunaka	Irrigation and drainage	First	7 Aug. 1989 - 10 Oct. 1989
		Second	23 Dec. 1989 - 25 Mar. 1990
Yoshiya Takashima	Farming Guidance	First	7 Aug. 1989 - 12 Aug. 1989
		Second	20 Feb. 1990 - 10 Mar. 1990
Syunsuke Akamatsu	Agricultural Economics	Second	10 Jan. 1990 - 9 Feb. 1990
Ken Higashimaki	Livestock Development	Second	10 Jan. 1990 - 9 Feb. 1990

1.2 JICA Experts (Long-term/Short-term) and Counterparts

Long-term Assignment	Name of Counterpart		1991	1992	1993	1994	1995	1996
	Full-time	Part-time						
Nobuyoshi Kayano (Team leader/Regional Planning)	Mr. Zainal Abidin		6/5					2/28
	Mr. Edison Dayoh		10/1	9/30				
	Mr. Ridowan Zakariah		10/1					
	Dr. Fausu Kasryno	Regional Office, MOA	6/10	6/30				
	Dr. Chairil A. Rasaban	BAPPEDA, Province	7/1					
	Mr. Yusuf Yakub	Planning Bureau, MOA	6/10					
Souichi Ogasawara (Coordinator)	Mr. La Aowu	"	6/10					
	Dr. La Ode Abd. Rauf	Regional Office, MOA	6/10					
	Mr. Puri B. Arsana	BAPPEDA, Province	6/10					
	Mr. Theodosius Mangape	Planning Bureau, MOA	6/5					2/28
		"	10/1					
		Regional Office, MOA	6/5	8/8				
Tatsuo Matsumaka (Agricultural and Rural Infrastructure)	Mr. Rahman Garrahama	Public Work, Province	6/10		3/31			
	Mr. Prastyo Budi R.	Regional Office, MOA	10/1	8/1				
		Public Work, Province						
Syuji Takaoka (Agricultural and Rural Infrastructure)	Mr. Prastyo Budi R.	Regional Office, MOA		7/8				2/28
		Regional Office, MOA						
	Mr. Suyadi	Public Work, Province	10/1	8/1				
Fujiochi Hatanaka (Construction management)	Mr. Prastyo Budi R.	Regional Office, MOA	6/14	9/30				
	Mr. Yusral Tahir	Regional Office, MOA						2/28
		Regional Office, MOA						
Tokuzaro Saita (Construction management)	Mr. Yusral Tahir	Regional Office, MOA	10/1					
	Mr. Abdul Rias	Food Crops, Province		4/1				
	Mr. Rahman Garrahama	Public Work, Province	6/10		3/31			
Ryoji Tamakuma (Operation and Maintenance of Machinery)	Mr. Juhari	Regional Office, MOA	8/26		2/25			
		Regional Office, MOA	10/1					

1.2 JICA Experts (Long-term/Short-term) and Counterparts

Long-term Assignment	Name of Counterpart		1991	1992	1993	1994	1995	1996
	Full-time	Part-time						
Taduo Xamo (Operation and Maintenance of Machinery)	Mr. Juhuri	Mr. Soetigno	10/1			9/29		2/28
	Mr. Mahnis Ideal	Mr. La Paaja			4/1	12/1	4/1	
Yoshiya Takahima (Farming Guidance)	Mr. Syamsul Rijal	Mr. Syamsul Rijal	6/5			6/4		3/31
	Mr. Juhuri	Mr. Maruf jafar	10/1	4/1				
	Mr. Amri Dayan	Mr. Nodi Samu						
Terubisa Numba (Farming Guidance)	Mr. Syamsul Rijal	Mr. Syamsul Rijal	10/1		5/16			2/28
	Mr. Rustam Supendi	Mr. Joni Ginting	10/1		4/1		4/10	
	Mr. Supriyanto	Mr. Soetigno					8/24	
		Mr. Nodi Samu	10/1					4/1
		Mr. Maruf jafar		4/1				
Yoshihiko Nishimura (Farmer's Group Strengthening)	Mr. Mappinangku		8/26			8/25		
	Mr. Bien Bangapadaang	Mr. Mansur Azis						
Hajime Kikuchi (Farmer's Group Strengthening)	Mr. Mappinangku		10/1			8/1		2/28
	Mr. Bien Bangapadaang				4/1			
	Mr. Andi Aria Pangeraang	Mr. Yanas Suryana			4/1			
		Mr. Syamsul Rijal				4/1		4/1



1.2 JICA Experts (Long-term/Short-term) and Counterparts

Short-term Assignment	Counterpart		1991	1992	1993	1994	1995	1996	
	Full time	Part time							Organization
Syunsuke Akamaizu (Agricultural Economics)		Mr. Mustary Jalal	9/30 11/14 9/30	1/11	3/10	10/24 12/9	1/4 1/24	1/10 1/22	
Toshio Morokuma (Designing Agricultural Facilities)		Mr. Prasetyo Budi Rahadjo	10/14 11/29 10/1	7/31					
Kazumi Karube			1/21 2/19	7/22 9/21					
Takashi Kobayashi (Soil Analysis)		Mr. Siradjuddin Mr. Abdul Rins	1/11 1/20	3/10 7/31					
Yoshiki Abe			3/22 3/31	11/20 2/19	9/23 12/22	10/2	11/25		
Kenichi Ueda							9/3 11/2		
Syoji Uchizawa (Livestock Development)		Mr. Hasan Mardiono		3/1					
Akira Ito			10/11 12/14		10/21 12/28				
Chunichi Murayama (Water Resources Development)									
Seiji Fujita				8/30		10/2	2/2 10/8 12/26	10/1 10/29	
Keiji Tokunaga									
Ryozo Kabamoto (Land Reclamation by Heavy Machines)									
Hideoyuki Kanamori (Agri. and Rural Facilities Development)						2/1 3/31			
Takako Haraguchi (Project Cycle Management Method)						3/25 4/5			
Maroba Horie (Regional Development Planning)							8/3 8/15		
Keiko Inagaki (Strengthening of Rural Women's Group)							2/3 4/30		
Keiji Miya (Operation of Water)								9/18 11/16	
Tohmasa Kiyosaga (Regional Development Planning)								11/1 11/2	

### 1.3 Members of Supporting Committee for Overseas Agricultural Development Project

Fiscal Year	Name	Post and Organization
1991	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Takeo Yamaguchi	Director, II Division, Tropical Agriculture Research Center
	Humihiko Sano	Professor, Meiji University
	Koichiro Katsurai	International Cooperation Expert, Japan International Cooperation Agency (JICA)
	Hiroshi Takeuchi	Ex-director, Agriculture, Forestry and Fisheries Division, Mie Prefecture
	Masashi Morita	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
1992	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Takeo Yamaguchi	Director, II Division, Tropical Agriculture Research Center
	Humihiko Sano	Professor, Meiji University
	Ryuhei Hunano	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
1993	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Masahito Sato	Director, Interchange Division of Overseas Research Data, Tropical Agriculture Research Center
	Fumihiko Sano	Professor, Meiji University
	Koichiro Katsurai	International Cooperation Expert, Japan International Cooperation Agency (JICA)
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
Ryuhei Hunano	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery	
1994	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Masahito Sato	Director, Interchange Division of Overseas Research Affairs, Tropical Agriculture Research Center
	Hideyuki Kanamori	Visiting Development Specialist, Japan International Cooperation Agency (JICA)
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
	Ryuhei Hunano	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery
1995	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Masahito Sato	Director, Interchange Division of Overseas Research Data, Tropical Agriculture Research Center
	Hideyuki Kanamori	International Cooperation Expert, Japan International Cooperation Agency (JICA)
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
	Ryuhei Hunano	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery
1996	Hikaru Tsutsui	Professor, Kinki University
	Yoshihiro Kaida	Professor, Research Center of South West Asia
	Masato Uwagawa	Professor, Komazawa University
	Masahito Sato	Director, Interchange Division of Overseas Research Affairs, Tropical Agriculture Research Center
	Fumihiko Sano	International Cooperation Expert, Japan International Cooperation Agency (JICA)
	Shiro Akamatsu	International Cooperation Expert, Japan International Cooperation Agency (JICA)
	Sadakichi Yoshida	Ex-leader, Agriculture Development Project
Akio Motosugi	Director, Overseas Land Improvement Technology Division, Ministry of Agriculture Forestry and Fishery	

1.4 Counterpart Trainees in Japan

Name	Contents of Training	1991	1992	1993	1994	1995	1996
Dr. Faisal KASRYNO	Study Tour	8/16 - 8/30					
Mr. Soedjatmiko	Study Tour			7/11 - 7/24			
Dr. La Ode Abdul Rauf	Study Tour				10/10 - 10/22		
Dr. Chairil A. Rasahan	Study Tour					7/24 - 8/3	7/22 - 7/27
Mr. La Ode Kaimoeddin	Study Tour						7/22 - 7/27
Dr. Abdul Razak Porosi	Study Tour						
Mr. Putu B. Arsana	Agricultural Economy/Regional Development	1/15 - 2/16					
Mr. Yusuf YAKUB	Project Management	3/23 - 4/7					
Mr. Zainal ABIDIN	Agricultural Cooperative	5/8 - 7/19					
Mr. Syamsal RIJAL	Vegetable Seed Production	2/8					
Mr. Ridwan ZAKARIAB	Regional Agricultural Administration	2/21 - 3/20					
Mr. H. BUHARI	Regional Development Planning					6/25 - 7/15	
Mr. SUTOPO	Agricultural Development Planning						10/7 - 11/1
Mr. SUYADI	Construction/Land Reclamation Planning		3/14 - 4/9				
Mr. Nodi SATTU	Vegetable Cultivation/Farming Guidance			8/23 - 9/17			
Mr. Mustari JALAL	Agricultural Economy/Marketing			9/16 - 12/28			
Mr. JUHURI	Farm Mechanization				2/14 - 11/18		
Mr. Bien BANGAPADANG	Agricultural Extension/Marketing System				5/10 - 9/15		
Mr. Hasan MARDIJONO	Livestock Development				11/26 - 12/3		
Mr. MAPPINANGKU	Vegetable Production				2/27 - 9/22		
Mr. SOEWONDO	Perennial Crops Production					9/17 - 10/7	
Mr. Rustan SUPENDY	Rice Production					2/26	8/26 - 9/20
Mr. Prasetyo Budi RAHARDJO	Construction management						

### 1.5 Members of the Indonesian Authorities concerned

#### Central Agencies

(Kendari, August 15, 1993)

Name	Post	Organization
Dr. Ali RACHMAN	Director of Bureau Agricultural Irrigation	Bureau of Agricultural Irrigation National Development Planning Agency (BAPPENAS)
Dr. Ir. Chairil ANWAR	Director of Bureau of Planning	Bureau of Planning Ministry of Agriculture (MOA)
Dr. Ir. Murasa SARKANIPUTRA	Chief of Planning and Program Division	Bureau of Planning Ministry of Agriculture
Dr. Ir. Togar A NAPITUPULU	Chief of Agricultural Regional Planning Division	Bureau of Planning Ministry of Agriculture
Mr. Putu B. ARSANA, SE, MS	Chief of Agricultural Regional Planning Division (Person in charge of Eastern-part Region)	Bureau of Planning Ministry of Agriculture
H. Suharyo HUSEN, B. SC., SE.	Chief of International Cooperation Division	International Cooperation Bureau
Ir. Rismansyah DANASAPUTRA		International Cooperation Bureau
Mr. HUSEM		Secretariat of Cabinet : SECAB

#### Regional Agencies

(Kendari, August 15, 1993)

Name	Post	Organization
Ir. Yusuf YAKUB, M.Ed	Head of Regional Office	Regional Office in Southeast Sulawesi Province Ministry of Agriculture
Ir. Zainal ABIDIN	Head of Regional Program Division	Regional Office in Southeast Sulawesi Province Ministry of Agriculture
Drs. H. La Ode Kaimuddin	Governor	Provincial Office Provincial Government in Southeast Sulawesi Province
Dr. La Ofe Abdul RAUF	Head of BAPPEDA	Regional Development Planning Agency Provincial Government in Southeast Sulawesi Province
Drs. Ridwan ZAKARIAH	Head of Physical Division	Regional Development Planning Agency Provincial Government in Southeast Sulawesi Province