Japan International Cooperation Agency (JICA)

National Development Planning Agency (BAPPENAS)

THE SUPPORT PROGRAM FOR AGRICULTURE AND FISHERIES DEVELOPMENT IN THE REPUBLIC OF INDONESIA

ACTION PLAN



NOVEMBER 2002

Nippon Koei Co., Ltd.

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Japan International Cooperation Agency (JICA) National Development Planning Agency (BAPPENAS)

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sue	Program	Ref.	Name of Project	Scheme	Input	2003 2004 2005
		No.	- Andrew and the set of the set			Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 C
		1-1	Institutional Support for Food Policy	TCP	Expert (long & short)	
			Agriculture Policy Advisor *1	Indiv. Expert	Expert (long term)	
		 	Food Crop Policy Advisor	Indiv. Expert	Expert (long term)	
	E		Agriciture Infrastructure Policy	Indiv. Expert	Expert (long term)	
	mproving Institution and Production Support System	1-2	Project for Training of Agricultural Extension Officers to Farm Management Improvement (Tentative Tittle)	тср	To be Determined	
	luction S	1-3	Strengthening of Market Orientad and Self- autonomy Agricultural Cooperatives	тср	To be Datermined	
	Page 1		Cooperative Planning	Indiv. Expert	Expert (long term)	
	fution and	1-4	Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources	TCP	Expert (short term)	
	g Insti		Livestock Development Advisor	Indiv. Expert	Expert (long term)	
	S.		Development of High Quality Seed Potato	1	Expert (king & short)	
:	ud en la		Multiplication Project	PTTC	Training, Equipment	
:	-		Quality Soybean Seed Mjultiplication and Training Project Followup	PTTC	Expert (long & short) Training, Equipment	
lutrition			Grant Aid for Increase of Food Production 2KR	Grant Aid	Fertilizer	
Stable Food Supply and Improvement of Nutrition		2-1	Project for Promotion of Farmers Empowe-rment & Irrigation Management Transfer to Water Users Association	ТСР	To be Determined	
Ĕ			Water Users Association Strengthening *2	Indiv. Expert	Expert (long term)	
2			Inigation Planning "3	Indiv Expert	Expert (long term)	
supply a	Improving Function of Agriculturral nifastructure and Sustainable O&M		Study on Comprehensive Recovery Program of Irrigation Agriculture	Develop. Study	Study Team	
8	appe		Way Sekampung Irrigation Project (1)	Loan	Yen Credit	
2	Paries Lies			Loan	Yen Credit	
ă	n n n n n n n n n n n n n n n n n n n		Way Sekampung Irrigation Project (2)			
N)	전 명		Bilibili Irrigation Project	Loan	Yen Credit	
	E g	ļ	Way Sekampung Irrigation Project (3)	Loan	Yen Credit	<u>╺╺</u>
	걸		Small Scale Irrigation Management Project III	Loan	Yen Credit	
	iasi Tasi		Batanghari Irrigation Project (II)	Loan	Yen Credit	
	토프		Project Type Sector Loan for Water Resource Development II	Loen	Yen Credil	
			Small Scale Irrigation Management Project IV	Loan	Yen Credit	
			Water Resources Existing Facilities Rehabilitation and Capacity Improvement Project	Loan	Yen Credit	
i	Bei	3-1	Project on Coastat Fisheries Resource Management	тср	Expert (long & short), SV	
			Fisheries Planning	Indiv. Expert	Expert (long term)	
	ц Б	<u> </u>	Technical Extension of Mariculture	Indiv. Expert	Expert (long term)	
	Sustainable Utitization of Fishenes Resources	3-2	Project for Dissemination of Sustainable Mariculture Technology	TCP	Expert (short term) SV	
	ainable l R	3-3	Coastal Community Development Project	TCP Grant Aid	Expert (long & short) Grant Aid	└────────────────────────────────────
	Sust		Freshwater Aquaculture Development Project	PTTC	Expert (short & long) Training, Equipment	
Raising Income of Farmers and Fishermen and Vitalization of Rural Economy	Promoting Community- based Economic Activities	4.1	Study for Promoting Community-based Economic Activities in Agriculture & Fisheries	Develop. Study	Study Team	
n of Rural Ex	Promoting based I Acti	4-2	Women Participatory Income Generation Project for Coastal Community	тср	Expert (Shorl Term)	
and Vitalization of Rural Economy	Improving and Strengthening Markets	5-1	Study on Improvement of Institutions and Information Systems for Agriculture Product Market	Develop. Study	Study Team	

Action Plan under the Support Program for Agriculture and Fisheries Development

Con-going Projects 2000 Projects adopted but not yet implemented Projects newly planned Projects under preparation Note; TCP: Technical Cooperation Project

*1: Activities of the Agriculture Policy Advisor include a part of TOR for the Institutional Support for Food Policy.

*2: The Water Users Association Strengthening Expert is to be involved in the Project for Promotion of Farmers Empowerment & Irrigation

Management Transfer to Water Users Association, when the project starts.

"3: Activities of the Irrigation Planning Expert Include a part of TOR for the Project for Promotion of Farmers Empowerment & Irrigation Management Transfer to Water Users Association.

Development Issue	Cooperation Program for	Cooperation Component
I. Stable Food Supply and Improvement of	1. Improving the Institution and Production Support System of Agriculture and	1-1 Support for policy and institutional system in line with the decentralization policy
Nutrition	Fisheries	1-2 Development of livestock industry utilizing local resources
	2. Improving the Function of the Agricultural	2-1 Support for turnover of irrigation O&M to WUAs and local governments
	Infrastructure and Sustainable Operation & Maintenance	2-2 Strengthening of WUAs and local governments for the above-mentioned purpose
		2-3 Rehabilitation of existing facilities and development of small scale irrigation for the above-mentioned purpose
	3 Sustainable Utilization of Fishery Resources	3-1 Cooperation in establishing the resource management system for sustainable development of coastal and inland open water capture fishery and fish culture
		3-2 Promotion of capture fishery and fish culture for expansion of local consumption at low prices
II. Raising the Income of Farmers & Fishermen	4. Promoting Community-based Economic Activities in	4-1 Encouragement of local processing industrics for agriculture and fishery products
and the Vitalization of Rural Economy	Agriculture and Fisherics	- Recommendation for institutional framework for creation of incentives for investments
		- Recommendation for information system
		- Encouragement and strengthening of farmers' and fishermen's organizations to promote the local processing industries for agricultural and fishery products
		- Improvement of necessary infrastructures such as small-scale facilities for the above-mentione purpose
		4-2 Support for income generation by poor people: promotion of micro credit schemes and recommendation and support for promoting and strengthening mutual-help organizations for farmers and fishermen
	5. Improving and Strengthening Markets for	5-1 Recommendation on the improvement of market institutions
	Agriculture and Fishery Products	5-2 Recommendation on the establishment o basic market information systems

Development Issues, Cooperation Programs and Cooperation Components

THE SUPPORT PROGRAM FOR AGRICULTURE AND FISHERIES DEVELOPMENT IN THE REPUBLIC OF INDONESIA

Action Plan

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5	_	n for Improving and Strengthening of Markets for Agricultural and Products
	5 - 1	The Study on Improvement of Institutions and Information Systems for Agriculture Product Market

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LIST OF ABBREVIATIONS

AARD	Agency for Agricultural Research Development
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ATC	Agricultural Training Center
BAPPENAS	National Development Planning Agency
BULOG	National Logistic Board
DANIDA	Project on Super Intensive Sea-farming Germination Unit
DG	Directorate General
FAD	Fish Aggregation Device
FAO	Food and Agriculture Organization of United Nations
FY	Fiscal Year
GKIS	Indonesia Union of Dairy Cooperatives
GOI	Government of Indonesia
GOJ	Government of Japan
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JOCV	Japan Overseas Cooperation Volunteers
KUD	Village Cooperative Units (Koperasi Unit Desa)
ΜΜΛϜ	Ministry of Marine Affairs and Fisheries
MOA	Ministry of Agriculture
NFSC	National Food Security Council
NGO	Non Governmental Organization
NTB	(West Nusa Tenggara)
NTT	(East Nusa Tenggara)
ODA	Official Development Assistance
O&M	Operation and Maintenance
PBIS	Project Brief Information Sheet
PIAETS	Project for Improvement of Agricultural Extension and Training System
PROPEDA	Provincial Five Year Development Plan <i>(Program Pembangunan Daerah)</i>
PROPENAS	National Development Plan (Program Pembangunan Nasional)
PTTC	Project-type Technical Cooperation
RFI	Rural Financial Institutions

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SEKNEG	State Secretariat of the Bureau of Technical Cooperation
SV	Senior Overseas Volunteer
S/W	Scope of Work
ТСР	Technical Cooperation Project
TOT	Training of Trainers
USAID	United State Agency for International Development
WATSAL	Water Sector Adjustment Loan
WTO	World Trade Organization
WUA	Water Users Association
WUAF	WUA Federation
2KR	Grant Aid for Increased Food Production

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Program for Improving the Institution and Production Support System

1

In order to realize the Stable Food Supply and Improvement of Nutrition, the issues encompass not only improvement of production techniques, but also the integrated function of various policies and institutions including macro finance and monetary systems, human resources development schemes, agricultural extension, and capacity building for farmers' organizations. Under such circumstances as economic globalization and decentralization, it is of critical importance to establish consistent policy and institutions in order to establish linkage at the farm level between macro policy and the agricultural development plans to be formulated and implemented by the local governments.

It is generally recognized that some progress has been made in the production technique for food crops in Indonesia. In order to utilize the effects of this progress, a high priority should be given to the improvement of agriculture and policies.

The sectors having the greater needs for production support are horticulture and livestock rather than estate crops, in which the private sector is engaged. Taking into account the position of the protein as the second most important nutrients for improvement of human nutrition and the need to raise the income of small-scale farmers in order to alleviate poverty, development of the livestock sector is an urgent requirement.

Considering these reasons and the above situation, the following two components are proposed with respect to the cooperation program:

- 1) Support for policy and various institutional systems in line with the decentralization policy
- 2) Development of livestock industry utilizing local resources

Under this program, the following action plan is formulated for the next three years.

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nproving		Development of High Quality Seed Potato Multiplication Project	PTTC	Expert (long & short) Training, Equipment											
д		Quality Soybean Seed Mjultiplication and Training Project Followup	PTTC	Export (long & short) Training, Equipment											
		Grant Aid for Increase of Food Production 2KR	Grant Aid	Fertilizor			l !''''	l 1	۱۱ ۱۱		l	ا ۲		l	

Congoing Projects 2000 Projects adopted but not yot implemented Congression Projects newly planned Congression Projects under preparation Note: TCP: Technical Cooperation Project

*1: Activities of the Agriculture Policy Advisor include a part of TOR for the Institutional Support for Food Policy.

Note: For this program, the needs for 1) the follow-up support for previous cooperation in the production area and 2) the support using the 2KR counterpart-fund may be examined in the process of monitoring the Action Plan, as required.

Development Issue:	Stable Food Supply and Improvement of Nutrition				
Program:	Improving the Institution and Production Support System				
Type of Scheme:	 ■ Technical Cooperation Project □ Technical Cooperation (Expert) □ Develop. Study □ Technical Cooperation Project (Training) □ Grant Aid 				
Project Name:	Institutional Support for Food Policy				
Implementation Agency:	Ministry of Agriculture				
Ageney.	Relevant Agency: National Logistic Agency (BULOG) and Regional Autonomies				
Project Area:	Whole areas of Indonesia				

1. Background

In the international environment, the globalization of economy under the WTO regime is surrounding the agriculture and fisheries sector in Indonesia; in the domestic sphere, the central government is shifting the authority for policy decisions to the local level, i.e., with the decentralization policy. These socioeconomic transformations require Indonesia to take a new and more complex approach to stable food security and improvement of people nutrition in an integrated manner at the national level.

The GOI has attempted to formulate and implement the national policy on food security through establishment of the NFSC as a ministerial coordinating board chaired by the President, where the Ministry of Agriculture acts as the Secretary of the NFSC. However, domestic food production is not still able to meet the demand for food due to the improvement of people's welfare and taste. To overcome this situation, in 2002 the President of GOI requested the FAO to assist the government in formulating the National Food Security Program. In response to this request, the FAO expressed its role of coordinating with other donors to provide the technical assistance for the establishment of institutions such as the Food Security Law.

The GOJ has provided a variety of assistance for production technology of food crops through a series of the Umbrella Cooperation since the 1970s, and some progress has been made. From 2000, the GOJ has assisted the GOI in capacity building of local governments in planning policy for smooth execution of the decentralization. In providing support for the agriculture policy of stable food security and improvement of people nutrition, this change is the continuous approach to effective cooperation, in that the effects of the previous cooperation can be linked with the current assistance to local government. Given this background, it is of great importance to render institutional support for agricultural policy for the stable food security, which includes the optimum balance between domestic production and imports and the diversification of food consumption for improvement of nutrition, by 1) utilizing the cooperation results so far obtained, 2) linkage with local governments, and 3) coordinating withpolicy support of the FAO.

The purpose of this project is to identify the alternative ranges of domestic production and imports in different situations, by forecasting the supply and demand. Careful consideration will be given to the food price, buffer stock, international trade, agricultural credit systems and policy demarcation between the central and local governments. Capacity building for the relevant government organizations will also be conducted at both central and local levels through the provision of information on policy formulation.

- 2. Outline of the Project
- (1) Overall Goal

Stable food security for the population.

(2) Project Purpose

Recommendations for the improvement of policy and institutional systems, taking into account 1) appropriate levels of domestic production and imports of food stuff, and 2) action for dealing with emergency cases of short- or over-supply of food.

- (3) Outputs
 - Appropriate levels will be set for domestic production, import and food balance, and policy measures will be studied for adjustment of supply.
 - Such policy measures as early warning system and minimum market operations will be studied for short- or over-supply cases.
 - The information and results of analysis will be disclosed to other agencies and donors for their use.
 - Capacity building of a task force in the Ministry of Agriculture will be conducted by means of collaboration with the experts, and the meanings of food security will be widely understood through workshops and seminars.
 - Recommendations will be made on consistent policy between central and local government regarding food security.
- (4) Activities
 - Crop production potential will be evaluated on the basis of available natural resources, agricultural infrastructure and technical levels, and the present production and profitability of crops will be studied. Domestic production will be projected based on the results of evaluation and studies, along with alternatives.
 - Domestic food demand will be estimated and forecast, for both macro-nutrients and micro-nutrients, on the basis of population projections, population by income

level, income elasticity, etc.

- Shortfalls will be estimated based on balancing domestic production and demand, as estimated above. Then, an appropriate range of domestic production and import will be estimated, taking into account the price and distribution of goods in the international market, particularly in Southeast Asia.
- Policy measures will be studied to adjust production and imports to the appropriate range, taking into account farmers' income levels and the rural economy.
- The framework of border measures, such as tariffs, and food price policy will be studied for the emergency cases of short- or over-supply.
- The results of the above studies will be adjusted through discussion with FAO and other relevant organizations, and comments will be obtained from the relevant organizations, including donors.
- Capacity building of the Ministry of Agriculture will be carried out by means of on-job-training in a cooperative environment.
- The Framework and mechanism will be studied in order to reflect the national policy for food security in the provincial policy through the review of the provincial five year development plan (PROPEDA) of the representative province.

(5) Inputs

(a) Japanese Side

-	Long-term Experts (agriculture policy, decentralization.):	1 or 2 persons
-	Short-term Experts (subject wise):	as required
-	Seminar and Workshop:	as required

- (b) Indonesian Side
- Counterparts: task forces to be organized within relevant organizations which are the member of the NFSC.
- 3. Cooperation Period

Three years

- 4. Other Relevant Projects
- (1) Japan

All the projects for the agriculture and fisheries sector under Japanese technical assistance.

(2) Other Donors

FAO is to provide a technical assistance for formulation of the National Program for Food Security. Currently, FAO has been implementing the Special Program for Food Security as community based projects in about 20 villages in five provinces, using the trust fund from the GOJ. The Asian Development Bank will support the Ministry of Agriculture in the formulation of agriculture and rural development policy between August 2002 and March 2003. USAID has been supporting BAPPENAS on food policy agenda, estimation of food supply and demand, food economy, food policy impact on nutrition and outreach programs for local institutions.

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Government officials involved in policy making for food security.
 - Number of Beneficiaries: -
- 6. Relevant PBIS (FY2002)

Ministry of Agriculture

"Agricultural Policy Advisor" from Secretariat General, "Extension of JICA Expert for Agricultural Facility Development" from DG of Agricultural Facilities.

"Extension of JICA Expert for Food Crops Development in the Framework of Food Security" and "Strengthening of Food Crops Development Planning by Increasing Capacity Building of Agriculture Planning Offices" from DG of Food Crops Production Development.

"Rural Community Empowerment for Food Security", "Community Empowerment for Food Security", "Farmers Empowerment toward their Income Improvement", "Food Distribution System Development" and "Food Price Information Networking Development" from the Agency of Community Empowerment of Food Security.

7. Other Important Information

The GOI has been taking an effort to formulate a long-term framework for National Food Security through the establishment of local food security councils under the National Security Council. For this purpose, the government requested FAO for technical assistance to formulate the National Program for Food Security, under which measures will be implemented in the priority 100 districts (Kabupaten) for enhancement of agricultural productivity, diversification of farm economy, marketing/ processing/ distribution of food, income generation at community and household levels and improvement of nutrition.

Development Issue:	Stable Food Supply and Improvement of Nutrition					
Program:	Improving the Institution and Production Support System					
Type of Scheme:	heme:Image: Technical Cooperation ProjectImage: VolunteerImage: Technical Cooperation (Expert)Image: Develop. StudyImage: Technical Cooperation Project (Training)Image: Grant Aid					
Project Name:	Project for Training of Agricultural Extension Officers to Farm Management Improvement (Tentative Title)					
Implementation Agency:	Ministry of Agriculture, Agency for Agricultural Human Resources Development					
Project Area:	oject Area: Jakarta, West Java Province, etc.					

1. Background

It is necessary to promote the improvement of productivity and crop diversification at the individual farmer level, in order to ensure stable food supply and the improvement of nutrition. Furthermore, a technical support system for farmers is needed.

JICA implemented the Project for Improvement of Agricultural Extension and Training System (PIAETS), categorized as a Technical Cooperation Project, during the period from 1999 to 2002. This Project was carried out at Kayuambon Agricultural Training Centre (ATC, former BDP¹) in West Java Province. Through the implementation of the Project, a training method for extension officers was developed, and trial training for the extension officers in Kabupaten Bandun was also implemented, verifying the effectiveness of the method. It is necessary to modify the training model mentioned above in a practical manner, and thus establish an updated training program for extension officers, in order to effectively disseminate the results of the Project across all of Indonesia. Furthermore, improvement of the extension system under decentralization would be required for the effective and smooth operation of the training program.

- 2. Outline of the Project
- (1) Overall Goal

The improved training program is implemented in ATCs nationwide.

(2) Project Purpose

To enable extension officers in model areas to acquire new extension methodology by

^{1 :}ATCs were formerly known as BDPs.

means of the improved PIAETS training program.

- (3) Outputs
 - 1) The training program that was prepared in the PIAETS (the previous project) will be improved at Kayuambon ATC (tentative).
 - 2) Kayuambon ATC (tentative) will become a base for the training of trainers (TOT).
 - 3) The training program will be applied to model areas.
- (4) Activities
 - 1) -1 Socialize PIAETS training program with other districts / ATCs / Institutes concerned.
 - 2 Follow-up for PIAETS trial course participants.
 - 3 Expand the training to other districts.
 - 4 Improve the training program, incorporating new concepts such as group formation and better marketing skills.
 - 5 Revise the PIAETS training manual.
 - 2) -1 Develop a TOT curriculum.
 - 2 Train instructors of Kayuambon ATC (tentative).
 - 3 Design a TOT plan (frequency, trainees, etc.).
 - 4 Implement TOT for instructors from some ATCs and district governments.
 - 5 Follow up the training activities of TOT trainees.
 - 6 Revise the PIAETS TOT manual.
 - 3) -1 Survey and analyse the existing situation regarding agriculture and extension activities in the model area.
 - 2 Collect and edit information on applicable cases from the model area.
 - 3 Formulate a training curriculum.
 - 4 Implement the training of extension officers.
 - 5 Evaluate the results of training.
 - 6 Feedback the applicability of the training program in the model area to the relevant institutes.
- (5) Inputs

Inputs are to be determined based on the results of a series of surveys, which are currently conducted.

3. Cooperation Period

From 2003

- 4. Other Relevant Projects
- (1) Japan

JICA: Project for Improvement of Agricultural Extension and Training System (1999 to 2002)

(2) Other Donors

World Bank: Decentralized Agriculture and Forestry Extension Project (1999 to 2004)

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: -
 - Number of Beneficiaries: -
- 6. Relevant PBIS

Ministry of Agriculture

"Project for Training of Farmers' Groups with Improvement of Farm Management (submitted in 2001)"

7. Other Important Information

Development Issue:	Stable Food Supply and Improvement of Nutrition					
Program:	Improving the Institution and Production Support System					
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Develop. Str Technical Cooperation Project (Training) Grant Aid 					
Project Name:	Strengthening of Market Oriented and Self-autonomy Agricultura					
Implementation Agency:	State Ministry of Cooperatives and Small & Medium Enterprises or Ministry of Agriculture					
Project Area:	Area: Entire Indonesia					

1. Background

The government has been shifting its policy on food security from self-sufficiency in rice to stable food supply and improvement of nutrition. This policy would be achieved at the national to household level, focusing on increase in farm income, human health and consumers' preference as well as poverty alleviation in the rural area.

In order to pursue the stable food supply, an environment must be created that will enable farmers to increase their income and intensify farm production under their own farm management. To create such an environment, farmers need to manage collection, shipping and sales of products as well as purchase of inputs, but it is difficult for individual farmers to manage all these aspects. Therefore, formation and activation of farmers' organization are required for farmers to obtain more profit through increase of efficiency in production and promotion of agribusiness activities such as collective shipment, processing and storage, collective sales, and collective procurement. Further, activities of farmers' organizations are expected to increase farmers' income through communication with farmers who know the prospective commodities in each local area.

The existing farmers' organizations are the farmers' groups (Kelonpok Tani) and cooperative societies. The cooperative societies are mainly the village cooperative units (KUD), which have been developed with the government support. Although some of KUDs have played important roles in the rural area, they do not always function satisfactorily due to heavy dependence on the government support. On the other hand, Presidential Decree No.18 in 1998 abolished the restriction on cooperative establishment other than KUDs in the rural area. Since then, "new agricultural cooperatives" are increasingly being organized, but many problems are emerging, as they come to a new stage of development.

Under these above circumstances, in order to increase farmers' income through expansion of

production and promotion of agribusiness, farmers' organizations need to be strengthened, based on the support of the rural community under democratic and self-reliant management through empowering farmers, using a bottom-up approach.

In this project, suggestions and recommendations for strengthening farmers' organizations will be made with regard to the policy frameworks and institutional systems, including promoting mergers and cooperation of business for merit of scale, guidelines for financial management and business activities, and training programs. These suggestions and recommendations will be obtained using analysis of the actual features of farmers' organizations as well as the results of reorganization and strengthening of the farmers' organizations in the model area.

2. Outline of the Project

(1) Overall Goal

The policy framework and institutional system will be improved for strengthening of farmers' organization.

(2) Project Purpose

To make recommendations for policy and institutional systems to strengthen farmers' organizations, and, if required, a model project would be implemented based on the improved policy and institutional system.

- (3) Outputs
 - 1) Actual features and conditions of farmers' organizations will be clarified, and appropriate policy directions for strengthening farmers' organizations, based on the features, will be defined.
 - 2) A policy framework will be formulated to strengthen farmers' organization, and this will be compiled as guidelines and manuals.

If the model project is implemented according to the above guidelines, the following outputs are envisaged.

- 3) Actual features and conditions of farmers' organizations will be clarified in the model area.
- 4) Based on the above policy framework, detailed direction will be defined for strengthening farmers' organizations in the model project area.
- 5) Based on the guidelines prepared above, human resources will be enhanced for management of farmers' organization and business activities.
- 6) Through implementation of the model project, self-reliant management of farmers' organizations will be attained and this will result in increase in farmers' income.
- 7) Experience obtained and lessons learned will be identified through evaluation of the model project.

- 8) The experience and lessons will be exchanged with others, and through feeding them back, the policy framework and guidelines will be improved.
- (4) Activities
 - 1) -1 Actual features and conditions of farmers' organizations will be surveyed through analysis of the existing data and field surveys. Based on the analysis, problems and constraints for strengthening farmers' organizations will be identified in terms of local socio-economic condition and custom, production activities and management of organization as well as the need for organizations and the perceptions of farmers.
 - 2 Problems and constraints will be categorized based on the causes such as local custom, limited perception of farmers, etc. For each category, policy direction will be studied and defined as measures to solve the problems and constraints.
 - 2) -1 Based on the policy direction defined above, the policy framework will be studied. The study results will be incorporated into the guidelines and manuals for strengthening farmers' organizations.

If the model project is implemented according to the above guidelines, the following outputs are envisaged.

- 3) -1 In the model project area, problems and constraints will be identified for strengthening farmers' organizations by analyzing the prevailing conditions and rural socio-economic situation influencing farmers and their organizations.
- 4) -1 Guidelines applicable in the model area will be selected and modified based on the above problems and constraints. According to the guidelines, particular business activities will be selected through a participatory approach, and the detailed direction will be defined to strengthen farmers' organizations.
- 5) -1 Democratic management will be introduced in farmers' organizations through empowering farmers in the development of business, using participatory approach. The results will be incorporated into the guidelines.
 - 2 Guidelines and manuals for training will be prepared for financial management and business activities, and training will be conducted.
 - 3 In order to supplement government support and monitor progress and results regarding the strengthening of farmers' organizations and the promotion of agribusiness, the training program for third parties will be prepared and conducted.
- 6) -1 In order to increase farmers incomes, efficient production activities and agribusiness will be encouraged with the support of the government and the third parties trained above.
- 7) -1 Before starting the model project, a baseline survey will be carried out in order to understand the current situation of farmers, and the benchmarks will be established to monitor progress. A benchmark survey will also be conducted periodically.

- 2 Records of activities and management of farmers' organizations will be regularly reviewed for evaluation.
- 8) -1 Experience and lessons will be presented to the public, and experience exchange with other donors will be done through workshops and seminars. The result will be incorporated in the guidelines for the strengthening of farmers' organizations.

(5) Inputs

Inputs are to be determined based on the results of a series of surveys, which are currently conducted.

3. Cooperation Period

Five years

- 4. Other Relevant Projects
- (1) Japan

JICA : The Study on Integrated Development Project for Rural Cooperatives in the Republic of Indonesia

(2) Other Donor

-

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Staff of the central government, local government and farmers in the model area.
 - Number of Beneficiaries: -

6. Relevant PBIS

State Ministry of Cooperative and Small & Medium Enterprises

"Strengthening of Market-oriented and Self-Autonomy Agricultural Cooperative", "Development of Processing Technology of Dairy Farmers on Cooperative Bases", "Improvement of Community Based Fishery Industry on Cooperative Bases".

7. Other Important Information

Development Issue:	Stable Food Supply and Improvement of Nutrition				
Program:	Improving the Institution and Production Support System				
Type of Scheme:	 □ Technical Cooperation Project □ Technical Cooperation (Expert) □ Develop. Study □ Technical Cooperation Project (Training) □ Grant Aid 				
Project Name:	Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources				
Implementation Agency:	Ministry of Agriculture, Directorate General for Livestock Production Development				
	Livestock Office in West Java Province				
	Livestock Office in East Java Province				
	Livestock Office in South Sumatra Province				
	Indonesia Union of Dairy Cooperatives (GKSI)				
Project Area:	West Java, East Java, and South Sumatra Provinces				
1. Background					

In Indonesia, dairy husbandry attracts a great deal of attention as an enterprise with the potential to increase farmer's income effectively. Local governments, which own suitable area for dairy husbandry, are promoting it as a series of measures for farmers' income generation and vitalization of rural economy.

The extent of import-dependence for feed materials is high for dairy husbandry in Indonesia. This is seen as a crucial subject to be improved and enhanced, from the viewpoints of safe and stable supply of dairy products and prevention of foreign currency outflow.

Under the situation mentioned above, the GOJ conducted "The Strengthening of Artificial Insemination Center Project" and "The Dairy Technology Improvement Project". In these Projects, training programs for extension officers, key farmers, etc. were implemented. It seems that transfer technology to them by those projects is just about completed.

With regard to training systems for general farmers, the training activities have just started in collaboration with the Indonesia Union of Dairy Cooperatives (GKSI), under the Dairy Technology Improvement Project. However it seems that some improvement is still required. Currently the most crucial point from the viewpoint of promotion of livestock industry applying local resources is how to disseminate effectively and smoothly to farmers themselves a series of technologies that have already been transferred, such as forage and feeding management.

2. Outline of the Project

(1) Overall Goal

Animal husbandry is activated through the promotion of improvement in the existing feed supply, particularly forage.

(2) Project Purpose

To establish a self-management system of training programs so that sustainable operation is possible. In this way, a series of technologies, such as forage and feeding management can be disseminated to dairy farmers.

- (3) Outputs
 - 1) Training programs for dissemination of a series of technologies such as forage and feeding management are updated and operated.
 - 2) Participants who undertake training programs acquire a series of technologies such as forage and feeding management.
 - 3) Self-management system for the operation of training program is established.
- (4) Activities
 - 1) -1 Support to formulate training programs based on a series of technologies that have already been transferred, such as forage and feeding management.
 - 2 Improve the training program, applying the new components depending on the current situation
 - 3 Revise the training manual that was designed in the former project.
 - 4 Prepare a curriculum.
 - 5 Train instructors.
 - 6 Revise training manuals for instructors.
 - 2) -1 Support the implementation of the training program mentioned above for extension officers and key farmers, utilizing the facilities and human resources of the existing cooperatives of GKSI.
 - 2 Conduct a follow-up survey with participants who undertook training courses.
 - 3 Evaluate training results based on the results of the follow-up survey.
 - 4 Feedback the evaluation results to the training program, manual, etc. and conduct supplemental instructions.
 - 3) -1 Implement training on a sustainable self-management system intended for instructors.
 - 2 Provide suggestion on self-management of training programs.

- (5) Input
 - (a) Japanese Side
 - Local Coordinator
 - Short-term experts (Feed crops, feeding management, etc. as required)
 - (b) Indonesian Side
 - Budget for training implementation
 - Cost for counterpart personnel required for monitoring
- Cooperation Period
 2003 to 2006 (3 years)
- 4. Other Relevant Reports
- (1) Japan

JICA : Dairy Technology Improvement Project

- (2) Other Donors
 - -
- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: -.
 - Number of Beneficiaries: -
- 6. Relevant PBISs

Ministry of Agriculture

"Development of Livestock Industry Utilizing Local Resources"

7. Other Important Information

Program for Improving the Function of Agricultural Infrastructure and Sustainable Operation and Maintenance

2

The irrigation area has been expanded under a government initiative to attain food self-sufficiency. This expansion of irrigation area along with improvement of production technology has contributed to the stable supply of food. However, trade liberalization has given rise to serious price competition between local and imported rice. In addition, the purchasing capacity of the people has improved due to economic recovery of other sectors. Under these circumstances, the focus on food policy is shifting to stable food supply rather than food self-sufficiency. The future irrigation development should be carefully examined, considering the food policy based on the supply and demand of food.

Regarding the existing irrigation schemes, a number of issues are examined: the deterioration of irrigation facilities, malfunction of irrigation facilities due to poor O&M following the unsuccessful hand-over to the WUA for the reduction of budgetary burden, the transfer of irrigated land to other land use on the populous Java Island, and abandoned irrigated areas on the outer islands.

Taking the above situation into account, the highest priority is the strengthening of the institutional system for O&M of the irrigation facilities which have been constructed under the Japanese ODA as well as other donors. In this regard, the components of the Japanese ODA in improving the function of irrigation facilities are:

- 1) Supporting promotion of turnover of O&M for irrigation facilities to WUAs and Local Government;
- 2) Strengthening of WUA and capacity building of local government for the above-mentioned purposes; and
- 3) Rehabilitation of existing facilities and development of small-scale irrigation facilities for the above-mentioned purposes.

Based on these components, the following action plan is formulated for the cooperation program for the next three years.

Program	Ref.	Name of Project	Scheme	Input		2003					04		2005 0				
C I U U I I I I I I I I I I I I I I I I	Ng.,	###### 01 F 10/000	20118m18	1000	_[91	Q	2 C	13	Q.4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2 (33[24 C
	2-1	<u>Project for Promotion of Earmare Empowe-</u> rmant & Irrigation Management Transfer to Water Users Association	TCP	To be Determined			1										
		Water Users Association Strengthening *2	Indiv. Expert	Expert (long term)		Γ	- į,				1					-	
	Irrigation Planning *3		Indiv. Experi	Expert (long term)													
ternal Land		Study on Comprehensive Recovery Program of Irrigation Agriculture	Develop, Study	Study Team		Į											
of Agricult estainable		Way Sekampung Irrigation Project (1)	Lown	Yen Credit			ф,					_					
Ч. Ч. Ч.		Way Sakampung Irrigation Project (2)	Lann	Yen Gredit	- (===		-		1		-				_		
E K		Bilihill Irrigation Project	Loan	Yen Credit	_	ų.	÷		1				1			-	
a de la de l		Way Sekempung Irrigation Project (3)	Loan	Yen Credit	- f=							_					
		Small Scale Irrigation Management Project III	Loan	Yen Credit	_h		uite State		-		[1_			r-1		
improving Sfrastruct		Batangharl Irrigation Project (II)	Lonn	Yen Credit	_ [÷2		.			-	ų. Lietus	μ		ш)- 		
E E		Project Type Sector Loan for Water Resource	Lonn	Yen Gredit	╘	I T		-				-					<u> </u>
		Small Scale Irrigation Management Project IV	Loan	Yen Credit	111	ÌĮ.	ŴĮ	Ŵ	M	711	III.	2111	YIII I	UIII.	IIII	1114	1111
_		Water Resources Existing Facilities Rehabilitation and Cepacity Improvement Protect	Loan	Yen Gredit	7114												

: On-going Projects 2000 Projects adopted but not yet implemented for the projects newly planned E Projects under preparation Note; TCP: Technical Cooperation Project

*2: The Water Users Association Strengthening Expert is to be involved in the Project for Promotion of Farmers Empowerrment & Irrigation Management Transfor to Water Users Association, when the project starts.

*3: Activities of the Irrigation Planning Expert include a part of TOR for the Project for Promotion of Farmere Empowerrment & Irrigation Management Transfer to Water Users Association.

Note: In the process of monitoring this program, the grant aid may be reconsidered for the above item 3).

2 - 1

Development Issue:	Stable Food Supply and Improvement of Nutrition							
Program: Improving the Function of the Agricultural Infrastructure Sustainable Operation and Maintenance								
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Develop. Study Technical Cooperation Project (Training) Grant Aid 							
Project Name:	Project for Promotion of Farmers Empowerment and Irrigation Management Transfer to Water Users Association							
Implementation Agency:	Directorate General of Water Resources, Ministry of Settlement and Regional Infrastructure							
Project Area:	West Sumatra, West Java, Central Java, West Nusa Tenggara and South Sulawesi Provinces							

1. Background

Irrigation facilities are the most important agricultural infrastructure for stable food supply. The Indonesian government has been making great efforts toward irrigation development in order to attain foodstuff self-sufficiency through construction of irrigation facilities by the government, and the irrigation area reached 5 million ha in 1999. However, O&M and rehabilitation of irrigation facilities depend upon the government budget, and sustainable water use by farmers has not been achieved yet. This situation resulted in financial burden of the government.

On the other hand, water demand has been increasing, and the efficient use of irrigation water is necessary since the irrigation sector uses the largest volume of water, accounting for more than 80% of total water consumption. For this purpose, the GOI has been formulating the institutional framework for O&M of irrigation facilities by farmers under WATSAL.

Under the above circumstances, handing over O&M of irrigation facilities to WUAs would be encouraged through strengthening of the WUAs based on the progress of building institutional system. In order to improve the technical capacity of WUAs for O&M, the local government organizations are required to enhance their capacity to conduct a series of guidance regarding proper O&M through farmers' participation. In this regard, the GOI requested the GOJ for technical cooperation to conduct capacity building in the area of technical guidance to farmers for management of irrigation water and facilities in the model area.

2. Outline of the Project

(1) Overall Goal

Irrigation facilities at the province level will be operated and maintained in a sustainable manner, and irrigation water will be efficiently utilized.

(2) Project Purpose

The WUA in the model area will be trained and strengthened by regional autonomies according to the local situation. A procedure will be established to hand over O&M of irrigation facilities to the WUA.

- (3) Outputs
 - Irrigation farmers will organize the WUA and WUAF, and conduct O&M of irrigation facilities in an autonomous and sustainable manner.
 - farmers operate and maintain the irrigation facilities.
 - Irrigation water is efficiently utilized.
 - Irrigation service fee is properly collected.
 - Institutional system is arranged for technical guidance regarding formation and strengthening of WUA.
- (4) Activities
 - Dissemination of information regarding role of WUA and handover of O&M to the rural community
 - Formation and training of the WUA according to the existing legal framework and guidelines, and enhancement of capacity for organization management and financial management by the WUA.
 - Guidance on water management and preparation of its guidelines.
 - Preparation of by-laws.
 - Preparation of a training program.
 - Updating the existing data base to monitor the situation of WAUs and the handover of O&M in the model area.
 - Making recommendation on irrigation projects of the GOI focusing on the handover of O&M to WUAs
- (5) Inputs

Inputs are to be determined based on the results of a series of surveys, which are currently conducted.

3. Cooperation Period

From 2003

- 4. Other Relevant Projects
- (1) Japan

All the projects for irrigation and rural development under Japanese technical assistance.

(2) Other Donors

World Bank: WATSAL, Java Irrigation Improvement and Water Resource Management Project, Water Sector Management Project.

ADB: Participatory Irrigation Sector Project.

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Staff of Ministry of Settlement and Regional Infrastructure and local government at Province and Kabupaten levels as well as farmers to be benefited in the irrigation area.
 - Number of Beneficiaries: -
- 6. Relevant PBIS

Ministry of Settlement and Regional Infrastructure

"Project for promotion of farmers empowerment and irrigation management transfer to water users association" from Directorate General of Water Resources

7. Other Important Information

This project would be coordinated with the Small Scale Irrigation Management Project financed by JBIC.

3 Program for the Sustainable Utilization of Fishery Resources

Fishery products play an important role in the nutritional improvement of the people and stable supply of food. Per capita consumption of fishery products in 1999 was about 18kg, which accounts for 60% of the animal protein intake. Fishery resources are the natural resources distributed in the third largest marine area in the world and the vast inland water area, and the products are mainly for domestic consumption in Indonesia. Furthermore, in such remote areas as the eastern part and the small islands area of Indonesia, where no other specific useful natural resources are available, fishery plays an important role in creating job opportunities as well as generating cash income for fishermen and related people.

The development subjects of this cooperation program are broadly categorized into two major aspects, namely, resources management for sustainable fisheries promotion, and the supply of fishery products to the people. Each aspect of management and supply involves both capture fishery and aquaculture.

Taking the above-mentioned circumstances into account, the projects will be implemented based upon the following components.

Considering the reasons and the situation described above, the following two components are proposed for the cooperation program:

- 1) Cooperation in establishing the resource management system for sustainable development of coastal and inland open water capture fishery and fish culture, and
- 2) Promotion of coastal and inland capture fishery and fish culture for expansion of local consumption of fishery products.

Under this program, the following action plan is formulated for the next three years.

Program	Ref, No.	Name of Project	Scheme	Input	2003 2004 2005 06 01020304010203040102030401
of Fisheries	3-1	Project on Coastal Fisheries Resource Management	TCP	Expert (long & short), SV	
		Fishries Planning	Indiv. Expert	Expert (long term)	
s of l		Technical Extension of Mariculture	Indiv. Expert	Expert (long term)	
Utilization Resources	3-2	Project for Dissemination of Sustainable Mariculture Technology	TCP	Expert (short term) SV	
Sustainable Utilization Resources	3-3	Coastal Community Development Project	TCP Grant Aid	Expert (long & short) Grant Aid	╎╶╎╴╎╸┟╶┟╴┶╴╘╌╎╼┙┵╸┵╸┝╾╿┯ ╽╴╵╴╴┍┑╺┯╺┯╸┍╼╷╼┑╺┯╴┱╸
Sust		Freshwater Aquaculture Development Project	PTTC	Expert (short & long) Training, Equipment	

Congoing Projects
 ///////
 Projects adopted but not yet implemented
 Congoing Projects newly planned
 Congoing Projects under preparation
 Note; TCP: Technical Cooperation Project

Development Issue:	Stable Food Supply and Improvement of Nutrition						
Program:	Sustainable Utilization of Fisheries Resources						
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Technical Cooperation Project (Training) 	 Volunteer Develop. Study Grant Aid 					
Project Name:	Project on Coastal Fisheries Resources Manag	ement					
Implementation Agency:	Ministry of Marine Affairs and Fisheries						
Project Area:	Whole of Indonesia, Semarang						

1. Background

Marine capture fishery produces around 3/4 of the total fishery production. It is regarded as the main animal protein resource for Indonesian people, even in the future, and the potential of marine fishery resources utilization is estimated about 5 million tons per year. Fishery resources management is flagged as one of the important issues in the national development plan, since it is a resource that can be utilized in a sustainable manner if the fishing pressure is properly managed. However, the deterioration of fishery resources condition in coastal areas has occurred due to over-utilization of the resources in some sea areas, coral reef destruction caused by illegal fishing using dynamite and poison, and over-catch or illegal fishing by foreign and domestic fishing vessels in coastal areas.

Central government, provinces and districts should evaluate the potential of fishery resources properly and utilize them in a sustainable manner. It is necessary to establish appropriate fishery resources management, based on the resources in each fishing area, with integration between central and regional/local government. Community-based fishery resources management is also expected to be established, since it is important to get the participation and understanding of coastal fishermen and villagers in the management and utilization of the fishery resources. With the process of decentralization after 1999, the power of regional autonomies has been strengthened, but administrative initiatives for enabling sustainable utilization of coastal fishery resources are being delayed, corresponding organizations or institutions are unprepared, and available human resources are insufficient.

Therefore, it is essential to provide support for building policies and institutions for fishery resources management based upon the decentralization by preparing guidelines on regulation measures for resources management for each region. In addition, training is required for people, such as administrators in regional autonomies and school teachers, who can support communities in the promotion of practical fishery resources management.

- 2. Outline of the Project
- (1) Overall Goal

A proper fishery resources management along with environmental conservation of coastal coral reef areas will be implemented in regional autonomies.

(2) Project Purpose

To prepare guidelines for the implementation of fishery resources management for regional autonomies, and upgrade the capability of administrators, technical staff and fishery school teachers.

- (3) Outputs
 - 1) Policy and institutional systems will be established for fisheries resources management in line with decentralization.
 - 2) Guidelines and policy measures on coastal fisheries resource management will be formulated, to be implemented by local government and community jointly.
 - 3) Training will be implemented for coastal fisheries resource management and sustainable coastal fisheries.
 - 4) The capability of local government for joint management of fishery resources with the community will be upgraded.
 - 5) A model of community-based coastal fishery resources management will be formulated.
- (4) Activities
 - 1) Support the formulation of policy and institutional systems for fisheries resources management in line with decentralization.
 - 2) Prepare guidelines and policy measures on coastal fisheries resource management for implementation by local government and the community jointly.
 - 3) Conduct training programs for staff of central government to transfer technology and for the staff of local government.
 - 4) Conduct workshops and seminars for community-based coastal resources management through selection of a model fishery community.
- (5) Inputs

(a) Japanese Side

- Long-term Expert: Fishery Resources Management Policy
- Short-term Expert: about 4 persons per annum (fisheries control institution, fisheries control activities, vessel control institutions, fisheries ground and dispute management, community-based coastal fishery management, fishing controlling and surveillance, extension and training, fishing ground use plan, fishing ground use implementation, coastal environment management, fishing gear and methods,

vessel technology, etc.)

- Senior Volunteer: 1 person (coastal fishing technology)
- Acceptance Trainees: about 4 persons per annum (fisheries control, vessel control institutions, fishing ground use institution, community-based coastal fishery management fishing controlling and surveillance, fishing ground use plan, etc.)
- Provision of Equipment: coastal environment monitoring equipment

(b) Indonesian Side

- Project Manager: 1 person
- Counterparts: 2-3 persons for each short-term expert .
- Local Costs
- 3. Cooperation Period

Three (3) years

- 4. Other Relevant Projects
- (1) Japan

-

JICA: Project on Human Resources Development Center for Fishing Technology and Fishery Resources Management (Grant Aid) 2000-2002

- (2) Other Donors
- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Administrators and Technical Staff of Central and Regional Government and School Teachers of Fishery Educational Institute (about 2,000 persons)
 - Number of Beneficiaries: coastal fishermen (about 2 million people)
- 6. Relevant PBIS

Ministry of Marine Affairs and Fisheries

"Responsible Coastal Fisheries Resources Management Plan"

"Training for Administrators, Observers and Staff to Strengthen the Capability and Capacity to Conduct Monitoring, Controlling and Surveillance System"

"Provision of Patrol Vessels"

7. Other Important Information

A long-term expert on fishery resources management will be assigned to the Ministry of Marine Affairs and Fisheries at Jakarta. Some of short-term experts (e.g. fisheries control institution, fisheries control activities, vessel control institutions, fisheries ground and dispute management) also will be assigned to the Ministry of Marine Affairs and Fisheries at Jakarta and will provide support for policy and institution at the central level.

Development Issue:	Stable Food Supply and Improvement of Nutrition							
Program:	Sustainable Utilization of Fisheries Resources							
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Technical Cooperation Project (Training) 	 Volunteer Develop. Study Grant Aid 						
Project Name:	Project for Dissemination of Sustainable Mar	iculture Technology						
Implementation Agency:	Ministry of Marine Affairs and Fisheries							
Project Area:	Whole of Indonesia							

1. Background

The Ministry of Marine Affairs and Fisheries tackles the increase in aquaculture production as one of the important national policies. Regional autonomies must develop their own financial resources for stable food supply, improvement of nutrition and peoples' income generation under the decentralization progress that began in 1999. In particular, coastal provinces and districts expect the development potential of marine and fishery resources. Mariculture development is a high priority issue, and JICA has supported seed production technology of marine finfish through the National Mariculture Research Center at Gondol. However, throughout Indonesia, 1) there is lack of a policy direction for technological development, as local technology has not sufficiently been established; 2) the experience of mariculture is not adequate; and 3) sustainable technology transfer with appropriate care of the marine environment is just beginning. In order to improve existing conditions, it is important to transfer technologies from Gondol to the other National Aquaculture Development Centers and disseminate them to fish farmers etc., through a fishery extension organization that is planned to operate in the provinces and districts in the near future.

In mariculture, it is important to implement the assistance in concert with support for establishing policy and institutions to ensure sustainability, particularly with regard to issues such as licensing, measures necessary for environmental protection and cooperating with the regions.

It is then considered effective to implement the above assistance by exchanging technology and information with neighboring countries such as the Philippines, Malaysia and Thailand. It is desirable to conduct the Third Country Training Program not only training for Indonesian technical staffs but also for technical staffs of neighboring countries.

- 2. Outline of the Project
- (1) Overall Goal

The sustainable mariculture technology is disseminated to fish farmers in Indonesia and the neighboring countries.

(2) Project Purpose

To transfer sustainable mariculture technology to core technical staff of national aquaculture development centers and neighboring countries.

- (3) Outputs
 - A technological manual on sustainable mariculture is prepared.
 - Seed production and sustainable mariculture technology are transferred to the staffs of national aquaculture development centers.
- (4) Activities
 - Clarify technological issues for sustainable mariculture.
 - Transfer technologies from Gondol center to other national aquaculture development centers.
 - Implement practical training at some national aquaculture development centers.
 - Disseminate technology to fishermen and fish farmers at national aquaculture development centers by cooperation with provinces and districts
 - Establish a system for training implementation at Gondol center.
- (5) Inputs
 - (a) Japanese Side
 - Short-term Expert: Mariculture Technology Extension 1 person per annum
 - Senior Volunteers: 3persons Seed Production, Aquaculture Technology, and Pathology

(b) Indonesian Side

- Counterparts: aquaculture extension planning, pathology, seed production, feed development, blood stock rearing, training management, etc.
- Training Facilities and Dormitory
- Local Cost
- 3. Cooperation Period

Three (3) years

4. Other Relevant Projects

(1) Japan

JICA: Project on Multi-species Seed Production Technology Development

- (2) Other DonorsDANIDA: Project on Super Intensive Sea-farming Germination Unit (Loan)
- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Technical Staff of National Aquaculture Development Centers, Regional Autonomies, etc.
 - Number of Beneficiaries: Approx. 13 million coastal villagers
- 6. Relevant PBIS

Ministry of Marine Affairs and Fisheries

"Study on Feed Formulation and Feeding Strategy for Groupers"

"Marine Finfish Hatchery Management"

"Responsible Aquaculture Management Project"

"Development Center for Mariculture in Western Indonesia"

"Sustainable Mariculture Based Coastal Village Development Project"

"Sustainable Mariculture Technology and Fish Disease"

"Development of Rapid Diagnostic Tools of Disease in Freshwater and Mariculture"

"Aquaculture Program for Development of Stock Enhancement and Sea Ranching in Indonesia"

7. Other Important Information

In parallel with this project, the third country training is assumed to be carried out in the surrounding counties.

The project will maintain linkages to reflect the results of the policy support by the JICA expert (fisheries planning) in Ministry of Marine Affair and Fisheries, regarding sustainable utilization of the fisheries resources.

Development Issue: Stable Food Supply and Improvement of Nutrition Program: Sustainable Utilization of Fisheries Resources Type of Scheme: Technical Cooperation Project □ Volunteer □ Technical Cooperation (Expert) Develop, Study Technical Cooperation Project (Training) Grant Aid **Project Name:** Coastal Community Development Project Implementation Ministry of Marine Affairs and Fisheries Agency: **Project Area:** West Nusa Tenggara (NTB) and East Nusa Tenggara (NTT) Provinces

Candidate Project for Action Plan

1. Background

In Indonesia, the development of eastern Indonesia is given a high priority. In NTB and NTT provinces in particular, where income level per capita is low and potential resources are negligible other than fisheries, the development of fishery resources is urgently required. In these areas the stock condition of fishery resources is still relatively good. However, the fishing grounds near shore and in the bays are heavily utilized, while the offshore areas within 12 nautical miles from shore are under-utilized. Therefore, it is necessary to increase fishery production by transferring the fishing efforts from the over-exploited fishing grounds to the new fishing grounds and to utilize fishery resources in a sustainable manner. This is also necessary for improving poor fishermen's income from the aspects of expansion of domestic fish consumption and stable supply of good quality fishery products.

In Nusa Tenggara, fishery extension workers are active in each district, and there are some coastal villages where fishermen's groups actively engage in fishing. But catch losses are high, largely because fish distribution facilities, such as fish landing places, handling and market places are unsanitary and unprepared. This also reduces the motivation for fishing and is a constraint for economic vitalization.

In order to enhance the economic activities of coastal fishermen and develop coastal communities, therefore, it is important to increase production through the establishment of fishermen's organizations and optimum utilization of fishery resources in the under-utilized fishing grounds; and to promote fishing activities in a sustainable manner by dispersing heavy fishing efforts in the existing fishing grounds and involving the fishermen themselves in formulating rules. At the same time, infrastructure support will be necessary for efficient utilization of the catches.

2. Outline of the Project

(1) Overall Goal

The economy of coastal communities in NTB and NTT provinces is vitalized.

(2) Project Purpose

To increase capture fishery production and income in coastal communities and to establish sustainable coastal capture fishery.

- (3) Outputs
 - 1) Capability of regional autonomies' staff for instructing fishermen is strengthened.
 - 2) Formulation of proper fishermen's organization and strengthening the organization are promoted.
 - 3) New fishing grounds are developed and kept in good condition by expanding fishing grounds.
 - 4) Fishery resources management is practiced by fishermen's groups.
 - 5) Living environment of coastal villages and fish landing place are improved.
- (4) Activities
 - 1) -1 Train staff of regional autonomies on organizing fishermen's group, fishing survey and technology dissemination, and coastal fishery resources management
 - 2) -1 Support for formulation of fishermen's group
 - -2 Support for activities of fishermen's group
 - -3 Strengthen organization of fishermen's group
 - 3) -1 Train fishermen how to collect catch data
 - -2 Conduct catch sampling survey and train fishing technology for expansion of fishing ground
 - -3 Teach fishermen how to improve fishing gears and methods
 - -4 Give instructions to fishermen about basic rules for fishery resources management
 - -5 Teach fishermen how to treat catches properly
 - 4) -1 Implement necessary infrastructure improvement such as fish landing place and coastal village social infrastructure and give guidance for the operation and maintenance
 - -2 Give a guidance on repair and maintenance of out-board engine

(5) Inputs

(a) Japanese Side

- Long-term Expert (fisheries development): 1person
- Short-term Experts (fishermen's organization, catch-sampling survey, coastal fishing technology, fishing gear and method, etc.): some experts
- Acceptance of Trainees (fishing gear and method, community development, resource management etc.): about 3 persons per year
- Provision of Equipment (materials and equipment of fishing gear, model boat for training and survey, out-board engine etc.)
- Grant Aid (relevant facilities for fish landing places etc., and the supporting soft component such as assistance for facility management, technical exercise and extension)
- Local Adaptable Support (micro credit and/or other relevant long-term financing system for fishermen: handled by NGO, etc.)
- (b) Indonesian Side
- Project Manager: 1 person
- Counterparts: (resource management, fishermen's organization, catch handling, fishing gear and method, community development, fishery extension, O&M of out-board engine etc.)
- Local Cost
- 3. Cooperation Period

Three years

- 4. Other Relevant Projects
- (1) Japan

JICA: The Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia

(2) Other Donors

ADB: Coastal Resources Management Project

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Residents of coastal communities in NTB and NTT provinces
 - Number of Beneficiaries: approx. 13 million people

6. Relevant PBIS

Ministry of Marine Affairs and Fisheries

"Counterpart Training on Fishing Communities Development Regarding the Development Study in Eastern Indonesia"

7. Other Important Information

The Project will start with the promotion of capture fishery by strengthening fishermen's organization and expanding fishing grounds, and subsequently improve fish landing places and other relevant facilities. It will also develop an intimate linkage with the Fishery Resources Management Project that will be launched in Semarang, and participate administrative officers of the NTT and NTB provinces and districts in the training program of that project.

The implementation of grass-roots grant will be considered to support fishermen's groups and NGOs in the target areas and their neighboring areas.

4 Program for Promoting Community-based Economic Activities in Agriculture and Fisheries

Although there are various activities relating to agriculture and fisheries, promotion of some aspects such as farm management and fishing have already been implemented by the Government of Indonesia. This program aims to raise the income of farmers and fishermen through vitalization of their villages, in order to alleviate poverty.

In order to activate the rural economy in Indonesia, agribusiness promotion is necessary for the processing industry for agricultural and fishery products. For promotion of agribusiness, institutional preferential measures are required to create investment incentive. The farmers and fishermen groups also need to be encouraged to engage in the processing industry by applying institutional preferential measures. In addition, an information system is necessary for basic information concerning agribusiness in order to facilitate the sale of products produced through the business activities.

In order to activate the rural economy, support for small and poor farmers and fishermen is required to increase their income generation through improvement of their economic activities. In this case, the micro financial institution is an effective and practical tool. However, small farmers and fishermen need to develop their capability as recipients of micro finance for proper operation of finance as well as management of group.

Considering the reasons and situation described above, the following two components have been established with respect to the cooperation program:

- 1) Encouragement of local processing industries for agricultural and fishery products, and
- 2) Support for income generation by poor people: promotion of micro credit schemes and recommendation and support for promoting and strengthening mutual-help organizations for farmers and fishermen.

Program	Ref.	Name of Project	Scheme	Input		2003				2004				2005 0		
riogian	No.					62	Q3	Q	01	02	03	QI	Q1	82	03 0	Q4 Q1
Community- Economic Svities	41	Study for Promoting Community-based Economic Activities in Agriculture & Fisheries	Develop. Study	Study Team												
Promoting Com based Econ Activitie:	42	Women Participatory Income Generation Project for Coastal Community	тср	Expert (Short Term)				-	 	L 	[
	On-or	ing Projects [//////: Projects adopted but not ye	et implemented	E Projects new	ly pl	ann	ed	Ē	_	Πī	λ	ects	unc	ler p	repa	ratio

Under this program, the following action plan is formulated for the next three years.

Note: In this program, support such as the grass-roots grant aid and 2KR counterpart-fund may be considered in the implementation of projects that will be formulated through the above studies.

Candidate Project for Action Plan

Development Issue:	Raising the Income of Farmers and Fishermen and the Vitalization of Rural Economy							
Program:	Promoting Community-based Economic Activities in Agriculture and Fisheries							
Type of Scheme:	 □ Technical Cooperation Project □ Technical Cooperation (Expert) □ Technical Cooperation Project (Training) □ Grant Aid 							
Project Name:	Study for Promoting Community-based Economic Activities in Agriculture and Fisheries							
Implementation Agency:	Leading Agency: Ministry of Agriculture(Bureau of Planning and Finance)							
	 Coordination Agency: Other Relevant Agencies in Ministry of Agriculture DG of Agricultural Facilities, DG of Food Crop Production, DG of Horticultural Production, DG of Livestock Production, DG of Agricultural Products Processing and Marketing, Agency of Human Resources and Development, the Center for Economic Research and Study for the AARD, etc Other Relevant Agencies outside Ministry of Agriculture Ministry of Marine Affairs and Fisheries, Ministry of Industry and Trade, Ministry of Home Affairs, Ministry of Settlement and Regional Infrastructure, State Ministry of Cooperatives and Small & Medium Enterprises, State Ministry of Women Empowerment, BAPPENAS, Provincial Government 							
Project Area:	A Number of Priority Areas in Specified Province							

1. Background

It is proposed that the development of agricultural and fisheries processing to add value to products be focused, and also rural economy be vitalized by means of income generation of poor farmers and fishermen, aiming at contribution of poverty alleviation. It is expected that local residents will play a role in the vitalization of the rural economy, depending on each situation.

The majority of agricultural and fisheries processing industries in rural area are categorized into home industry (1 to 4 workers) or small industry (5 to 19 workers). Regarding promotion of the processing industry in the rural area, new and existing business at the home industry and small-scale industry levels the subject of the view of the technical cooperation. It is necessary to improve financial institutions in terms of initial investment, development and rehabilitation of the relevant information system, which covers materials for processing, financial resources, relevant techniques, business partners, regulations and rules, etc., and strengthen organizations that want to start some business. Most farmers and fishermen are small in scale, and generally lack the channels and financial resources that are necessary to manage all activities from production to marketing. There are a lot of cases, in which they tend to depend on support from private business people such as middlemen, fishing companies, etc. in order to procure inputs and daily necessities. It is clear that micro credit schemes are useful in order to improve these aspects of the current economic activity. However the recipients are confronted by certain constraints concerning management capacity, financial management systems, etc.

2. Outline of the Project

This Project is a development study, aiming to contemplate recommendations for enhancement of the institutional frameworks for development and promotion of agricultural and fisheries processing industries in Indonesia, and also encouragement and strengthening of farmers' and fishermen's organizations, from the viewpoints of improvement of added value and vitalization of the rural economy. Furthermore, recommendations for promotion of micro credit schemes, and promoting and strengthening of mutual-help organizations for farmers and fishermen will be considered in terms of improvement of economic activities (income generation) by poor people.

Especially, it is set out to formulate proposal and recommendation that are practical and replicable, through the formulation of a specific development plan focusing on agriculture and fisheries processing industries in a certain area. Therefore, Areas (minimum unit might be one Sub-district or a number of villages), in which paddy, livestock, horticulture, fisheries, or other activities are likely to be dominant, should be selected.

Concerning the development of local processing industries, proposals on preferential treatment for the creation of investment incentives including improvement of financial institutions, improvement of relevant information system for the promotion of industries, enhancement of organizations for farmers and fishermen are surely required.

In terms of improvement of economic activities of poor farmers and fishermen, proposals will focus on the improvement of operation and management of agricultural finance institutes including micro finance, and enhancement of mutual-help organizations for farmers and fishermen as recipients of financial resource, etc.

(1) Overall Goal

Recommendations and development plans obtained from the development study are utilized for formulation and implementation of the national measures and policies concerning encouragement of the processing industries in agriculture and fisheries sectors as well as the promotion of agribusiness.

(2) Project Purpose

To ensure that staff members in the Ministry of Agriculture and other relevant institutions, including the Ministry of Marine Affairs and Fisheries understand the recommendations and development plans, and then apply them to their related activities.

(3) Outputs

1) Recommendations for the formulation of an institutional framework for creation

of investment incentives, including preferential treatment and improvement of credit scheme, and improvement of information system, and for enhancement of organizations for the management of the processing industries are prepared.

- 2) Recommendations for promotion of micro-credit schemes intended for poor farmers and fishermen, and also for encouragement of mutual-help organizations for farmers and fishermen are prepared.
- 3) Plans for raising the incomes of farmers and fishermen and vitalization of the rural economy are formulated.
- 4) Transfer technology and capacity building are undertaken through a series of the development study.
- (4) Activities
 - 1) With regard to the financial institutions concerned, relevant information system for processing industries, and organizations for processing business, orientation for the development and improvement would be studied through a series of the following activities.
 - -1 Advantages and disadvantages for operation and management of the existing financial institutions are clarified.
 - -2 Operation and management guidelines, etc. intended for the relevant financial institutions as well as training programs concerned are designed.
 - -3 Improvement of the information system relevant to the case study, production technology, price, relevant government information, processors, etc. is planned based on the situation of the current information system.
 - -4 Current status of organizations of farmers and fishermen for processing industries is clarified and guidelines for the enhancement of these organizations are prepared.
 - -5 Improvement measures for business management, extension of market, etc. is proposed.
 - 2) Regarding promotion of micro financial institutions for poor farmers and fishermen and enhancement of their organizations, direction for the development and improvement will be studied through the following activities.
 - -1 Advantages and disadvantages of O&M of the existing micro financial institutions are clarified.
 - -2 Operation and management guidelines, etc. intended for the relevant micro financial institutions as well as training programs concerned are designed.
 - -3 Guideline for establishment and enhancement of mutual-help organizations for farmers and fishermen is prepared.
 - 3) Based on Items 1) and 2), directions for improvement of income of farmers and fishermen and vitalization of rural economy are proposed.
 - 4) Improvement of technology and development of a sense of responsibility of

counterparts are undertaken through synergic work with counterparts.

- (5) Inputs
 - (a) Japanese Side
 - Study Team:

agriculture, agro-processing, rural finance, organization and management, agricultural marketing, fishery marketing & processing.

• NGOs or Local Consultants: as required

Local experts on social development, environment, banking, etc.

- (b) Indonesia Side
 - Counterpart personnel : in the prospective fields of agriculture, small & medium enterprises development, organization and management, social development, education and training, rural finance, agricultural extension, agriculture marketing, information system, agricultural processing, fish processing and marketing

• Facilities and undertakings to be required for study implementation

3. Cooperation Period

One year from FY 2003

- 4. Other Relevant Projects
- (1) Japan

JICA: The Aftercare Technical Cooperation for the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province

JICA: Project on Strengthening Sulawesi Rural Community Development to Support Poverty Alleviation Programmes

JICA: Project on Strengthening Cluster Function of Small and Medium Enterprises

(2) Other Donors

ADB : Community Empowerment for Rural Development

ADB : Poor Farmer Income Improvement Project

ADB : Rural Micro Finance

World Bank : Sulawesi Agricultural Area Development Project

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries : Rural people, any other stakeholders
 - Number of Beneficiaries : -

6. Relevant PBISs

Ministry of Agriculture

"Promotion of Pilot Model of Agricultural Credit and Rural Financial Institutions (RFI)"

"The Establishment of Rural Agriculture Financial Institutions System to Support Rural Economic Development (Micro Finance)"

"Pilot Project of Increasing Soybean Seed Production"

"Integrated Horticulture Development in Upland Areas (IHDUA-II)"

"Development of Vegetable Agribusiness System for Fulfillment the Domestic Demand"

"Rural Development Credit for Increasing Income of Small Scale Horticultural Products"

"Promotion of Community-Based Economic Activities in Agriculture

Agribusiness Entrepreneur-ship Development Project"

Ministry of Marine Affairs and Fisheries

"Technical Assistance for the Establishment of Fishermen Credit Bank"

"The Study for Fish Quality Improvement and Promotion of Value-added Fish Product"

"Empowering Small-scale Fisheries Project"

"Fish Business and Network Development Pilot Project"

- 7. Other Important Information
 - 1) If adaptability of the project implementation is confirmed, it is expected that technical cooperation for the implementation of the model project will be conducted after the completion of the development study.
 - 2) It is suggested that the Ministry of Marine Affairs and Fisheries, the Ministry of Industry and Trade, the Ministry of Home Affairs, the State Ministry of Cooperatives and Small & Medium Enterprises, BAPPENAS, the State Ministry of Women Empowerment, the Provincial Government of the study area, etc. be involved as members of a Steering Committee, chaired by the Ministry of Agriculture.

No.4-2

Candidate Project for Action Plan

Development Issue:	Raising the Income of Farmers and Fishermen and the Vitalization of Rural Economy							
Program:	Promoting Community-based Economic Activities in Agriculture and Fisheries							
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Develop. Study Technical Cooperation Project (Training) Grant Aid 							
Project Name:	Women Participatory Income Generation Project for Coastal Community							
Implementation Agency:	Ministry of Marine Affairs and Fisheries							
Project Area:	West Nusa Tenggara (NTB) and East Nusa Tenggara (NTT) Provinces							

1. Background

Coastal capture fishery is the main industry in NTB and NTT provinces, surveyed in the Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia. However, much of the catches is lost due to improper handling of the catches, inappropriate management of stocking and treatment of materials for processing, and lack of experience of processing technology. Women in fishing villages and small processors use part of the catch for primitive processing such as salted fish, but the quality is low and the price is lower than flesh fish.

The areas have good access for distribution of their produce to consumers in large cities such as Surabaya and tourism cities such as Denpasar and Mataram. It would benefit the areas to expand the distribution of fishery products and this would contribute to improving the income of fishing villages in the areas by upgrading the simple processing technology of fishery products and improving their quality.

- 2. Outline of the Project
- (1) Overall Goal

Value-adding of fishery products and the income of artisanal fishermen are improved.

(2) Project Purpose

To enable women's groups in coastal fishing villages to produce simple processed fishery products in a stable manner.

- (3) Outputs
 - 1) Women's groups in coastal fishing villages will develop business activities.
 - 2) Simple processing technologies will be transferred to the same groups.
 - 3) The groups will upgrade the technology of simple processing and the quality of the products.

- (4) Activities
 - 1)-1 Investigate factors imposing constraints on women's activities in coastal communities.
 - -2 Support for building institutions for business management of women's groups in coastal villages.
 - -3 Implement marketing study on processed fishery products.
 - -4 Provide support for a system for collection and shipment of the products.
 - 2)-1 Transfer technologies for simple processing such as salted and dried fish and smoked one through practical training.
 - -2 Prepare facilities and equipment for simple fish processing.
 - -3 Provide a technical guidance for the operation and maintenance of the above equipment.
 - 3)-1 Provide a technical guidance for selection, preservation and treatment methods of materials for processing.
 - -2 Provide support for building a system for quality control of materials for processing and products.
- (5) Inputs
 - (a) Japanese Side
 - Short-term Experts (fish processing, quality control, marketing survey, gender etc): some experts
 - In-country Training (training at National Fisheries Processing and Quality Control Center)
 - Provision of Equipment (equipment for simple fishery processing, etc.)
 - (b) Indonesian Side
 - Counterparts: (fish processing, quality control, community development)
 - Local Cost
- 3. Cooperation Period

Three years

- 4. Other Relevant Projects
- (1) Japan

JICA: The Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia

(2) Other Donor

-

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: Women and residents of coastal communities in NTB and NTT province
 - Number of Beneficiaries: approx. 0.5 million people
- 6. Relevant PBIS

Ministry of Marine Affairs and Fisheries

"The Training Course in Fish Processing Techniques for Small Fisheries in Eastern Indonesia"

7. Other Important Information

The provision of relevant facilities and equipment used for simple fish processing by grass-roots grants will also be examined. Introduction and guidance on revolving funds will also be considered, if necessary.

5 Program for Improving and Strengthening of Markets for Agricultural and Fishery Products

As a result of the sector analysis, the improvements needed in the marketing of agricultural and fishery products have been summarized into the following five points.

- 1) To realize hygienic and efficient market management
- 2) To establish an effective institutional framework governing the market for realization of transparent trade and fair price formation
- 3) To facilitate access of farmers/fishermen to market information
- 4) To realize collective marketing by farmers' organizations
- 5) To clarify and improve the situation of post-harvest losses

Out of the five points above, item 4) is to be studied together with farmers' organizations in the Program for Improvement of Institutions and Production in Agriculture. Study of item 5) is to be considered on a medium- to long-term basis, since the target for improvement ranges very widely from farms through to the market and distribution. Items 1), 2) and 3) are to be taken up for study in this program, focusing on institutional improvement.

Accordingly, the components under this program are to be as follows:

- 1) Recommendation on the improvement of market institutions for agricultural and fishery products; and
- 2) Recommendation on the establishment of basic market information systems for agricultural and fishery products.

Based on the above examination, the Action Plan under the cooperation program No. 5 for 2003 through to 2005 was formulated as follows:

Program	Ref.	Name of Project	Scheme	heme Input		2003			2004				2005			06
riogram	No.		Octione			02	Q3	Q4	Q1	02	Q3	Q4	Q1	02 Q	3 Q1	Q1
traproving and Strengthening Markets	5-1	<u>Study on Improvement of Institutions and Information Systems for Agriculture Product Market</u>	Develop. Study	Study Team												

Note; TCP: Technical Cooperation Project

Note: In this program, support such as grant aid may be considered based on the results of a development study in the process of monitoring the Action Plan.

Candidate Project for Action Plan

Development Issue:	Development Issue: Raising the Income of Farmers and Fishermen and the Vitalization Rural Economy							
Program:	Improving and Strengthening Markets for Agriculture and Fishery Products							
Type of Scheme:	 Technical Cooperation Project Technical Cooperation (Expert) Technical Cooperation Project (Training) 	 Volunteer Develop. Study Grant Aid 						
Project Name:	The Study on Improvement of Institutions and Information Systems for Agriculture Product Market							
Implementation Agency:	Ministry of Industry and Trade Coordinating with Ministry of Agriculture and Regional Government concerned							
Project Area:	East Java Province							

1. Background

The Sector Assistance Strategy Formulation Study on the Agriculture and Fishery Sector (2001) formulated two Development Issues and five Cooperation Programs, including the Program for improving and strengthening markets for agriculture and fishery products. Further, the Support Program for Agriculture and Fisheries Development (2002) led the components under that cooperation program to (1) Recommendation on the improvement of market institutions for agricultural and fishery products and (2) Recommendation on the establishment of basic market information systems for agricultural and fishery products.

Wholesale markets of agricultural products in Indonesia have several constraints on transparent trades and fair price formation, in addition to being unhygienic and inefficient. The wholesale markets are centered on distribution between producers and consumers, aiming at the smooth and stable supply of commodities (mostly perishables) through fair and prompt transactions. Improvement of the wholesale market, therefore, is imperative to establish an effective system.

The majority of farmers have difficulty in accessing market information, and the users of agricultural products also do not have enough information on the production side. Effective market information exchange systems need to be established between the producers and the users of agricultural products for revitalization of the market.

The role of the local governments, who are responsible for management of the wholesale markets, will become more important with the progress of decentralization. The current situation of the market institutions and information systems in Indonesia needs to be examined to ensure that it complies with the requirements of the Government of Indonesia regarding decentralization, and recommendations for improvement should be made where necessary.

In order to raise the income of small farm households that depend heavily on paddy production, diversification from paddy into other crops of higher value and with greater demand in urban areas is required. In Java in particular, where the majority of farm households are small, improvement of marketing institutions and information systems for communicating between producers and consumers are required to promote the diversification of crop cultivation.

- 2. Outline of the Project
- (1) Overall Goal

Market institutions and market information systems of agricultural products are improved, and eventually farmers' incomes are raised and the rural economy are vitalized.

- (2) Project Purpose
 - 1) Recommendation on the improvement of market institutions for agricultural products
 - 2) Recommendation on the establishment of market information systems for agricultural products
 - 3) Technology transfer to the Indonesian counterpart personnel throughout the steps of the study
- (3) Outputs
 - 1) The current situation and constraints on market institutions and market information systems for agricultural products will be identified.
 - 2) A basic plan for the improvement of market institutions for agricultural products will be formulated.
 - 3) A basic plan for the improvement of market information systems for agricultural products will be formulated.
- (4) Activities
 - 1) A study to identify the current situation and constraints on market institutions and market information systems for agricultural products using the following steps.
 - -1 Selection of Target Commodities and Target Area

Through comparison of the characteristics of agricultural and fishery products, target commodities and a target area will be selected, taking into account the diversification of crops for small farmers in Java.

-2 Improvement of the market institutions

Establish the current situation and constraints on the wholesale markets and relevant areas, including the subjects summarized in the Interim Report.

Establish the current status of the institutional framework governing the markets.

Conduct a joint study by both the Indonesian and Japan sides on institutional improvement to overcome the constraints, including a participatory approach through the steps of the study.

-3 Establishment of market information systems

Establish the needs of the players in the market (producers, collectors, wholesalers, processors, retailers, etc.) for market information.

Evaluation of the current market information systems (method, users, purpose and degree of utilization, problems, etc.).

Examine the communication infrastructure in Indonesia.

- 2) Formulation of a basic plan for improvement of the market institutions for agricultural products, based on the above study.
- 3) Formulation of a basic plan for improvement of the market information systems for agricultural products, based on the above study.
- (5) Input
 - (a) Japanese Side
 - 1) Japanese Study Member (Advisor) : 1 person.
 - Study Team (Local) covering: market institutions / market organizations & management / distribution & the market facilities / market information / information technology
 - (b) Indonesian Side
 - 1) Counterpart team comprising members of the agencies and the regional government concerned.
 - 2) Facilities and undertaking required for the Study.
- 3. Cooperation Period

One year (JFY2003)

4. Other Relevant Projects

Information acquired from a new project to be implemented by ARRD and the Center for Statistical Data and Information under assistance of ADB should be used as a base so as to increase efficiency and effectiveness of this development study.

- 5. Type and Number of Beneficiaries
 - Direct Beneficiaries: producers, collectors, traders and users of agricultural products
 - Number of Beneficiaries: -
- 6. Relevant PBIS

Ministry of Industry and Trade

"Implementation of Modernization of Distribution System in Indonesia"

from DG of Domestic Trade

"Local Auction Market Development"

from Commodity Futures Trading Regulation Agency

Ministry of Agriculture

"Improvement and Strengthening of Market for Agricultural Products"

from DG of Processing and Marketing of Agricultural Products

7. Other Important Information

A technical and grant-aid cooperation projects, including the grass-roots aid, to support implementation of the improvement of the market institutions and information systems is expected to follow, subject to justification by the study.