

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

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

**FINAL REPORT**  
**ACTION PLAN**

**JUNE 2005**

**Nippon Koei Co., Ltd.**

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**National Development Planning Agency (BAPPENAS)**

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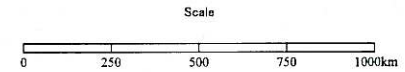
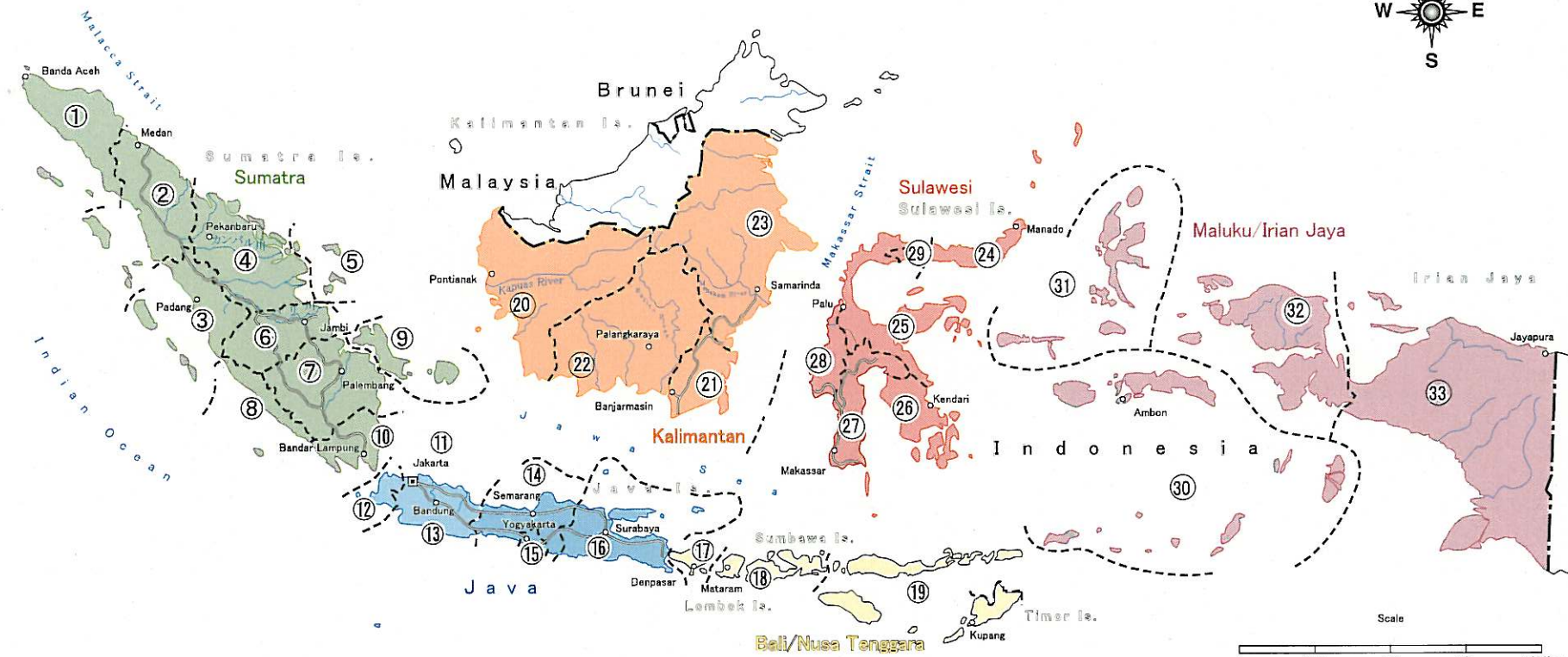
**FINAL REPORT  
ACTION PLAN**

**JUNE 2005**

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## LIST OF REPORTS

SECTOR ANALYSIS  
ACTION PLAN  
EXECUTIVE SUMMARY



Legend			
Province			
① Aceh	⑪ Jakarta	⑳ South Kalimantan	㉓ North Maluku
② North Sumatra	⑫ Banten	㉑ Central Kalimantan	㉔ West Papua
③ West Sumatra	⑬ West Java	㉒ East Kalimantan	㉕ Papua
④ Riau	⑭ Central Java	㉓ North Sulawesi	
⑤ Riau Island	⑮ Yogyakarta	㉔ Central Sulawesi	
⑥ Jambi	⑯ East Java	㉕ Southeast Sulawesi	
⑦ South Sumatra	⑰ Bali	㉖ South Sulawesi	
⑧ Bengkulu	⑱ West Nusa Tenggara	㉗ West Sulawesi	
⑨ Banka-Belitung	㉒ East Nusa Tenggara	㉘ Gorontalo	
⑩ Lampung	㉓ West Kalimantan	㉙ Maluku	

— — — — —	National Border
- - - - -	Provincial Border
— — — — —	Road
~ ~ ~ ~ ~	River
■	Capital
○	Provincial Capital

## The Support Program for Agriculture and Fisheries Development in the Republic of Indonesia

## Development Issues, Cooperation Programs and Cooperation Components

Development Issue	Cooperation Program	Cooperation Component
<b>I. Stable Food Supply and Improvement of Nutrition</b>	<b>1. Improving the Institution and Production Support System of Agriculture and Fisheries</b>	<p>1-1 Support for policy and institutional system in line with the decentralization policy</p> <p>1-2 Development of livestock industry utilizing local resources</p>
	<b>2. Improving the Function of the Agricultural Infrastructure and Sustainable Operation &amp; Maintenance</b>	<p>2-1 Support for participation of WUA in irrigation O&amp;M and rehabilitation</p> <p>2-2 Strengthening of WUAs and local governments for the above-mentioned purpose</p> <p>2-3 Rehabilitation of existing facilities and development of small scale irrigation for the above-mentioned purpose</p>
	<b>3 Sustainable Utilization of Fishery Resources</b>	<p>3-1 Cooperation in establishing the resource management scheme for the sustainable development of the fisheries and fisheries communities</p> <p>3-2 Promotion of coastal and inland capture fishery and fish culture for expansion of local consumption of fishery products at low prices</p>
<b>II. Raising the Income of Farmers &amp; Fishermen and the Vitalization of Rural Economy</b>	<b>4. Promoting Community-based Economic Activities in Agriculture and Fisheries</b>	<p>4-1 Encouragement of local processing industries for agriculture and fishery products</p> <ul style="list-style-type: none"> <li>- Recommendation for institutional framework for creation of incentives for investments</li> <li>- Recommendation for information system</li> <li>- Encouragement and strengthening of farmers' and fishermen's organizations to promote the local processing industries for agricultural and fishery products</li> <li>- Improvement of necessary infrastructures such as small-scale facilities for the above-mentioned purpose</li> </ul> <p>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</p>
	<b>5. Improving and Strengthening Markets for Agriculture and Fishery Products</b>	<p>5-1 Recommendation on the improvement of market institutions</p> <p>5-2 Recommendation on the establishment of basic market information systems</p>

## Action Plan

(As of November 2002)

Issue	Program	Ref. No.	Name of Project	Scheme	Input	2003		2004			2005			06	
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
Stable Food Supply and Improvement of Nutrition	Improving Institution and Production Support System	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)										
			Agriculture Infrastructure Policy	Indiv. Expert	Expert (long term)										
			Project for Training of Agricultural Extension Officers to Farm Management Improvement (Tentative Title)	TCP	To be Determined										
			1-3	Strengthening of Market Oriented and Self-autonomy Agricultural Cooperatives	TCP	To be Determined									
				Cooperative Planning	Indiv. Expert	Expert (long term)									
			1-4	Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources	TCP	Expert (short term)									
				Livestock Development Advisor	Indiv. Expert	Expert (long term)									
				Development of High Quality Seed Potato Multiplication Project	PTTC	Expert (long & short) Training, Equipment									
				Quality Soybean Seed Multiplication and Training Project Followup	PTTC	Expert (long & short) Training, Equipment									
				Grant Aid for Increase of Food Production 2KR	Grant Aid	Fertilizer									
		Improving Function of Agricultural Infrastructure and Sustainable O&M	2-1	Project for Promotion of Farmers Empowerment & Irrigation Management Transfer to Water Users Association	TCP	To be Determined									
				Water Users Association Strengthening *2	Indiv. Expert	Expert (long term)									
				Irrigation Planning *3	Indiv. Expert	Expert (long term)									
				Study on Comprehensive Recovery Program of Irrigation Agriculture	Develop. Study	Study Team									
				Way Sekampung Irrigation Project (1)	Loan	Yen Credit									
				Way Sekampung Irrigation Project (2)	Loan	Yen Credit									
				Billibili Irrigation Project	Loan	Yen Credit									
				Way Sekampung Irrigation Project (3)	Loan	Yen Credit									
				Small Scale Irrigation Management Project III	Loan	Yen Credit									
				Batang Hari Irrigation Project (II)	Loan	Yen Credit									
				Project Type Sector Loan for Water Resource Development II	Loan	Yen Credit									
			Small Scale Irrigation Management Project IV	Loan	Yen Credit										
		Sustainable Utilization of Fisheries Resources	3-1	Project on Coastal Fisheries Resource Management	TCP	Expert (long & short), SV									
				Fisheries Planning	Indiv. Expert	Expert (long term)									
				Technical Extension of Mariculture	Indiv. Expert	Expert (long term)									
			3-2	Project for Dissemination of Sustainable Mariculture Technology	TCP	Expert (short term) SV									
			3-3	Coastal Community Development Project	TCP Grant Aid	Expert (long & short) Grant Aid									
			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									
			4-2	Women Participatory Income Generation Project for Coastal Community	TCP	Expert (Short Term)									
		Improving and Strengthening Markets	5-1	Study on Improvement of Institutions and Information Systems for Agriculture Product Market	Develop. Study	Study Team									

: On-going Projects  
  : 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.

## Updated Action Plan

(as of May 2005)

Issue	Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	2003		2004			2005			2006		
								Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Stable Food Supply and Improvement of Nutrition	Improving Institution and Production Support System	1-01	Institutional Support for Food Security	MOA	TCP	Expert (long & short), Training, Equip.	on going											
		1-02	Advisor on Agriculture Policy and Programme Coordination*1 (Former position is Agriculture Policy Advisor)	MOA	Indiv. Expert	Expert (long term)	on going											
		1-03	Food Crop Policy Advisor	MOA	Indiv. Expert	Expert (long term)	completed											
		1-04	Agriculture Infrastructure Policy	MOA	Indiv. Expert	Expert (long term)	completed											
		1-05	Project for Training of Agricultural Extension Officers on Improvement of Farm Management	MOA	TCP	Expert (long & short), Training	on going											
		1-06	Strengthening of Market Oriented and Self-autonomy Agricultural Cooperatives	MENKOP	TCP	To be Determined	to be considered											
		1-07	Cooperative Planning	MENKOP	Indiv. Expert	Expert (long term)	completed											
		1-08	Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources	MOA	TCP	Expert (short term), Training, Equip.	on going											
		1-09	Beef Cattle Development Project Utilizing Local Resources in the Eastern Part of Indonesia	MOA	TCP	Expert (long & short), Equip.	approved, preliminary evaluation for TOR to be planned											
		1-10	Livestock Development Advisor	MOA	Indiv. Expert	Expert (long term)	on going, successor approved											
		1-11	Development of High Quality Seed Potato Multiplication Project	MOA	TCP	Expert (long & short) Training, Equip.	completed											
		1-12	Strengthening Network System for High Quality Seed Potato Multiplication and Distribution	MOA	Grant Aid	Grant Aid	to be examined											
		1-13	Quality Soybean Seed Multiplication and Training Project Follow up	MOA	TCP	Expert (long & short) Training, Equip.	completed											
		1-14	Increasing of High Quality Soybean Seed Production through Strengthening of Food Crops Seed Institution and Seed Growers Empowerment	MOA	Grant Aid	Grant Aid	to be examined											
		1-15	Grant Aid for Increase of Food Production 2KR *2	MOA	Grant Aid	Fertilizer	on going											
	Improving Function of Agricultural Infrastructure and Sustainable O&M	2-01	Project for Empowerment Water Users Associations	PU	TCP	Expert, Training, Equip.	on going											
		2-02	Water Users Association Strengthening	PU	Indiv. Expert	Expert (long term)	completed											
		2-03	Irrigation Planning *3 (Irrigation Management)	PU	Indiv. Expert	Expert (long term)	on going, extension approved											
		2-04	Study on Comprehensive Recovery Program of Irrigation Agriculture	PU	Develop. Study	Study Team	completed											
		2-05	Way Sekampung Irrigation Project (1)	PU	Loan	Yen Credit	completed											
		2-06	Way Sekampung Irrigation Project (2)	PU	Loan	Yen Credit	completed											
		2-07	Bilibili Irrigation Project	PU	Loan	Yen Credit	completed											
		2-08	Way Sekampung Irrigation Project (3)	PU	Loan	Yen Credit	on going											
		2-09	Small Scale Irrigation Management Project III	PU	Loan	Yen Credit	completed											
		2-10	Balang Hari Irrigation Project (II)	PU	Loan	Yen Credit	on going											
		2-11	Project Type Sector Loan for Water Resource Development II	PU	Loan	Yen Credit	on going											
		2-12	Small Scale Irrigation Management Project IV (Decentralized Irrigation System Improvement Project in Eastern Region of Indonesia)	PU	Loan	Yen Credit	on going											
		2-13	Water Resources Existing Facilities Rehabilitation and Capacity Improvement Project	PU	Loan	Yen Credit	on going											
		2-14	Komerang Irrigation Project Stage II, Phase 2	PU	Loan	Yen Credit	to be implemented											
	Sustainable Utilization of Fisheries Resources	3-01	Project for the Development and Dissemination of the Fisheries Resource Management	MMAF	TCP	Expert (long & short), Training, Equip.	to be examined											
		3-02	Fisheries Planning	MMAF	Indiv. Expert	Expert (long term)	on going, successor to be examined											
		3-03	Technical Extension of Mariculture	MMAF	Indiv. Expert	Expert (long term)	completed											
		3-04	Project for Dissemination of Sustainable Mariculture Technology	MMAF	TCP	Expert (short term), SV	on going											
		3-05	Project for the Promotion of the Sustainable Coastal Fisheries	MMAF	TCP Grant Aid	Expert, Training, Equip. Grant Aid	TCP approved, second preliminary evaluation for TOR under preparation Grant Aid approved											
		3-06	Freshwater Aquaculture Development Project	MMAF	TCP	Expert (long & short) Training, Equip.	on going, to be extended											
		3-07	Rehabilitation and Improvement Project of Jakarta Fishing Port	MMAF	Loan	Yen Credit	to be implemented											
	Raising Income of Farmers and Fishermen and Vitalization of Rural Economy	Promoting Community-based Economic Activities	4-01	The Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Micro Finance	MOA	Develop. Study	Study Team	to be implemented										
Improving and Strengthening Markets			5-01	Study on Improvement of Institutions and Information Systems for Agriculture Product Market	MOT	Develop. Study	Study Team	completed										
		5-02	Improvement of Management Operational System and Human Resources Capacity of Regional Distribution Centers in Indonesia	MOT	TCP	Expert (long & short), Training	to be examined											

: On-going or Completed Projects
  : Projects adopted but not yet implemented
  : Projects newly planned
  : Project Digest

MOA: Ministry of Agriculture, MENKOP: State Ministry of Cooperatives and Small and Medium Enterprises, PU: Ministry of Public Works, MMAF: Ministry of Marine Affairs and Fisheries, MOT: Ministry of Trade

Note: TCP: Technical Cooperation Project SV: Senior Overseas Volunteer

\*1: Activities of the Advisor for Agriculture Policy and Programme Coordination include a part of TOR for the Institutional Support for Food Security.

\*2: Project name will be changed to "The Grant Assistance for Underprivileged Farmers" toward the implementation for next request.

\*3: Activities of the Irrigation Planning (Irrigation management) Expert include a part of TOR for the Project for Empowerment Water Users Association.

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THE REPUBLIC OF INDONESIA

**Final Report  
Action Plan**

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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
BBAT	Freshwater Aquaculture Development Center ( <i>Balai Budidaya Air Tawar</i> )
BULOG	National Logistic Agency
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 ( <i>Koperasi Unit Desa</i> )
MMAF	Ministry of Marine Affairs and Fisheries
MOA	Ministry of Agriculture
MOIT	Ministry of Industry and Trade
MOT	Ministry of Trade
NFSC	National Food Security Council
NGO	Non Governmental Organization
NTB	( <i>West Nusa Tenggara</i> )
NTT	( <i>East Nusa Tenggara</i> )
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</i> )

*Daerah)*

PROPENAS	National Development Plan ( <i>Program Pembangunan Nasional</i> )
PTTC	Project-type Technical Cooperation
RFI	Rural Financial Institutions
SEKNEG	State Secretariat of the Bureau of Technical Cooperation
SV	Senior Overseas Volunteer
S/W	Scope of Work
TCP	Technical Cooperation Project
TOT	Training of Trainers
UPT	Technical Implementing Unit ( <i>Unit Praksana Teknis</i> )
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

# **1. Program for Improving the Institution and Production Support System**

# 1 Program for Improving the Institution and Production Support System

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 institutional system in line with the decentralization policy
- 2) Development of livestock industry utilizing local resources

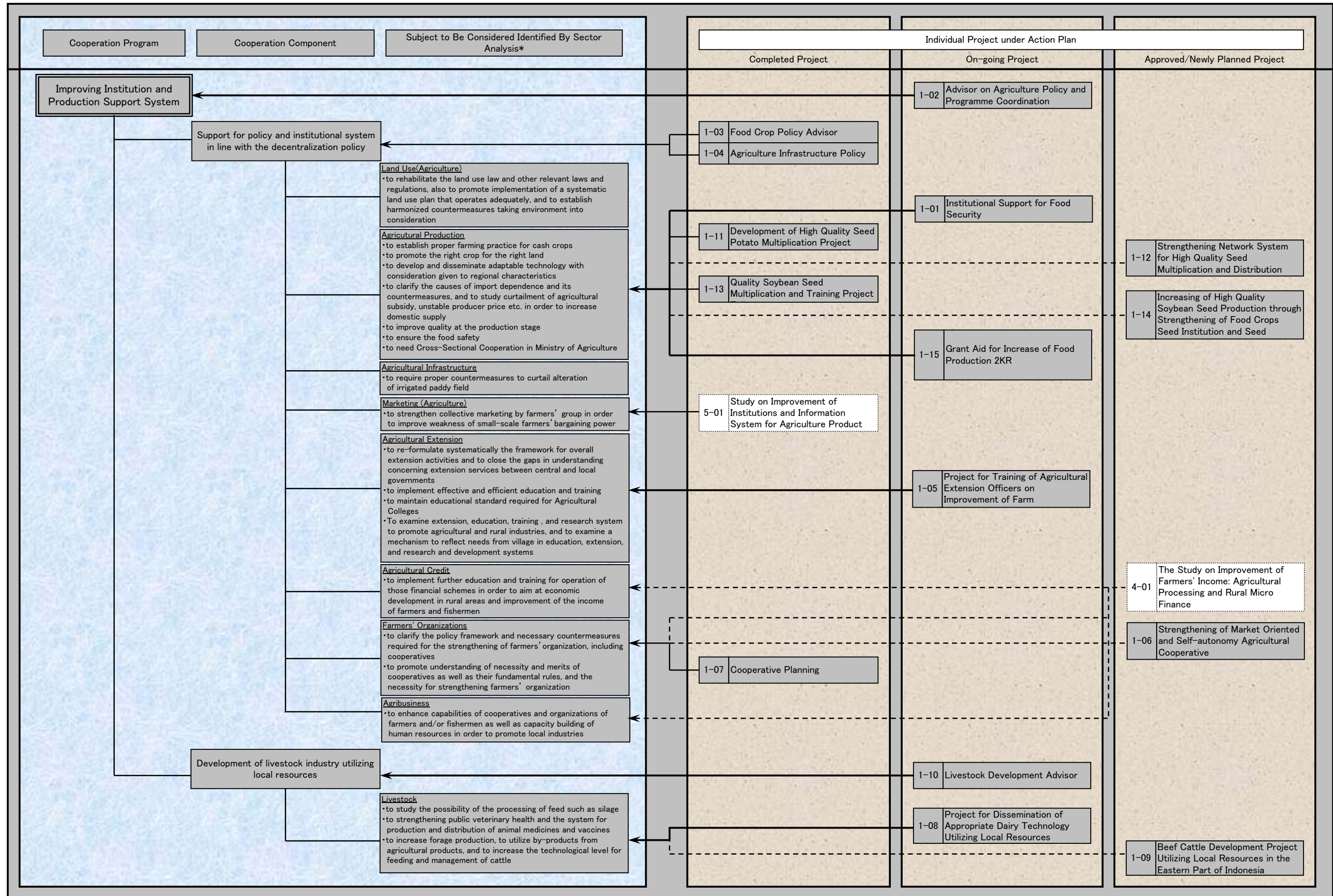
Under this program, the action plan which was formulated in 2002, is revised as below

Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	(as of May 2005)																	
							2003				2004				2005				2006					
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1					
Improving Institution and Production Support System	1-01	Institutional Support for Food Security	MOA	TCP	Expert (long & short), Training, Equip.	on going																		
	1-02	Advisor on Agriculture Policy and Programme Coordination <sup>1</sup> (Former position is Agriculture Policy Advisor)	MOA	Indiv. Expert	Expert (long term)	on going																		
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	1-08	Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources	MOA	TCP	Expert (short term), Training, Equip.	on going																		
	1-09	Beef Cattle Development Project Utilizing Local Resources in the Eastern Part of Indonesia	MOA	TCP	Expert (long & short), Equip.	approved, preliminary evaluation for TOR to be planned																		
	1-10	Livestock Development Advisor	MOA	Indiv. Expert	Expert (long term)	on-going, successor approved																		
	1-11	Development of High Quality Seed Potato Multiplication Project	MOA	TCP	Expert (long & short) Training, Equip.	completed																		
	1-12	Strengthening Network System for High Quality Seed Potato Multiplication and Distribution	MOA	Grant Aid	Grant Aid	to be examined																		
	1-13	Quality Soybean Seed Multiplication and Training Project Follow up	MOA	TCP	Expert (long & short) Training, Equip.	completed																		
	1-14	Increasing of High Quality Soybean Seed Production through Strengthening of Food Crops Seed Institution and Seed Growers Empowerment	MOA	Grant Aid	Grant Aid	to be examined																		
	1-15	Grant Aid for Increase of Food Production 2KR <sup>2</sup>	MOA	Grant Aid	Fertilizer	on going																		

MOA: Ministry of Agriculture, MENKOP: State Ministry of Cooperatives and Small and Medium Enterprises  
 Note: TCP: Technical Cooperation Project  
<sup>1</sup>: Activities of the Advisor for Agriculture Policy and Programme Coordination include a part of TOR for the Institutional Support for Food Security.  
<sup>2</sup>: Project name will be changed to "The Grant Assistance for Underprivileged Farmers" toward the implementation for next request.

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.

## Hierarchy Tree for Cooperation Program Improving Institution and Production Support System



\*: This Sector Analysis is as of Final Report  
Note: Individual Projects do not cover all of the subjects to be considered in the related fields.

### Candidate Project for Action Plan

Development Issue: Stable Food Supply and Improvement of Nutrition

Program: Improving the Institution and Production Support System

Type of Scheme:  Technical Cooperation Project  Volunteer  
 Technical Cooperation (Expert)  Develop. Study  
 Technical Cooperation Project (Training)  Grant Aid

Project Name: Strengthening of Market Oriented and Self-autonomy Agricultural Cooperatives

Implementation Agency: State Ministry of Cooperatives and Small & Medium Enterprises or Ministry of Agriculture

Project 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 (Kelompok 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 (under examination of revision on the requested components)

### (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 (5) 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 (Requested in 2002)

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

As for this project, the preliminary study was implemented. According to the result of the preliminary study, it was judged that the present requested components seem not to achieve the expected output. As the issues to be improved were indicated, official application would be submitted after revision of project components.

### Candidate Project for Action Plan

Development Issue: Stable Food Supply and Improvement of Nutrition

Program: Improving the Institution and Production Support System

Type of Scheme:  Technical Cooperation Project  Volunteer  
 Technical Cooperation (Expert)  Develop. Study  
 Technical Cooperation Project (Training)  Grant Aid

Project Name: Beef Cattle Development Project Utilizing Local Resources in the Eastern Part of Indonesia

Implementation Agency: Ministry of Agriculture Directorate General for Livestock Development

Project Area: NTB

#### 1. Background

In Indonesia, demand of beef cattle is being increased year by year depending on increment of income, population growth and diversification of diet. Ministry of Agriculture is tackling beef cattle production development in order to achieve complete self sufficiency of meat (especially beef) up to 2005, because growth of demand (consumption) exceeds that of production and import of beef cattle is increasing recently.

Eastern part of Indonesia, which has severe natural condition and lot of people with poverty, has been appointed as important selective area for regional development. This area is suitable for beef cattle production (especially feeder cattle) by utilizing local resources, especially Bali cattle, which is grown mainly in this area, has good quality of its meat and high reproductive ability. Therefore strengthening of beef cattle farming in this area is intended.

With this background, this project is proposed in order to make this cooperation contribute to increase of meat supply in Indonesia and increase of farmer's income through beef cattle farming in this area.

#### 2. Outline of the Project

##### (1) Overall Goal

Beef cattle production will increase and income of beef cattle farmers will increase in Eastern part of Indonesia.

##### (2) Project Purpose

Beef cattle farming by utilizing local resources will be strengthening systematically in NTB.

(3) Outputs

- 1) Function and system of the present breeding stock farm will be strengthened and “Beef Cattle Breeding Center” will be established in NTB.
- 2) Beef cattle farming techniques for small scale farmers will be improved in NTB.
- 3) Support of promoting beef cattle farming for small scale farmers will be strengthened in NTB.

(4) Activities

- 1) Strengthen function and system of the breeding stock farm in NTB
- 2) Develop techniques of beef cattle farming (forage production, feeding management, cattle breeding, etc) for small scale beef cattle farmers by utilizing local resources
- 3) Implement support activities (training/instruction tour, introduction of lending system for reproductive cattle, etc) to promote beef cattle farming for small scale farmers in NTB.

(5) Inputs

(a) Japanese Side

- Long-term Experts: chief advisor, coordinator, beef cattle farming techniques, livestock extension
- Short-term Experts: forage production, feeding management, cattle reproduction, cattle breeding, etc.
- Provision of equipment (equipment for cattle reproduction and forage production, material and equipment for training, etc)
- Local cost: introduction of reproductive cattle lent for small scale farmers, etc

(b) Indonesian Side

- Project Manager
- Counterparts (forage production, feeding management, livestock breeding, beef cattle improvement, etc.)
- Local Cost

3. Cooperation Period

Five (5) years

4. Other Relevant Projects

(1) Japan

JICA : Dairy Technology Improvement Project in Indonesia (1997~2002)

JICA : The Strengthening of Artificial Insemination Center Project (1986~1995, after

care 2000~2002)

JICA : Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources (2004~2007)

(2) Other Donors

-

5. Type and Number of Beneficiaries

- Direct Beneficiaries: Beef cattle farmers in NTB
- Number of Beneficiaries: 107,000 farm households (1,019 farm household groups)

6. Relevant PBIS (Requested in FY2003)

Ministry of Agriculture

Directorate General for Livestock Development

“Development of Beef Cattle Farming in Eastern Indonesia”

7. Other Important Information

Meat processing facilities were equipped by yen loan at Mataram in NTB.

### Candidate Project for Action Plan

Development Issue: Stable Food Supply and Improvement of Nutrition

Program: Improving the Institution and Production Support System

Type of Scheme:  Technical Cooperation Project  Volunteer  
 Technical Cooperation (Expert)  Develop. Study  
 Technical Cooperation Project (Training)  Grant Aid

Project Name: Strengthening Network System for High Quality Seed Potato Multiplication and Distribution

Implementation Agency: Ministry of Agriculture

Project Area: Aceh province, North Sumatra province, West Sumatra province, Jambi province, Central Java province, East Java Province, North Sulawesi province, South Sulawesi province

#### 1. Background

A potato is one of the most profitable crops planted in tropical highlands of Indonesia. And the cropped area has reached almost 70,000 ha with the backdrop of diversification of domestic consumption.

However, as it is difficult for farmers to acquire domestic seed potatoes that are high-quality at low costs, they are used to plan the part of their products as seed for the next production. With the accumulation of virus, however, the productivity is 15 ton / ha which is just a half or one thirds of other countries' performances.

Under this circumstance, GOJ implemented the technical cooperation project of "Seed Potato Multiplication and Training Project(1992~97)" and "Development of High Quality Seed Potato Multiplication System Project (1998~2003)", focusing on the West Java province. These projects strengthened seed multiplication and test techniques, improved farmers' production techniques, disseminated high-quality seed potatoes and conduct model development in the West Java province with provision of trainings for other provinces to replicate model effects. GOI requested this cooperation in order to strengthen supply system of high quality seed potato at low price and to increase production of high quality seed potato and benefit and income of farmers, through expanding those cooperation results to domestic main production area for potato, 8 provinces<sup>1</sup>.

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<sup>1</sup> Ache, North Sumatra, West Sumatra, Jambi, Central Java, East Java, North Slawesi, South Slawesi

## 2. Outline of the Project

### (1) Overall Goal

Nationwide multiplication system for high-quality seed potatoes will be developed and the production of high-quality potatoes will increase.

### (2) Project Purpose

In the main production area for potato (8 provinces), the production and test techniques of high-quality seed potatoes will be strengthened.

### (3) Outputs

In the 8 provinces which are main production areas for potato, the multiplication for high-quality seed potatoes and test techniques for seed will be strengthened.

### (4) Activities

Improvement of facilities and replacement of equipment of BBI<sup>2</sup>, BBU<sup>3</sup>, BPSB<sup>4</sup> in 8 provinces of main potato production area

### (5) Inputs

#### (a) Japanese Side

- Grand Aid

#### (b) Indonesian Side

- Lands
- Facilities
- Local Costs

## 3. Cooperation Period

FY 2005

## 4. Other Relevant Projects

### (1) Japan

Grant aid : Project for Multiplication and Distribution of High Quality Seed Potato E/N 1990

Yen Loan : Sector Program Loan (I) E/N 1998

JICA : Seed Potato Multiplication and Training Program (1992~1997)

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<sup>2</sup> BBI; Foundation Stock Seed Farms

<sup>3</sup> BBU; Stock Farms

<sup>4</sup> BPSB; Seed Testing Laboratories

JICA: Development of High Quality Seed Potato Multiplication System Project (1998  
~2003)

(2) Other Donors

-

5. Type and Number of Beneficiaries

- Direct Beneficiaries: Potato Farmers in 8 provinces which are the main production areas for potato
- Number of Beneficiaries: -

6. Relevant PBIS (Requested in FY2003)

Ministry of Agriculture

Directorate General of Horticultural Production Development

“Development of High Quality Seed Potato Project Multiplication System Project (Follow up)”

7. Other Important Information

-



### Candidate Project for Action Plan

Development Issue: Stable Food Supply and Improvement of Nutrition

Program: Improving the Institution and Production Support System

Type of Scheme:  Technical Cooperation Project  Volunteer  
 Technical Cooperation (Expert)  Develop. Study  
 Technical Cooperation Project (Training)  Grant Aid

Project Name: Increasing of High Quality Soybean Seed Production through Strengthening of Food Crops Seed Institution and Seed Growers Empowerment

Implementation Agency: Ministry of Agriculture

Project Area: South Sulawesi, NTB, West Java, Yogyakarta, Lampung and Bali provinces

#### 1. Background

A soybean is a traditionally important food for Indonesian people as the major source of vegetable protein for human nutrition. In recent years, while the demand for soy beans is increasing with the diversification and development of food culture of the people, the domestic production of soy beans is abruptly decreasing. This is mainly due to 1) the increase in the import from abroad under the liberalization trade policy which the Government of Indonesia has been launching after the Asian economic crisis, 2) low yield of production due to the restriction on the supply of seed which government tested (the amount of supply does not reach 1% of the demand amount), and 3) the change in the preference of Tempe producers who are major consumers of soy beans (they tend to prefer to the imported one which is relatively large and unified in terms of size rather than the domestic one that is of a small size).

With this background, the GOI regards soy beans as significant goods for trade strategies and has set up the target of increasing the domestic production. By utilizing soybean-seed facilities that have been transferred to the regional autonomies under the decentralization policy, it is now disseminating the technology for increasing supply of high-quality seeds to some particular provinces and districts that are good at producing domestic soybeans.

With respect to the soybean-related facilities, however, there are problems of decayed equipment. And there is also the question on how to provide extension systems for high quality soybean seed stable multiplication technology after the decentralization. To response these issues, the Ministry of Agriculture has established the Seedling Management technology Center in 2002 and is disseminating the multiplication technologies of high-quality seeds and the seed-quality improvement technology. MOA has also specified

the need for seed development as one pillar of the Ten-Economic Recovery Acceleration Program.

Japan implemented the technical cooperation project of the “Quality Soybean Seed Multiplication and Training Project” (1996~2003) including follow up” in East Java province thereby establishing models for high quality seed stable multiplication technology, system for multiplication, distribution and seed tests, and making relevant organizations go well for implementation. Especially good performances were seen in the areas of the breeding of high-quality seeds, seed-testing techniques, capacity building of provincial government staffs and seed farmers, and enlightenment activities in model farms. In addition, two varieties developed by this cooperation (Anjasmoro and Mahamel) are rich in protein and relatively large, meeting the requirement from Tempe producers: they are given higher market prices than traditional small-size soybeans.

This project is proposed in order to make these cooperation effects spread over major soybean-producing regions in the county, reinforce the supply and production of high-quality seeds, and increase the unit yield and production of soybeans through the cooperation for improving technology of provincial agricultural department, seed-related faculties and seed farms.

## 2. Outline of the Project

### (1) Overall Goal

Domestic production will increase through dissemination of high-quality seeds.

### (2) Project Purpose

Multiplication techniques and seed distribution systems adopted for local area will be strengthened in major soybean-producing provinces.

### (3) Outputs

In main soybean-producing 6 provinces (South Sulawesi, NTB, West Java, Yogyakarta, Lampung and Bali provinces), facilities and equipments required by well planned production and distribution system are provided.

### (4) Activities

- 1) Improvement of facilities in soybean seed related facilities and provision of equipment (small tractor, power cultivators, weeder, power sprayer, dryer, rapping machine, farm related equipments, seed test related equipments, etc) in main soybean-producing 6 provinces.
- 2) Complementary provision of equipment in MOA related facilities (Seed Quality Development Center) which are the core in spreading over high quality seed and in related facilities in East Java province.

- (5) Inputs
  - (a) Japanese Side
    - Grant aid
  - (b) Indonesian Side
    - Local Costs
- 3. Cooperation Period
  - FY 2005
- 4. Other Relevant Projects
  - (1) Japan
    - Grant aid : Project for Multiplication and Distribution of High Quality Soybean Seed E/N 1995
    - JICA : Quality Soybean Seed Multiplication and Training Project (1996~2001)
    - JICA : Quality Soybean Seed Multiplication and Training Project Follow up (2001~2003)
  - (2) Other Donors
    -
- 5. Type and Number of Beneficiaries
  - Direct Beneficiaries: seed farmers and soybean producers in main soybean-producing provinces
  - Number of Beneficiaries: -
- 6. Relevant PBIS (Requested in FY2003)
  - Ministry of Agriculture
  - Directorate General of Food Crops Production Development
  - “Soybean Seed Multiplication and Distribution System for Increasing Production of Good Quality Domestic Soybean in Indonesia”
- 7. Other Important Information
  -

## Project Brief for All Individual Projects under Action Plan

### Development Issue 1: Stable Food Supply and Improvement of Nutrition

#### Cooperation Program 1: Improving Institution and Production Support System

Project Name (Scheme & Period)	Project Brief
1-01 Institutional Support for Food Security <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From March 2005 to March 2008</li> </ul>	In order to strengthen the function of the institutions related to food security such as Agency for Food Security, It is required to promote establishment of food security system and enhance strategy. In this connection, the project envisages that mechanism of preparation and implementation of the policies by enhancing the capacity of policy-making through establishment of information management system, introduction of simulation model method on food supply and demand policy, comparative study of food security policy, and policy dialogue on food security.
1-02 Advisor on Agriculture Policy and Programme Coordination <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From July 2004 to July 2006 (Agriculture Policy Advisor; from July 2001 to June 2004)</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment and implementation of Agricultural policy and agricultural development program</li> <li>• Coordination among MOA and related institutions and promotion of facilitation for effective implementation regarding the development program utilizing counterpart budget of 2 KR</li> <li>• Coordination on development program for agricultural sector by other donors</li> </ul>
1-03 Food Crop Policy Advisor <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From October 2000 to September 2003</li> </ul>	Advisory work about main food crop production for <ul style="list-style-type: none"> <li>• Information collection on agriculture policy.</li> <li>• Facilitation &amp; assistance for execution of related on-going projects.</li> <li>• Review of completed projects and study on their self sustainability</li> <li>• Suggestion about promotion of main food crop production</li> <li>• Promotion of cooperation between Japan and Indonesia</li> </ul>
1-04 Agriculture Infrastructure Policy <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From July 2001 to July 2003</li> </ul>	Advisory work for <ul style="list-style-type: none"> <li>• Water resources management,</li> <li>• Development, restoration and preservation of farm land, as well as arrangement of farm land,</li> <li>• Agricultural credit, fertilizer, agro chemical, machinery</li> </ul>
1-05 Project for Training of Agricultural Extension Officers on Improvement of Farm Management <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From January 2004 to January 2007</li> </ul>	The purpose is to enable field extension officers in selected districts to acquire skills in the extension methodology through the improved training program developed in the previous technical cooperation (PIAETS methods). Expected output of the project would be; <ul style="list-style-type: none"> <li>• Training program developed in the previous technical cooperation is improved in BDA-Kayuambon (National Agribusiness In-Service Training Center), in Lembang, West Jawa province.</li> <li>• TOT program are established in BDA-Kayuambon</li> <li>• The training program is applied to selected districts</li> </ul>
1-06 Strengthening of Market Oriented and Self-autonomy Agricultural Cooperatives <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• 5 years</li> </ul>	The project will provide suggestions and recommendations for strengthening farmers' organizations with regard to the policy frameworks and institutional system through analysis of farmers' organizations and their re-organization and strengthening in the model area.
1-07 Cooperative Planning <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From July 1998 to June 2003</li> </ul>	Advisory work on Cooperative activities; <ul style="list-style-type: none"> <li>• Field study for advice &amp; guidance</li> <li>• Technical advice on planning project etc.</li> <li>• Human resources development</li> </ul>

## Project Brief for All Individual Projects under Action Plan

Project Name (Scheme & Period)	Project Brief
<p>1-08 Project for Dissemination of Appropriate Dairy Technology Utilizing Local Resources</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From July 2004 to June 2007</li> </ul>	<p>Project purpose: A series of dairy husbandry technologies, such as feed supply and feeding management based on utilization of local resources, can be disseminated to dairy farmers in the target areas, in accordance with sustainable self-management system of training programs.</p> <p>Expected output of the project:</p> <ul style="list-style-type: none"> <li>• Training programs for dissemination of dairy husbandry technologies based on utilization of local resources are updated and revised in Chikole Dairy Training Center (in West Jawa Province)</li> <li>• Participants who undertake training programs in Chikole DTC acquire a series of dairy husbandry technologies such as feeding supply and feeding management.</li> <li>• The training programs are applied to selected dairy cooperatives as well as dairy farmers' group in the target areas.</li> </ul>
<p>1-09 Beef Cattle Development Project Utilizing Local Resources in the Eastern Part of Indonesia</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• 5 years</li> </ul>	<p>In order to increase meat production and income of beef cattle farmers in Eastern part of Indonesia, this project plans to strengthen beef cattle farming in Eastern part of Indonesia by utilizing local resources systematically.</p>
<p>1-10 Livestock Development Advisor</p> <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From May 2003 to May 2005 (Successor to be dispatched for 2 years)</li> </ul>	<p>Advisory work;</p> <ul style="list-style-type: none"> <li>• Studying and analysis of the existing conditions and problems in livestock industry</li> <li>• Assistance and advice for self-reliant operation of technical cooperation in livestock development</li> <li>• Assistance and advice for improving policy and institution in livestock development</li> </ul>
<p>1-11 Development of High Quality Seed Potato Multiplication Project</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From October 1998 to September 2003</li> </ul>	<p>Project purpose: Establishment of multiplication system of high quality seed potato in West Java province, which will be a model to whole country.</p> <p>Expected output of the project :</p> <ul style="list-style-type: none"> <li>• Seed potato production technology is strengthened in West Java.</li> <li>• Seed potato production technology of seed grower is improved in West Java.</li> <li>• Seed potato distribution is effectively managed in West Java.</li> <li>• The guidance system in West Java is strengthened for staff of other province in particular of North Sumatra and Central Java, on seed potato production technology and inspection technology.</li> </ul>
<p>1-12 Strengthening Network System for High Quality Seed Potato Multiplication and Distribution</p> <ul style="list-style-type: none"> <li>• Grant Aid</li> <li>• JFY 2005</li> </ul>	<p>Through improvement of facilities and replacement of equipment, this project aims to strengthen the production and test techniques of high-quality seed potatoes in the main production area for potato.</p>
<p>1-13 Quality Soybean Seed Multiplication and Training Project Follow up</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From July 2001 to June 2003</li> </ul>	<p>Government intended to increase production of soybean, one of the important main crops except rice, and important source to provide protein and fat but still demand is more than supply. In order to improve this situation, in east Java province, which is main production area, seed multiplication system will be strengthened through technology transfer and training. This is the follow up project of former Quality Soybean Seed Multiplication and Training Project which was conducted through July 1996 to June 2001 in order to tackle with especially the following topics;</p> <ul style="list-style-type: none"> <li>• The technical transfer on seed stock production was not enough because of the delay of land acquisition by Indonesian side.</li> <li>• The flow of soybean multiplication system was not well established though the production was almost prepared</li> <li>• It was desirable to expand the application of the key soybean seed growers in order to promote seed production</li> </ul>

## Project Brief for All Individual Projects under Action Plan

Project Name (Scheme & Period)	Project Brief
<p>1-14 Increasing of High Quality Soybean Seed Production through Strengthening of Food Crops Seed Institution and Seed Growers Empowerment</p> <ul style="list-style-type: none"> <li>• Grand Aid</li> <li>• JFY 2005</li> </ul>	<p>Through improvement of facilities and provision of equipment, this project will envisages to strengthen multiplication techniques and seed distribution systems adoptable for local area in main soybean-producing provinces.</p>
<p>1-15 Grant Aid for Increase of Food Production 2KR (Project name will be changed to "The Grant Assistance for Underprivileged Farmers" toward the implementation for next request.)</p> <ul style="list-style-type: none"> <li>• Grant Aid</li> <li>• From December 2004 to June 2006 (implementation toward request in JFY 2003)</li> </ul>	<p>To support the effort for attainment of food security, procurement fund of material for agricultural production is provided as a grant.</p>

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

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

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, change of O&M and rehabilitation concepts from transfer to participation by WUA due to the new Water Resources Law, 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) Support for participation of WUA in irrigation O&M and rehabilitation;
- 2) Strengthening of WUAs and local governments 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 action plan which was formulated for the cooperation program in 2002, is revised as follows;

Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	(as of May 2005)															
							2003				2004				2005				2006			
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
Improving Function of Agricultural Infrastructure and Sustainable O&M	2-01	Project for Empowerment Water Users Associations	PU	TCP	Expert, Training Equip.	on going																
	2-02	Water Users Association Strengthening	PU	Indiv. Expert	Expert (long term)	completed																
	2-03	Irrigation Planning *1 (Irrigation Management)	PU	Indiv. Expert	Expert (long term)	on going, extension approved																
	2-04	Study on Comprehensive Recovery Program of Irrigation Agriculture	PU	Develop. Study	Study Team	completed																
	2-05	Way Sekampung Irrigation Project (1)	PU	Loan	Yen Credit	completed																
	2-06	Way Sekampung Irrigation Project (2)	PU	Loan	Yen Credit	completed																
	2-07	Bitilili Irrigation Project	PU	Loan	Yen Credit	completed																
	2-08	Way Sekampung Irrigation Project (3)	PU	Loan	Yen Credit	on going																
	2-09	Small Scale Irrigation Management Project III	PU	Loan	Yen Credit	completed																
	2-10	Batang Hari Irrigation Project (II)	PU	Loan	Yen Credit	on going																
	2-11	Project Type Sector Loan for Water Resource Development II	PU	Loan	Yen Credit	on going																
	2-12	Small Scale Irrigation Management Project IV (Decentralized Irrigation System Improvement Project in Eastern Region of Indonesia)	PU	Loan	Yen Credit	on going																
	2-13	Water Resources Existing Facilities Rehabilitation and Capacity Improvement Project	PU	Loan	Yen Credit	on going																
	2-14	Komerling Irrigation Project Stage II, Phase 2	PU	Loan	Yen Credit	to be implemented																

Legend: : On-going or Completed Projects : Projects adopted but not yet implemented

PU: Ministry of Public Works,

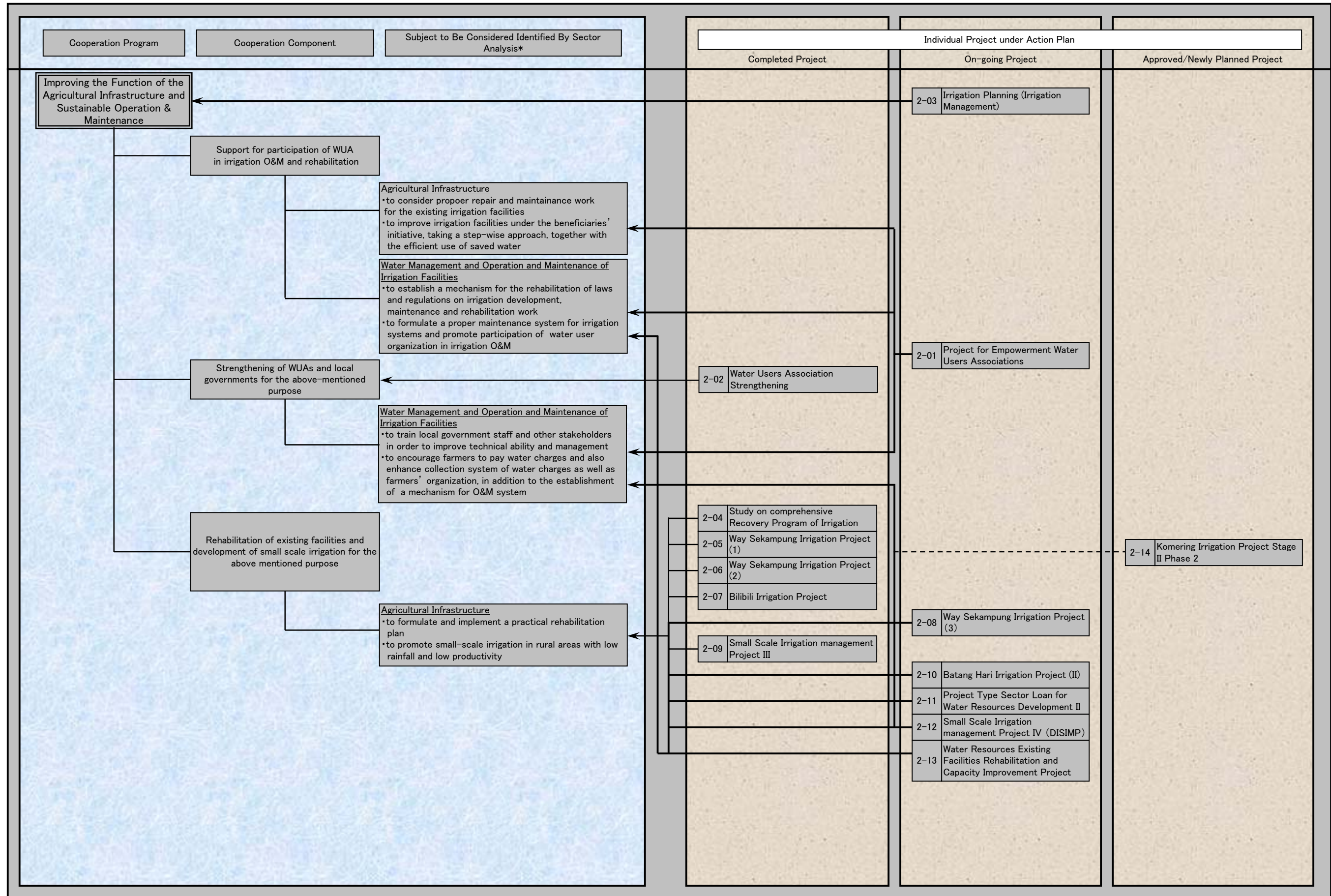
Note: TCP: Technical Cooperation Project

\*1: Activities of the Irrigation Planning (Irrigation management) Expert include a part of TOR for the Project for Empowerment Water Users Association.

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



Hierarchy Tree for Cooperation Program Improving the Function of the Agricultural Infrastructure and Sustainable Operation & Maintenance



\*: This Sector Analysis is as of Final Report  
 Note: Individual Projects do not cover all of the subjects to be considered in the related fields.

## Project Brief for All Individual Projects under Action Plan

Development Issue 1: Stable Food Supply and Improvement of Nutrition

Cooperation Program 2: Improving Function of Agricultural Infrastructure and Sustainable O&M

Project Name (Scheme & Period)	Project Brief
<p>2-01 Project for Empowerment Water Users Associations</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From April 2004 to March 2007</li> </ul>	<p>This project envisages that the model for the proper operation and maintenance of the irrigation facilities is introduced through empowerment of WUAs by Local Government assistance and collaboration between Local Government and WUAs, in the model area in Kabupaten Gowa, South Sulawesi province (command area under Bilibili irrigation system financed by Yen loan). Expected output is;</p> <ul style="list-style-type: none"> <li>• WUAs in the model area are strengthened.</li> <li>• In the model area, irrigation water is distributed efficiently to the farmland.</li> <li>• Irrigation facilities in the model area are adequately managed and improved based on local conditions</li> <li>• In the model area, the farming system with efficient use of irrigation water is introduced.</li> <li>• The staff of the local Government and other stakeholders related to empowerment of WUAs acquire the knowledge and experience to provide the proper assistance to WUAs.</li> </ul>
<p>2-02 Water Users Association Strengthening</p> <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From July 2003 to March 2004 (original plan: to June 2004)</li> </ul>	<p>Expected out put is;</p> <ul style="list-style-type: none"> <li>• Execution of basic study for the cooperation project</li> <li>• Establishment of implementation organization and steering committee in central and local level</li> <li>• Formulation of cooperation project for strengthening of water users associations</li> <li>• Preparation for provision of budget and facilities for the project implementation</li> <li>• Start of the project implementation</li> </ul>
<p>2-03 Irrigation Planning</p> <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From June 2003 to May 2005 (to be extended for 1 year)</li> </ul>	<p>Advisory and other works for</p> <ul style="list-style-type: none"> <li>• Irrigation policy making and technical matters of facilities, based on the experience in Japan</li> <li>• Efficient and effective planning and implementation of cooperation projects with JICA, JBIC, as well as Japan's Grant Aid Assistance</li> <li>• Contribution to the JICA technical cooperation project "the project for empowerment of water users associations"</li> </ul>
<p>2-04 Study on Comprehensive Recovery Program of Irrigation Agriculture</p> <ul style="list-style-type: none"> <li>• Develop. Study</li> <li>• From February 2003 to March 2004</li> </ul>	<p>This is the study on comprehensive rehabilitation program of irrigation system in 3 provinces (North Sumatra, Central Java, South Sulawesi province). This component includes analysis and evaluation of existing development plan and facilities, and preparation of rehabilitation guideline and so on.</p>

## Project Brief for All Individual Projects under Action Plan

Project Name (Scheme & Period)	Project Brief
<p>Way Sekampung Irrigation Project 2-05 (1), 2-06 (2), 2-08 (3)</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• (1) From October 1992 to December 2003</li> <li>• (2) From November 1994 to December 2003</li> <li>• (3) From January 1998 to February 2005 (2 years extended, until February 2007)</li> </ul> <p>(Loan validity)</p>	<p>Income generation of farmers in Lampung province through rice production increase by:</p> <ul style="list-style-type: none"> <li>• Construction of Batuteki Dam</li> <li>• Construction of irrigation related facilities and others</li> </ul> <p>Loan amount is</p> <p>(1) 7,635 million JPY (2) 16,210 million JPY (3) 9,216 million JPY</p>
<p>2-07 Bilibili Irrigation Project</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From December 1996 to December 2003</li> </ul> <p>(Loan validity)</p>	<p>The Bili Bili Multipurpose Dam was constructed in 1999 at the upstream of the Jene Berang River, stretching in the south edge of the South Sulawesi Province. Using the water from the Bili Bili Multipurpose Dam, the existing irrigation area located near the Makassar was rehabilitated and expanded to 24,000 ha, along with on-farm development and strengthening of WUA.</p> <p>Loan amount is 5,472 million JPY.</p>
<p>2-09 Small Scale Irrigation Management Project III</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From January 1998 to February 2004</li> </ul> <p>(Loan validity)</p>	<p>In the eastern region of Indonesia, where economic situation is not so developed, surface water and groundwater were developed through construction of dam and weir and provision of pump in order to increase production of crop and attain income generation and expansion of job opportunity.</p> <p>Loan amount is 16,701 million JPY.</p>
<p>2-10 Batang Hari Irrigation Project (II)</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From July 2001 to October 2009</li> </ul> <p>(Loan validity)</p>	<p>In west Sumatra and Jambi province in Sumatra island, where potential of paddy field development is high, Batang hari irrigation project (I) was implemented in order to attain food self sustainability through increasing of rice production. In the connection of Phase I which contains construction of weir and main canal, phase II does the on farm development and the agricultural extension service.</p> <p>Loan amount is 7,639 JPY</p>
<p>2-11 Project Type Sector Loan for Water Resource Development II</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From July 2001 to October 2009</li> </ul> <p>(Loan validity)</p>	<p>In this project, medium irrigation facilities, are constructed or rehabilitated in west and central Indonesia. Through this project, stable rice production will be ensured and food security will be strengthened, subsequently poverty in the rural area will be alleviated.</p> <p>Loan amount is 18,676 million JPY.</p>
<p>2-12 Small Scale Irrigation Management Project IV (Decentralizes Irrigation System Improvement Project in Eastern Region of Indonesia)</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From October 2002 to February 2012</li> </ul> <p>(Loan validity)</p>	<p>In the Eight provinces in eastern region of Indonesia, irrigation facility will be constructed and water users association will be supported, and capacity building in regional government will be assisted. This project is the successive project after SSIMP, -II, -III.</p> <p>Loan amount is 27,035 million JPY.</p>

## Project Brief for All Individual Projects under Action Plan

Project Name (Scheme & Period)	Project Brief
<p>2-13 Water Resources Existing Facilities Rehabilitation and Capacity Improvement Project</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From October 2002 to February 2011 (Loan validity)</li> </ul>	<p>This project provides rehabilitation of urgent and prioritized projects among completed projects by yen loan under water resource sector, and assistance to build the capacity of related organization. The project includes rehabilitation of the Ular Irrigation project located in North Sumatra Province.</p> <p>Loan amount is 14,696 million JPY. (This amount includes all of the components besides irrigation components)</p>
<p>2-14 Komerang Irrigation Project Stage II, Phase 2</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• 8 years (Loan validity)</li> </ul>	<p>The project is providing irrigation facilities and establishing an operation and maintenance system in the Komerang River basin in South Sumatra Province, thus raising production of rice and other crops, and so improving the incomes of farmers and contributing to economic growth and poverty reduction in the region. Loan amount is 13,790 million JPY.</p>

### **3. Program for the Sustainable Utilization of Fisheries Resources**

### 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 2002 was about 20kg, which accounts for 50% 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:

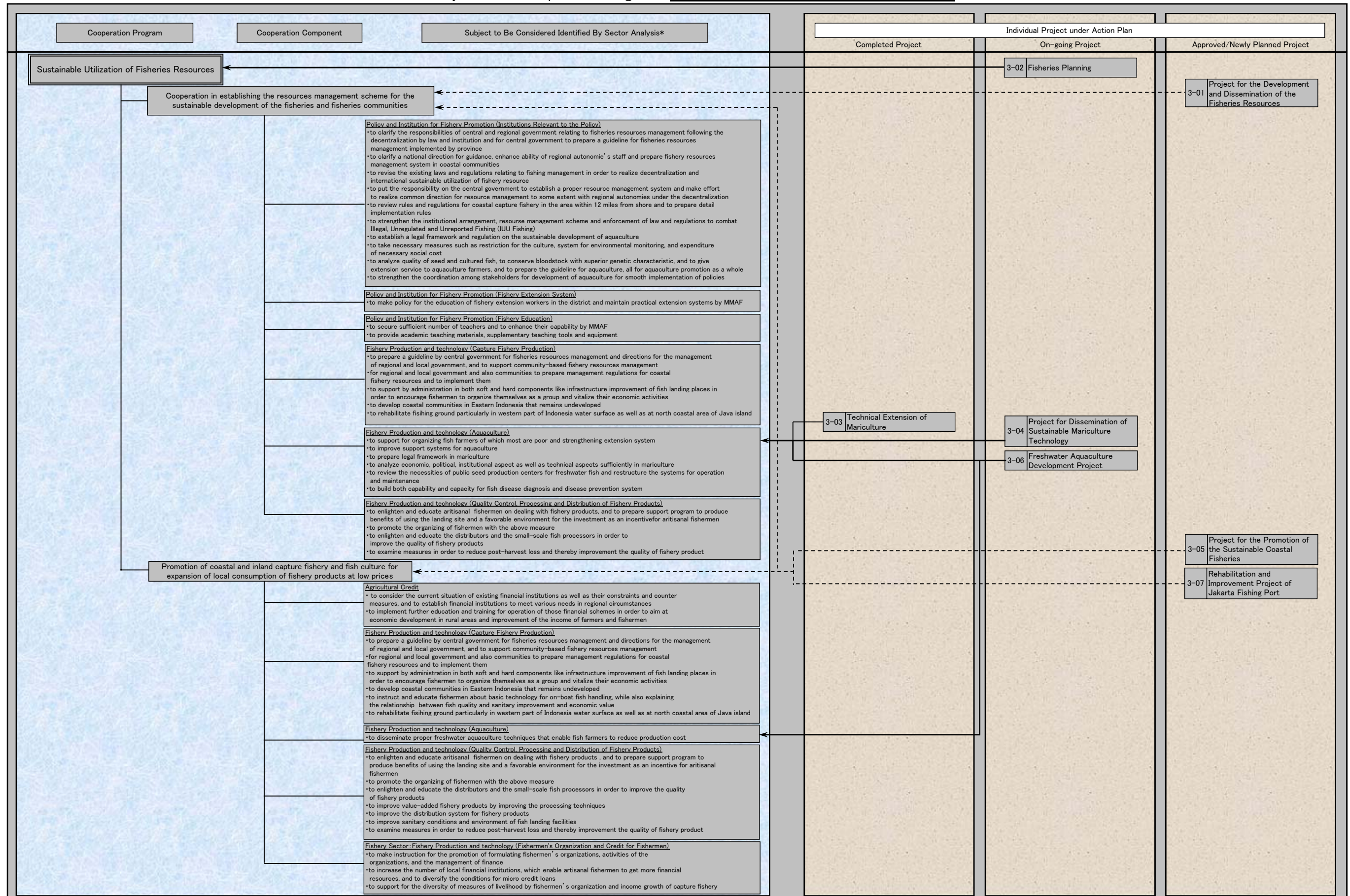
- 1) Cooperation in establishing the resource management scheme for the sustainable development of the fisheries and fisheries communities, and
- 2) Promotion of coastal and inland capture fishery and fish culture for expansion of local consumption of fishery products at low prices.

Under this program, the action plan which was formulated in 2002 was revised as follows.

Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	(as of May 2005)															
							2003				2004				2005							
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
Sustainable Utilization of Fishery Resources	3-01	Project for the Development and Dissemination of the Fisheries Resource Management	MMAF	TCP	Expert (long & short), Training, Equip.	to be examined																
	3-02	Fisheries Planning	MMAF	Indiv. Expert	Expert (long term)	on going, successor to be examined																
	3-03	Technical Extension of Mariculture	MMAF	Indiv. Expert	Expert (long term)	completed																
	3-04	Project for Dissemination of Sustainable Mariculture Technology	MMAF	TCP	Expert (short term), SV	on going																
	3-05	Project for the Promotion of the Sustainable Coastal Fisheries	MMAF	TCP Grant Aid	Expert, Training, Equip. Grant Aid	TCP approved, second preliminary evaluation for TOR under preparation Grant Aid approved																
	3-06	Freshwater Aquaculture Development Project	MMAF	TCP	Expert (long & short) Training, Equip.	on going, to be extended																
	3-07	Rehabilitation and Improvement Project of Jakarta Fishing Port	MMAF	Loan	Yen Credit	to be implemented																

[Grey Box] : On-going or Completed Projects    [Hatched Box] : Projects adopted but not yet implemented    [Dotted Box] : Projects newly planned    [Yellow Box] : Project Digest  
 MMAF: Ministry of Marine Affairs and Fisheries  
 Note: TCP: Technical Cooperation Project    SV: Senior Overseas Volunteer

## Hierarchy Tree for Cooperation Program Sustainable Utilization of Fisheries Resources



\*: This Sector Analysis is as of Final Report.  
 Note: Individual Projects do not cover all of the subjects to be considered in the related fields.

### Candidate Project for Action Plan

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: Project for the Development and Dissemination of the Fisheries Resource Management

Implementation Agency: Ministry of Marine Affairs and Fisheries

Project Area: Ministry of Marine and Fisheries in Jakarta, North Sumatra province, Central Java province, North Sulawesi province, Bali province

#### 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 the utilization of marine fisheries resources is estimated about 5 million tons per year. However, especially, the resource management for the coastal fisheries is still underdeveloped at the local areas in Indonesia, though the resource management for the high migratory fish resources, which are directly managed by the central government, has been developed year by year. Under those situation, the deterioration of fishery resources could cause over-utilization of the resources, which also affect sustainable fisheries and stable promotion of the fisheries community. It is because the Central Government can not collect local data, though it is require to collect the data at the central level through the local areas to analyze and evaluate the resource condition comprehensively within Indonesia, in order to apply appropriate countermeasures to the fishing activities by the central and/or local governments. The coastal fisheries, which are mainly managed local fisheries, especially has not developed the resource management scheme.

Fisheries management mainly consists of (1) data collection under the appropriate data collection/registration scheme, (2) data analysis and resource evaluation, (3) application of fishing control/regulations and (4) enlightenment and dissemination of the appropriate way of fishing and data collection toward fishermen. Achieving sustainable fisheries will also contribute to promoting fisheries and fisheries communities in Indonesia. Under those condition, the first thing to do is to formulate the data collection scheme and disseminate the appropriate way of fishing. Especially, for the formulation of the scheme, it is required to improve the data collection regulations at the central and local government level and rules at the fisheries groups, (b) to disseminate methodologies to record and provide the data on fishing and fishing vessels with the "Data Book", and (c) to improve the information system



to collect, accumulate and analyze the data. Once this scheme is completed, data accumulated are analyzed, the resource conditions are evaluated by the central level, and the local government can timely apply the appropriate countermeasures and regulations to those fisheries based on the resource evaluation.

This Project supports the Ministry of Marine Affairs and Fisheries, local governments and fisheries groups to formulate the data collection scheme and disseminate the appropriate sustainable fisheries, for the purpose of the improvement of the sustainable fisheries resource management in Indonesia, which enhances the sustainable coastal fisheries and the productivity of fisheries communities in the local areas.

## 2. Outline of the Project

### (1) Overall Goal

The fisheries data collection scheme will be improved for the achievement of sustainable fisheries resource management in Indonesia, which enhances the sustainable coastal fisheries and fisheries communities, and the appropriate way of fishing will be transferred to the coastal fishermen.

### (2) Project Purpose

The fisheries data collection scheme is formulated at the Ministry of Marine Affairs and Fisheries and the local governments and fisheries groups in the target areas and the appropriate way of fishing will be disseminated in the target areas.

### (3) Outputs

- 1) The importance of the data collection scheme is enlightened at the local governments and the local fisheries communities at the target areas.
- 2) The regulations and methodologies for the fisheries data collection are introduced into the Ministry of Marine Affairs and Fisheries and the local governments at the target areas.
- 3) The “Data Book” and the rules for the data collection are introduced at the fisheries groups at the target areas.
- 4) The Data System is improved at the Ministry of Marine Affairs and Fisheries and the fisheries areas in Indonesia for the effective data collection and analysis and timely application of the countermeasures.
- 5) Manuals for the data collection for the Ministry of Marine Affairs and Fisheries and the local governments and the local fisheries communities in Indonesia and the “Data Book” for the local fisheries communities are prepared.
- 6) The appropriate way of fishing (legally, environmentally, economically) will be disseminated.
- 7) The Manual Guidelines for the local fisheries in the use of fisheries resources.

(4) Activities

- 1) To support the Ministry of Marine Affairs and Fisheries to enlighten the local governments and the local fisheries groups at the target areas for the data collection scheme
- 2) To support the Ministry of Marine Affairs and Fisheries and the local governments at the target areas to introduce the regulations and methodologies for the fisheries data collection
- 3) To support the local communities at the target areas to introduce the “Data Book” and the rules for the data collection
- 4) To support the Ministry of Marine Affairs and Fisheries to improve the Data System for the effective collection and analysis scheme for the data concerned at the fisheries areas in Indonesia
- 5) To prepare the manuals for the data collection for the Ministry of Marine Affairs and Fisheries and the local governments and the local fisheries communities in Indonesia and of the “Data Book” for the local fisheries communities
- 6) To hold field training courses to disseminate the appropriate way of fishing (legally, environmentally, economically)
- 7) To prepare the Manual Guidelines for the local fisheries in the use of fisheries resources.

(5) Inputs

(a) Japanese Side

- Long-term Expert (Fishery Resources Management Policy): 1 persons
- Short-term Expert (Data collection and recording, Data analysis and resource evaluation, Fisheries management and control, etc): total 3 persons
- Acceptance of Trainees (Data collection and recording, Data analysis and resource evaluation, Fisheries management and control, etc.): 3 persons
- Provision of Equipment

(b) Indonesian Side

- Project Manager
- Counterparts (Data collection and recording, Data analysis and resource evaluation, Fisheries management and control, etc.)
- Local Costs

3. Cooperation Period

Two (2) years

4. Other Relevant Projects

(1) Japan

-

(2) Other Donors

-

5. Type and Number of Beneficiaries

- Direct Beneficiaries: technical and administrative officers in Ministry of Marine Affairs and Fisheries, provincial, and kabupaten's government and fishermen's group and teachers in fisheries high school, located in North Sumatra province/Medan kabupaten/Belawan, Central Java Province/Cilacap kabupaten/Cilacap, North Sulawesi province/Bitung kabupaten/Bitung, Bali province/Denpasar kabupaten/Benoa
- Number of Beneficiaries: around 2.6 million people

6. Relevant PBIS

Requested in FY2002

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"

Requested in FY2003

"Project for the Development and Dissemination of the Fisheries Resources Management"

Requested in FY 2004

"Project for the Development and Dissemination of the Fisheries Resources Management"

7. Other Important Information

-

### **Candidate Project for Action Plan**

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: Project for the Promotion of the Sustainable Coastal Fisheries

Implementation Agency: Ministry of Marine Affairs and Fisheries

Project Area: West Nusa Tenggara (NTB) and East Nusa Tenggara (NTT) Provinces

#### 1. Background

NTT and NTB are known as areas surrounded by rich fisheries grounds. Under increasing tendency of the demand of fisheries products as a high quality protein resource, the expectation toward NTT and NTB is getting stronger to stably distribute fisheries products to consumers through the enhancement of the fisheries scheme. This fact also contributes to vitalize fisheries areas and to increase fishers' income in NTT and NTB. On the other hand, the fisheries in NTT and NTB, which have been formulating the scheme for better utilization of fish resources, have been required to be promoted.

Under those situations, Ministry of Marine Affairs and Fisheries (MMAF) and JICA completed "The Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia (Development Study)" in October 2002. Through this study, several critical issues have been identified as constraints to sustain the stable the stable supply of high quality fish products and the vitalization of fisheries communities in NTT and NTB, and the study proposed the achievements such as improving fundamental facilities for sustainable fisheries and fish processing, distribution, mitigating the pressure on fish resources by introducing appropriate fishing technologies and methodologies, and enhancing fisher's groups for effective management of the fisheries.

To address these issues, the Government of Indonesia requested a Technical Cooperation Project to the Government of Japan in order to reflect the needs of the local government and to provide support to benefit the local communities.

#### 2. Outline of the Project

##### (1) Overall Goal

Successful promotion models for sustainable coastal fisheries are disseminated to other coastal areas.

(2) Project Purpose

Promotion models for sustainable coastal fisheries are developed in two target areas.

(3) Outputs

- 1) The coastal fisheries groups are strengthened through the fisheries activities.
- 2) The supporting system by the district government for local sustainable coastal fisheries is strengthened.

(4) Activities

- 1)-1 Technologies and methodologies of fish processing are improved.
- 1)-2 Technologies and methodologies of fish-product distribution are improved.
- 1)-3 Managerial skills of the fisheries/fish-farmers groups are improved.
- 2)-1 The district governments acquire the knowledge concerning the sustainable fisheries resources management, and disseminate it to fisheries groups
- 2)-2 The district governments improve a supporting system to sustain fisheries activities, such as provision of information on fisheries and aquaculture technology for the coastal fisheries groups.

(5) Inputs

- Japanese experts:
  - Fisheries Development as the Japanese side leader of the project,
  - Fisheries community empowerment,
  - Fish processing,
  - Products distribution,
  - Fish resource management, etc
- Indonesian experts as required:
  - Fisheries technologies,
  - Fishing vessel engineering,
  - Fisheries education, aquaculture,
  - Fish processing, products distribution,
  - Community empowerment, etc.
- Capacity building
  - To provide training to staff of district government
  - To provide training to local fisheries including member of women groups
- Necessary facilities and equipment
- Grant Aid (necessarily minimum improvement of fishery infrastructure and

provision of equipment which coastal fishermen will use at a central base for promotion of the coastal fishery)

3. Cooperation Period

Three (3) years

4. Other Relevant Projects

(1) Japan

JICA: The Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia (2001~2002)

(2) Other Donors

ADB: Coastal Resources Management Project

5. Type and Number of Beneficiaries

- target area: Amargapati in East Flores kabupaten, East Nusa Tenggara province  
Waworada in Bima kabupaten, West Nusa Tenggara province
- District governments
- Coastal fisheries communities

6. Relevant PBIS

Ministry of Marine Affairs and Fisheries

Requested in FY 2002

“Fishing Community Development regarding the Development Study in Eastern Indonesia”

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

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

Requested in FY 2003

“Project for Promotion of the Sustainable Coastal Fisheries”

Requested in FY 2004

“Project for the Promotion of the Sustainable Coastal Fisheries” (for grant aid)

7. Other Important Information

This project is formulated based on the recommendations from the JICA Development Study “ The Study on Fisheries Infrastructure Support and Coastal Communities Development Plan in Eastern Indonesia”.

## Project Brief for All Individual Projects under Action Plan

### Development Issue 1: Stable Food Supply and Improvement of Nutrition

#### Cooperation Program 3: Sustainable Utilization of Fisheries Resources

Project Name (Scheme & Period)	Project Brief
3-01 Project for the development and dissemination of the fisheries resource management <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• 3 years</li> </ul>	In Indonesia, fisheries resources are 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 appropriate resource management has not been conducted for most of fishes at this moment. In this connection this project will target improvement of fisheries data collection scheme for fisheries resources management, based on the collaboration among central government and regional government and fisheries group.
3-02 Fisheries Planning <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From March 2003 to March 2006</li> </ul>	Activities are to; <ul style="list-style-type: none"> <li>• study and analyze fisheries situation and issues</li> <li>• advise strategies and programs required</li> <li>• assist proposing, implementing and reviewing activities</li> <li>• assist facilitating and activating the exchange of information between Japan and Indonesia</li> <li>• assist promoting capacity building for administrative official and fishermen</li> <li>• recommend the future fisheries plan required</li> </ul>
3-03 Technical Extension of Mariculture <ul style="list-style-type: none"> <li>• Individual Expert</li> <li>• From June 2001 to June 2003</li> </ul>	Activities are; <ul style="list-style-type: none"> <li>• To clarify the situation of Mariculture in Indonesia</li> <li>• To upgrade the research capability of Gondol Research Institute for Mariculture</li> <li>• To disseminate sustainable Mariculture technology</li> </ul>
3-04 Project for Dissemination of Sustainable Mariculture Technology <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• From February 2005 to February 2008</li> </ul>	The purpose of this project is that sustainable mariculture technology is transferred to core technical staff of the Technical Implementation Units (TIUs) and the local governments and introduced to ASEAN countries. Outputs of the project are as follows; <ul style="list-style-type: none"> <li>- Technologies for seed production and sustainable mariculture are transferred to the selected staff of the Technical Implementation Units (TIUs), local governments, through domestic dissemination, including domestic training.</li> <li>- Technologies for seed production and sustainable mariculture are introduced to the government staff concerned in ASEAN countries and networking on the mariculture is promoted in ASEAN countries through the Third Country Training Program (TCTP).</li> <li>- The Dissemination Manual on the Technical and Management for the Sustainable Mariculture and the Training Textbooks for the Mariculture Technology and Management are prepared and the training scheme for the dissemination of mariculture technologies for the target species is strengthened.</li> </ul>
3-05 Project for the Promotion of the Sustainable Coastal Fisheries <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• 3 years</li> </ul>	Under increasing tendency of the demand of fisheries products as a high quality protein resource, the expectation toward NTT and NTB, surrounded by rich fisheries grounds is getting stronger to stably distribute fisheries products to consumers through the enhancement of the fisheries scheme. However several critical issues have been identified. To address these issues, this project plans to develop Promotion models for sustainable coastal fisheries in target areas.

## Project Brief for All Individual Projects under Action Plan

Project Name (Scheme & Period)	Project Brief
<p>3-06 Freshwater Aquaculture Development Project</p> <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> </ul> <p>From August 2000 to August 2005 (to be extended)</p>	<p>Aquaculture development is expected to contribute food security and provide job opportunity but its productivity is still at low level. In order to improve present low aquaculture productivity, this project provides technical cooperation for expanding the technology to small fish farmers. Main components are;</p> <ul style="list-style-type: none"> <li>• High quality broodstock of existing freshwater fish culture species is supplied to seed production units.</li> <li>• Quality of aquaculture products of existing freshwater fish culture species is improved</li> <li>• Fish breeding technology for new culture species are developed.</li> <li>• Effective extension models suitable to the local conditions are established</li> <li>• The stakeholders in the project area have common information on freshwater aquaculture</li> </ul>
<p>3-07 Rehabilitation and Improvement Project of Jakarta Fishing Port</p> <ul style="list-style-type: none"> <li>• JBIC Loan</li> <li>• From September 2004 to September 2012 (Loan validity)</li> </ul>	<p>Jakarta Fishing Port in the largest fishing port in Indonesia, and it functions as a very important fisheries center. However, the facilities have deteriorated as a result of the ground subsidence caused by excessive pumping of underground water in the urban area of Jakarta among other factors. Strategies to address the subsidence of the facilities are required to maintain the functions of the fishing port and to effectively utilize the related facilities.</p> <p>This project aims to restore the function and secure the durability of the existing facilities through rehabilitation work on the east and west wharves (1,349 m) and improvement of other facilities.</p> <p>Loan amount is 3,437 million JPY.</p>



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

#### 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.

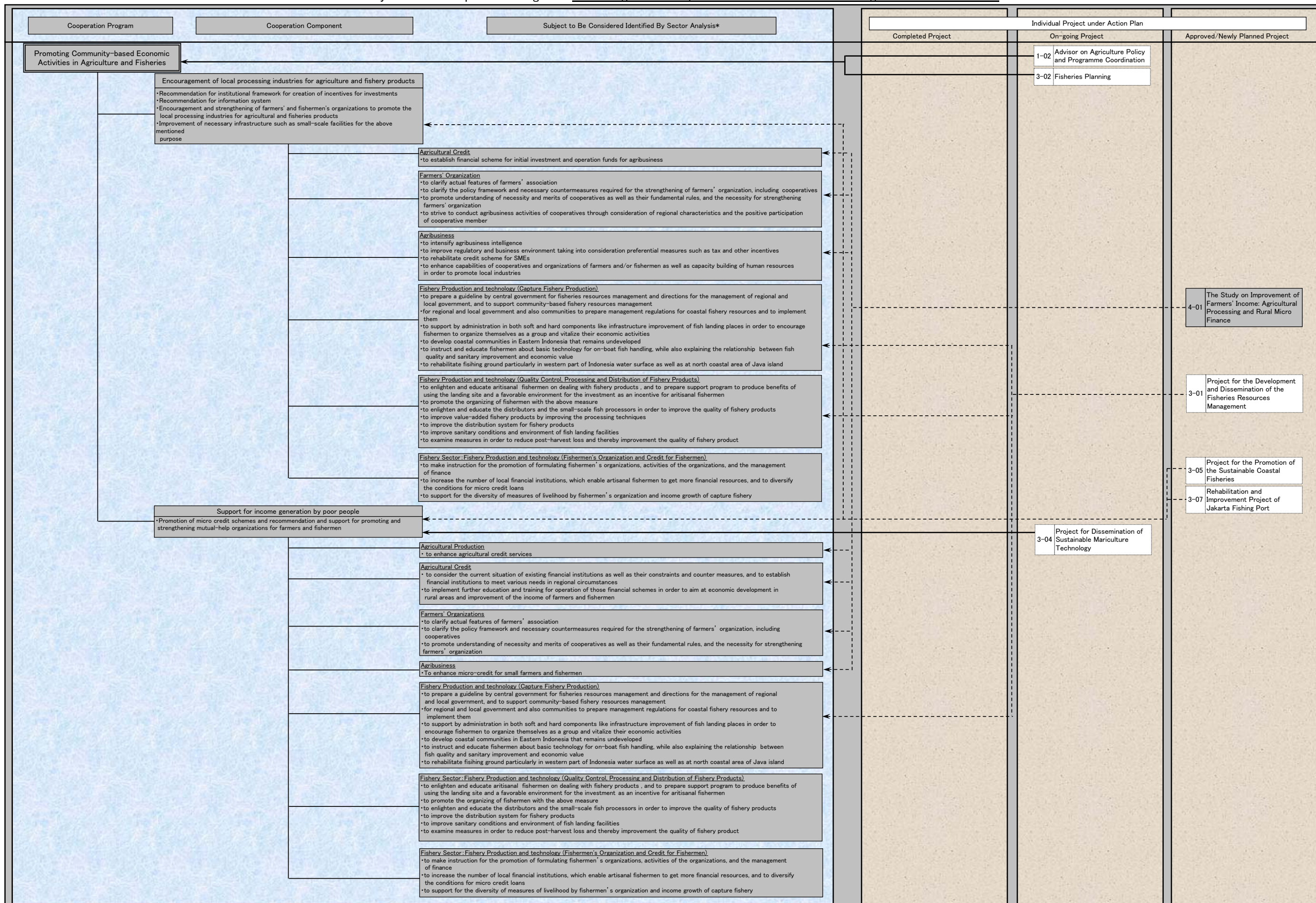
Under this program, the action plan which was formulated in 2002 is revised as follows.

Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	(as of May 2005)																
							2003				2004				2005				2006				
							O1	O2	O3	O4	O1	O2	O3	O4	O1	O2	O3	O4	O1				
Promoting Community-based Economic Activities	4-01	The Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Micro Finance	MOA	Develop. Study	Study Team	to be implemented																	

: Projects adopted but not yet implemented  
MOA: Ministry of Agriculture

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.

### Hierarchy Tree for Cooperation Program Promoting Community-based Economic Activities in Agriculture and Fisheries



\*: This Sector Analysis is as of Final Report.  
 Note: Individual Projects do not cover all of the subjects to be considered in the related fields.

## Project Brief for All Individual Projects under Action Plan

Development Issue 2: Raising Income of Farmers and Fishermen and Vitalization of Rural Economy

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

Project Name (Scheme & Period)	Project Brief
4-01 The Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Micro Finance • Development Study • 1 year	The project envisages to make a recommendation on making and implementing policies on promotion of agricultural processing and establishment of rural micro finance scheme to improve farmers' income, and to implement transfer of skill through on-the job-training during the study period.

**5. Program for  
Improving and Strengthening  
of Markets for Agricultural  
and Fisheries Products**

## 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 fisheries products; and
- 2) Recommendation on the establishment of basic market information systems for agricultural and fisheries products.

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

							(as of May 2005)												
Program	No.	Name of Project	Ministry in charge	Scheme	Input	Status	2003				2004				2005				2006
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Improving and Strengthening Markets	5-01	Study on Improvement of Institutions and Inform	MOT	Develop. Study	Study Team	completed					■	■							
	5-02	Improvement of Management Operational System and Human Resources Capacity of Regional Distribution Centers in Indonesia	MOT	TCP	Expert (long & short), Training	to be examined													■

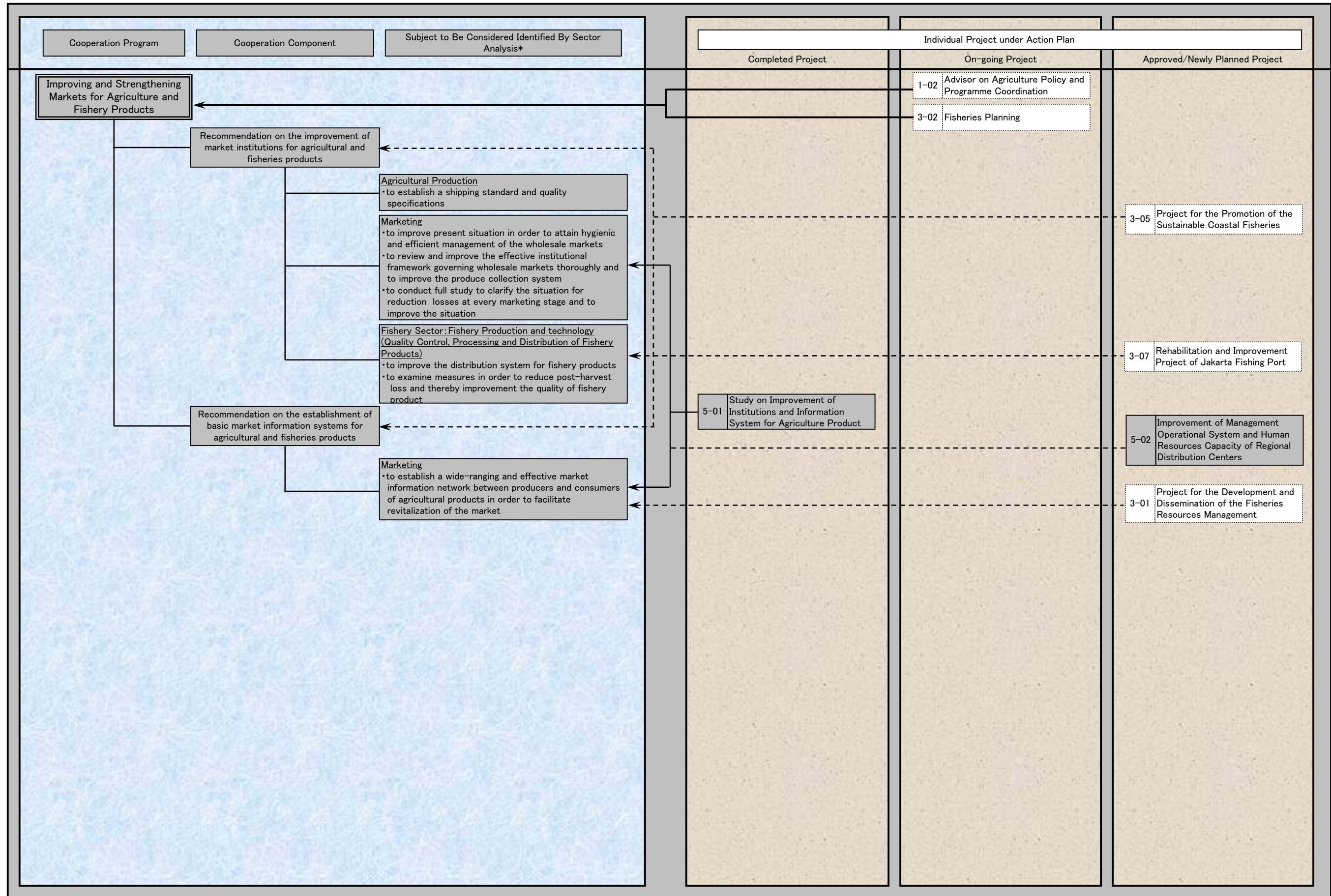
■ : On-going or Completed Projects    ■■■ Projects newly planned    ■ : Project Digest

MOT: Ministry of Trade

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.

Hierarchy Tree for Cooperation Program Improving and Strengthening Markets for Agriculture and Fishery Products



\*: This Sector Analysis is as of Final Report  
 Note: Individual Projects do not cover all of the subjects to be considered in the related fields.

### Candidate Project for Action Plan

Development Issue: Raising the Income of Farmers and Fishermen and the Vitalization of Rural Economy

Program: Improvement and Strengthening Markets for Agriculture and Fishery Products

Type of Scheme:  Technical Cooperation Project  Volunteer  
 Technical Cooperation (Expert)  Develop. Study  
 Technical Cooperation Project (Training)  Grant Aid

Project Name: Improvement of Management Operational System and Human Resources Capacity of Regional Distribution Center

Implementation Agency: Ministry of Trade  
Directorate General of Domestic Trade

Project Area: West Java Province, North Sumatra Province, South Sulawesi Province

#### 1. Background

Wholesale markets of agricultural products in Indonesia have several constraints on transparent trades and fair price formation, in addition to being unhygienic and inefficient. Thus, the wholesale markets are required to be modernized through fair and rapid trade in order to be able to supply agricultural products smoothly and stably. In order to improve marketing system of agricultural products, Ministry of Industry and Trade is planning to establish Regional Distribution Center in important regions as its own activities. This center has already been established in Bandung in West Java province and Dairi in North Sumatra province and will be established in Makassar in South Sulawesi. However, function of this center has not been well demonstrated because of lack of management plan, regulation of operation and management of facilities, human resources although facilities are equipped.

Under these circumstances, GOI requested development study on improvement of institutions and information systems for agriculture product market which includes future appropriate function of regional distribution center and GOJ is now conducting "The Study on Improvement of Institutions and Information Systems for Agriculture Product Market" from March 2004. This project was requested for continuous support by GOJ on the establishment of future function of regional distribution center in the recommendation which will be concluded in this study.

#### 2. Outline of the Project

##### (1) Overall Goal

Market of agricultural products in Indonesia will be improved.



(2) Project Purpose

Regional distribution center will smoothly function and be fixed and utilized in the marketing procedure of regional agricultural products.

(3) Outputs

- 1) Management plan will be decided in each regional distribution center.
- 2) Capacity of human resources in each regional distribution center will be developed.
- 3) System of operation and maintenance in each regional distribution center will be improved.
- 4) Each regional distribution center will provide appropriate services for users.

(4) Activities

- 1) To decide management plan in each regional distribution center.
- 2) To conduct capacity development for worker with unripe capability based on management plan in each regional distribution center
- 3) To conduct on-the-job-training for improvement of system of operation and maintenance in each regional distribution center
- 4) To conduct advertisement and dissemination of regional distribution center for users
- 5) To enlighten officers in regional government and administrative persons concerned on market system of agricultural products

(5) Inputs

(a) Japanese Side

- Long-term Expert (marketing of agricultural products, operation and maintenance of wholesale market of agricultural products, etc.): 3 persons
- Short-term Expert: around 3 persons per year
- Training in Japan
- Training in Indonesia

(b) Indonesian Side

- Project Manager
- Counterparts, personnel in each regional distribution center.
- Local Costs (including part of training cost)

3. Cooperation Period

Three (3) year

4. Other Relevant Projects

(1) Japan

JICA: The Study on Improvement of Institutions and Information Systems for Agriculture Product Market

(2) Other Donors

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5. Type and Number of Beneficiaries

- Direct Beneficiaries : users of regional distribution center (farmers, wholesalers, retailers, and transportation contractor in Bandung, Dairi, and Makassar)

- Number of Beneficiaries : -

6. Relevant PBIS (Requested in FY 2004)

Ministry of Industry and Trade (at FY 2004, currently Ministry of Trade)

“Improvement of Management Operational System and Human Resources Capacity of Regional Distribution Center”

7. Other Important Information

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## Project Brief for All Individual Projects under Action Plan

Development Issue 2: Raising Income of Farmers and Fishermen and Vitalization of Rural Economy

Cooperation Program 5: Improving and Strengthening Markets for Agriculture and Fisheries Products

Project Name (Scheme & Period)	Project Brief
5-01 Study on Improvement of Institutions and Information Systems for Agriculture Product Market <ul style="list-style-type: none"> <li>• Development Study (Overseas Basic Study)</li> <li>• From March 2004 to October 2004</li> </ul>	The objective of this study is to make policy recommendations to improve the market institutions and market information system for agricultural products in Indonesia. Scope of study is through collection and analysis existing information and field survey in West Java province and selected provinces in eastern and western Indonesia (North Sumatra, South Sulawesi province), to find constraints and identify possible solution, and to prepare policy recommendations Action Plan.
5-02 Improvement of Management Operational System and Human Resources Capacity of Regional Distribution Centers in Indonesia <ul style="list-style-type: none"> <li>• Technical Cooperation Project</li> <li>• 3 years</li> </ul>	In order to improve marketing system of agricultural products, Ministry of Industry and Trade is planning to establish Regional Distribution Center in important regions as its own activities.  This project is planned to assist the establishment of future function of regional distribution center in the recommendation which will be concluded in above mentioned study.