MINISTRY OF AGRICULTURE THE REPUBLIC OF INDONESIA

THE STUDY ON THE IMPROVEMENT OF FARMERS' INCOME: AGRICULTURAL PROCESSING AND RURAL MICROFINANCE IN INDONESIA

FINAL REPORT VOLUME-II: MAIN REPORT

July 2007

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD.

LIST OF REPORTS

FINAL REPORT:

SUMMARY

MAIN REPORT

APPENDICES

Appendix A: Rural Microfinance

Appendix B: Agricultural Processing

Appendix C: Agricultural Marketing

Appendix D: Socio-Economy and Institution

SOUTH SULAWESI COMPONENT:

MAIN REPORT

PREFACE

In response to the request from the Government of Indonesia, the Government of Japan decided to conduct the Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Microfinance and and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Naoto MORIOKA of Nippon Koei Co., Ltd. Between November, 2005 and June, 2007.

The team held discussions with the officials concerned of the Government of Indonesia and conducted field surveys at the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the promotion of this project and to the enhancement of friendly relationship between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Indonesia for their close cooperation extended to the study.

July 2007

Takashi KANEKO, Vice President Japan International Cooperation Agency Mr. Takashi KANEKO Vice President, Japan International Cooperation Agency Tokyo, JAPAN

Letter of Transmittal

Dear Sir,

We are pleased to submit to you the Final Report of the Study on Improvement of Farmers' Income: Agricultural Processing and Rural Microfinance in Indonesia. This report presents the policy recommendation for policy formulation and implementation s for promotion of agricultural processing and rural microfinance to improve farmers' income, formulated through the study conducted for the period from November 2005 to July 2007.

The currency crisis in 1997 caused drastic increase of the poverty, of which about 60% are located in the rural area, and the government put emphasis to reduce the poverty in the rural area. On the other hand, prices of primary agricultural products have been remained at lower level linking with the international market, and value addition of agricultural products is one of key activities to increase the farmers' income. For three sample commodities, and agricultural processing plans for thirteen Kelompok Tani in five Kabupaten were formulated to increase value of products, then the plans are categorized into five business models to extend to other commodities and regions.

Microfinance is the another component to support agricultural processing to provide the business environment through farmers' groups and rural habitants into microfinance institutions (MFI) to enable to access finance and strengthen their capacity to conduct agricultural processing business in sustainable way. Improvement plans were formulated to develop and strengthen the capacity of farmers' group for agricultural processing groups as well as other groups like self-help groups. Three MFI models applicable to wider areas were established to to improve access to finance and capacity building for rural habitants.

We hope that the business models for agricultural processing and microfinance will contribute increase of farmers' income, and the study results compiled into the policy recommendation will be fully utilized through smooth extension of business models.

We wish to express our deep appreciation and sincere gratitude to the officials concerned of your Agency, the Ministry of Foreign Affairs, and the Ministry of Agriculture, Forestry and Fisheries of the Government of Japan for the courtesies and cooperation kindly extended to us. We would also like to express our hearty gratitude to the officials concerned from the Indonesia Office of JICA, the Embassy of Japan in Indonesia, the Ministry of Agriculture, provincial and district governments, and other stakeholders for the close cooperation and various forms of assistance extended to us during field investigations and studies in Indonesia.

Very truly yours,

Naoto MORIOKA

Team Leader of the Study Team for the Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Microfinance in Indonesia





Photographs



Socialization Meeting at Kabupaten Majalengka (February 8th, 2007)

Field Survey, Interview at Kelompok Tani Andayarasa in Kabupaten Kuningan (September 7th, 2006)

Photographs









Sweet Potato Sweet Potato Farm at Kelompok Tani Sawalogah in Kabupaten Majalengka (September 11th, 2006)



Mango Peeled by Farmers' Group for preparing Dried Mango at Kabupaten Kediri (November 6th, 2007)



Mango Dried Mango processed by the assistance of REI in Kabupaten Kediri (February 20th, 2007)





Mango

Mango

Exchange of Opinion with REI during Socialization Meeting at Kabupaten Kediri (February 20th, 2007)



Mango Juice Packing Equipment in Kabupaten Kediri (November 6th, 2006)



Mango Problem Census in Field Workshop at Kelompok Tani Makmur Jaya in Kabupaten Kediri (October 16th, 2006)

MASAK MASAK OHON POHON Mango Market in Surabaya

Packed Products in Kabupaten Kediri

(November 6th, 2006)

(August 10th, 2006)

THE STUDY ON THE IMPROVEMENT OF FARMERS' INCOME: AGRICULTURAL PROCESSING AND RURAL MICROFINANCE IN

INDONESIA

Final Report

Main Report

Table of Contents

Location Maps Photographs Abbreviation and Measurement Unit

CHAPTER 1 INTRODUCTION

1.1	General	1-1
1.2	Background of the Study	1-1
1.3	Objectives of the Study	1-1
1.4	Study Area	1-2
1.5	Scope of the Study	1-2
1.6	Study Organization	1-3
1.7	Study Activities	1-3

CHAPTER 2 SOCIO-ECONOMIC CONDITION AND AGRICULTURE SECTOR POLICY

2.1.	Socio-Ec	conomic Conditions Surrounding Agriculture	2-1
2.2	Finance		2-3
	2.2.1	Economic Situation Related to Microfinance	2-3
	2.2.2	Banking Sector	2-5
	2.2.3	Overview of the Microfinance Sector	2-7
2.3	Agricult	ure Sector Policy	2-12
	2.3.1	National Medium-Term Development Plan (RPJMN)	2-12
	2.3.2	Agricultural Development Plan 2005 to 2009	2-13
	2.3.3	Agricultural Processing and Marketing	2-13
	2.3.4	Rural Microfinance and Agricultural Finance	2-14
	2.3.5	Agricultural Extension	2-16

Page

Page

CHAPTER 3 PRESENT CONDITION OF THE STUDY AREA

3.1	Survey P	rocedure	3-1
	3.1.1	Field Survey and Kelompok Tani Selection	3-1
	3.1.2	Field Workshop and Poverty Ranking	3-1
3.2	General	Condition	3-2
	3.2.1	Location and Administration	3-2
	3.2.2	Natural Condition	3-3
	3.2.3	Socio-Economic Condition	3-4
3.3	Kabupate	en Cirebon	3-5
	3.3.1	General	3-5
	3.3.2	Characteristics of Kelompok Tani	3-6
	3.3.3	Agricultural Processing	3-9
	3.3.4	Marketing	
3.4	Kabupate	en Kuningan	3-11
	3.4.1	General	3-11
	3.4.2	Characteristics of Kelompok Tani	
	3.4.3	Agricultural Processing	3-14
	3.4.4	Marketing	
3.5	Kabupate	en Majalengka	3-17
	3.5.1	General	3-17
	3.5.2	Characteristics of Kelompok Tani	3-17
	3.5.3	Agricultural Processing	
	3.5.4	Marketing	
3.6	Kabupate	en Mojokerto	
	3.6.1	General	
	3.6.2	Characteristics of Kelompok Tani	
	3.6.3	Agricultural Processing	
	3.6.4	Marketing	
3.7	Kabupate	en Kediri	
	3.7.1	General	
	3.7.2	Characteristics of Kelompok Tani	
	3.7.3	Agricultural Processing	3-31
	3.7.4	Marketing	

			Page
3.8	Rural M	licrofinance	3-34
	3.8.1	Overview of Financial Services available for Farmers' Community	3-34
	3.8.2	Conditions of Institutional Finance	3-38
	3.8.3	Financial Experience of Kelompok Tani	3-43
	3.8.4	Gap	3-46

CHAPTER 4 BASIC IMPROVEMENT APPROACH

4.1	Basic Imp	provement Approach	4-1
	4.1.1	Poverty and Target Group	4-1
	4.1.2	Linkage of Agricultural Processing and Rural Microfinance	4-2
	4.1.3	Transformation of Farmers' Organizations as Agribusiness Entity	4-3
	4.1.4	Interaction between Farmers Agribusiness and Rural Community Development	
4.2	Improven	nent Direction	4-5
	4.2.1	Agricultural Processing	4-5
	4.2.2	Marketing	4-10
	4.2.3	Microinance	4-15

CHAPTER 5 IMPROVEMENT PLAN

5.1	Contents	of the Improvement Plan	5-1
5.2	Improve	ment Directions and Business Model	5-1
	5.2.1	Improvement Directions and Business Models for Processing and Marketing	5-1
	5.2.2	Improvement Directions and Business Models for Finance	5-2
5.3	Linkage	between Business Models for Processing and Marketing,	
	and those	e for Microfinance	5-5
5.4	Supporti	ng Mechanism considering the Issues arising from Previous Programs	5-6
	5.4.1	Target Selection	5-6
	5.4.2	Technical Support	5-7
	5.4.3	Decentralization and the Role of Government Offices	5-8
	5.4.4	Exit Strategy	5-8
	5.4.5	Financial Capacity Building	5-8
5.5	Socializa	ation Workshop	5-10
	5.5.1	General	5-10
	5.5.2	Socialization Result	5-10

Page

5.6	Impleme	ntation Plan for Processing and Marketing Schemes	5-11
	5.6.1	Implementation Plans and Kelompok Tani	5-11
	5.6.2	Implementation Steps and Schedule	5-12
	5.6.3	Financial Analysis	5-12
5.7	Impleme	ntation Plan for Rural Finance Scheme	5-13
	5.7.1	Implementation Plan and Target Gabungan and LKM	5-13
	5.7.2	Implementation Steps and Schedule	5-13
	5.7.3	Financial Analysis	5-14
5.8	Capacity	Development, Monitoring and Evaluation	5-14
	5.8.1	Overview	5-14
	5.8.2	Capacity Development	5-15
	5.8.3	Monitoring and Evaluation	5-17

CHAPTER 6 POLICY RECOMMENDATION

6.1	Overvie	W	6-1
6.2	Policy R	ecommendation	6-3
	6.2.1	Group Selection, Monitoring and Involvement of Community	6-4
	6.2.2	Processing Technology & Other Commodities and Marketing Partnership	6-5
	6.2.3	Business Development Services (BDS)	6-5
	6.2.4	Capital Support for Capacity Building, with the Asset Building Component.	6-6
	6.2.5	Support from Local Government Services	6-6
	6.2.6	Replication of Business Models	6-6

List of Table

Page

Table 2.3.1	Priority Area in the Government Work Plan for 2007 under National Medium-Term Development Plan $(1/2 - 2/2)$	T-1
Table 2.3.2	Focus and Priority Activities: "Revitalization of Agriculture, Fishery, Forestry and Village Affair" in the Government Work Plan 2007 under the National Medium-Term Development Plan (RPJMN) $(1/2 - 2/2)$	
Table 4.2.1	Marketing Activities Applicable to Each Type of Business Unit $(1/2 - 2/2)$	T-5
Table 5.1.1	Summary of Improvement Plan for Selected Kelompok Tani (1/5 - 5/5)	T-7
Table 5.1.2	Classification of Business Model in Processing and Marketing	T-12
Table 5.1.3	Summary of Finance Improvement Direction for Selected Kelompok Tani	
	(1/4 - 4/4)	T-13
Table 5.1.4	Classification of Business Model in Finance $(1/2 - 2/2)$	T-17
Table 5.2.1	Summary of Investment and Profit in Each Project	T-19
Table 5.5.1	List of Major Operation and Effect Indicators for the Model Project	T-20
Table 6.2.1	Points to be Considered for Implementation under SKR-CF $(1/2 - 2/2)$	T-21

List of Figures

		Page
Figure 2.3.1	Major Finance Program under the Ministry of Agriculture	F-1
Figure 4.1.1	Result of Poverty Ranking at Farmers Community $(1/2 - 2/2)$	F-2

List of Tables in Text

Page

		-
Table 1	Sample Site and Sample Commodity	1-2
Table 2	Growth Rate of GDP (1993 Constant Price)	2-1
Table 3	Growth Rate of GDP in Agriculture Sector (2000 Constant Price)	2-1
Table 4	Share of Agriculture in Nominal GDP (Current Price)	2-2
Table 5	Employment Situation	2-2
Table 6	Nominal GDP per Employment (Current Price)	2-2
Table 7	Population below the Poverty Line (1976 - 2005)	2-3
Table 8	Indonesia's Economy: Before and After Crisis Comparison	2-3
Table 9	Non Performing Loan (NPL) of Commercial Banks	2-4
Table 10	Number of Banks	2-5
Table 11	Long-Term Trends of Interest Rates in Indonesia	2-6
Table 12	Commercial Banks Performance Indicators	2-6
Table 13	Central Government Poverty Alleviation Program	2-8
Table 14	Microfinance Institutions	2-8
Table 15	Number of Kelompok Tani and Agriculture Training Center Established	2-17
Table 16	Agricultural Extension Institution	2-18
Table 17	Evaluation Items of Kelompok Tani Selection	3-1
Table 18	Number of Kelompok Tani Surveyed	3-2
Table 19	Administrative Overview	3-3
Table 20	Poverty Index	3-5
Table 21	Basic Social Indicators	3-5
Table 22	Summary of Kelompok Tani Surveyed in Kabupaten Cirebon	3-6
Table 23	Evaluation Result of Kelompok Tani in Kabupaten Cirebon	3-7
Table 24	Problem Ranking (Kelompok Tani Sigranala Indah)	3-8
Table 25	Problem Ranking (Kelompok Tani Bebek Jaya)	3-8
Table 26	Problem Ranking (Kelompok Tani Tigan Mekar)	3-8
Table 27	Type of Duck Breeding System	3-9
Table 28	Supply and Demand of Duck Product in Kabupaten Cirebon (2005)	3-11
Table 29	Summary of Selling Prices Data in Kabupaten Cirebon (Rp./piece)	3-11
Table 30	Summary of Kelompok Tani Surveyed in Kabupaten Kuningan	3-12
Table 31	Evaluation Result of Kelompok Tani in Kabupaten Kuningan	3-13
Table 32	Problem Ranking (Kelompok Tani Lingassari 2)	3-14
Table 33	Problem Ranking (Kelompok Tani Andayarasa)	3-14
Table 34	Problem Ranking (Kelompok Tani Bina Karya)	3-14
Table 35	Middlemen's Selling Prices and Margins in Kabupaten Kuningan (Rp./fresh kg)	3-16
Table 36	Summary of Kelompok Tani Surveyed in Kabupaten Majalengka	3-18
Table 37	Evaluation Result of Kelompok Tani in Kabupaten Majalengka	3-18

Page

Page

		<u>1 u50</u>
Table 38	Problem Ranking (Kelompok Tani Delima 2)	
Table 39	Problem Ranking (Kelompok Tani Mitra Binangkit)	
Table 40	Selling Prices Data in Kabupaten Majalengka (Rp./kg)	
Table 41	Summary of Kelompok Tani Surveyed in Kabupaten Mojokerto	
Table 42	Evaluation Result of Kelompok Tani in Kabupaten Mojokerto	
Table 43	Problem Ranking (Kelompok Tani Karya Tani)	
Table 44	Problem Ranking (Kelompok Tani Lestari Sejahtera)	
Table 45	Problem Ranking (Kelompok Tani Tani Mulyo)	
Table 46	Summary of Selling Prices Data in Kabupaten Mojokerto (Rp./pce)	
Table 47	Summary of Kelompok Tani Surveyed in Kabupaten Kediri	
Table 48	Evaluation Result of Kelompok Tani in Kabupaten Kediri	
Table 49	Problem Ranking (Kelompok Tani Budidaya)	
Table 50	Problem Ranking (Kelompok Tani Makmur Jaya)	
Table 51	Selling Prices Data in Kabupaten Kediri (Rp./kg)	
Table 52	Financial Services Available in the Community of Kelompok Tani	
	in West Java Province	
Table 53	Financial Services Available in the Community of Kelompok Tani	
	In East Java Province	
Table 54	Access to Finance by Poverty Ranking	
Table 55	Conditions for Savings	
Table 56	Conditions for Loan	
Table 57	Border of Income Level in Poverty Ranking by Community	4-1
Table 58	Market Features of Kabupaten Cirebon and Mojokerto	
Table 59	Improvement Direction of Kabupaten Cirebon and Mojokerto	
Table 60	Market Features of Kabupaten Kuningan and Majalengka	
Table 61	Improvement Direction of Kabupaten Kuningan and Majalengka	
Table 62	Market Features of Kabupaten Kediri	
Table 63	Improvement Direction of Kabupaten Kediri	
Table 64	Effect of Household Income Improvement	5-12
Table 65	Target Candidate of KPK Gabungan or LKM	5-13
Table 66	Proposed Activities of Community Institutional Development	
Table 67	Proposed Activities of Technical Development	5-16

List of Figures in Text

Figure 1 Figure 2 GDP Growth of Indonesia (2001 - 2005) and Contribution to Growth...... 2-4 Figure 3 Figure 4 Figure 5 Figure 6 Figure 7 Figure 8

Page

Figure 9	Sector-based Population (Kabupaten Mojokerto)	3-3
Figure 10	Sector-based Population (Kabupaten Kediri)	3-3
Figure 11	Mean Rainfall and Temperature (Kabupaten Cirebon in West Java Province)	3-3
Figure 12	Mean Rainfall and Temperature (Kabupaten Kediri in East Java Province)	
Figure 13	Land Use Pattern (Kabupaten Cirebon)	3-4
Figure 14	Land Use Pattern (Kabupaten Kuningan)	3-4
Figure 15	Land Use Pattern (Kabupaten Majalengka)	3-4
Figure 16	Land Use Pattern (Kabupaten Mojokerto)	3-4
Figure 17	Land Use Pattern (Kabupaten Kediri)	3-4
Figure 18	Production of Duck (Kabupaten Cirebon)	3-6
Figure 19	Community Poverty Percentage (Kabupaten Cirebon)	3-8
Figure 20	Conceptual Diagrams of Triangle System	3-9
Figure 21	Production of Sweet Potato (Kabupaten Kuningan)	3-11
Figure 22	Poverty Percentage of Communities (Kabupaten Kuningan)	3-13
Figure 23	Sweet Potato Production (Kabupaten Majalengka)	3-17
Figure 24	Poverty Percentage of Communities (Kabupaten Majalengka)	3-19
Figure 25	Production of Duck (Kabupaten Mojokerto)	3-22
Figure 26	Poverty Percentage of Communities (Kabupaten Mojokerto)	3-24
Figure 27	Production of Mango (Kabupaten Kediri)	3-28
Figure 28	Poverty Percentage (Kabupaten Kediri)	3-30
Figure 29	Result of Poverty Ranking at Farmer's Commnity	4-1
Figure 30	Schematic Image of Linkage	4-3
Figure 31	Transformation Image of Farmers' Organization to MFI	4-4
Figure 32	Interaction with Community	4-4
Figure 33	Value Chain Chart of Duck Business	4-5
Figure 34	Value Chain Chart of Sweet Potato Business	4-7
Figure 35	Value Chain Chart of Mango Business	4-9
Figure 36	Problem Analysis on Marketing-related Issues	4-11
Figure 37	Marketing Activities Image	4-12
Figure 38	Problem Analysis and Improvement Direction of Finance	4-20
Figure 39	Schematic Image of Business Model for Processing and Marketing	5-2
Figure 40	Schematic Image of Business Model for Finance	5-4
Figure 41	Linkage for Duck Industry and Finance Business Models	5-5
Figure 42	Linkage for Sweet Potato Processing and Finance Business Models	5-6
Figure 43	Linkage for Mango Processing and Finance Business Models	5-6
Figure 44	Linkage for Income Generation Activities and Finance Business Models	5-6
Figure 45	Proposed Implementation organization (Flow of Coordination and Fu Disbursement)	
Figure 46	Implementation Schedule of Agricultural Processing and Marketing Model	5-12
Figure 47	Implementation Schedule of Finance Scheme	5-14
Figure 48	Mechanism of Capacity Development, Monitoring and Evaluation	
Figure 49	Schematic Image of Rural Microfinance and Processing & Marketing	
Figure 50	Business Model of Rural Microfinance and Processing & Marketing	
Figure 51	Extraction of Important Aspect as Policy Recommendation	

Attachment

Attachment -1	Scope of Work
Attachment -2	Minutes of Meeting for Inception Report
Attachment -3	Minutes of Meeting for Progress Report 1
Attachment -4	Minutes of Meeting for Interim Report
Attachment -5	Minutes of Meeting for Progress Report 2
Attachment -6	Minutes of Meeting for Draft Final Report

Measurement Unit

Extent

cm^2	=	Square-centimetres (1.0 cm x 1.0 cm)
m^2		Square-meters (1.0 m x 1.0 m)
km ²	=	Square-kilometres (1.0 Km x 1.0 Km)
a.	=	Acre or Acres (100 m^2 or 0.1 ha.)
ha.	=	2
ac	=	Acres (4,046.8 m ² or 0.40468 ha.)

Length

c	,	
mm	=	Millimetres
cm	=	Centimetres ($cm = 10 mm$)
m	=	Meters ($m=100 \text{ cm}$)
Km	=	Kilometres (Km = $1,000$ m)
Inch	=	2.54 cm
ft	=	foot (0.3048 m)
mile	=	1,609.34 m

Currency

US\$	=	United State Dollars
J¥	=	Japanese Yen

Rp. = Indonesian Rupees

Volu	me	
cm ³	=	Cu

m ³	=	Cubic-centimetres (1.0 cm x 1.0 cm x 1.0 cm or 1.0 m-lit.)	
2			

 m^3 = Cubic-meters (1.0 m x 1.0 m x 1.0 m or 1.0 K-lit.)

lit. = Litre $(1,000 \text{ cm}^3)$

Weight

gr.	=	Grams
Kg	=	Kilograms (1,000 gr.)
ton	=	Metric tonne (1,000 Kg)
MCM	= N	1,000,000 cu-m = 810.68 acre-ft
ac-ft	=	1,233.83 m3

Time and Others

sec. = Seconds min. = Minutes (60 sec.) hr. = Hours (60 min.) cusec. = 28.32 lit/sec cu-m/s = 35.31 cu-ft/sec

Exchange Rate

As of April, 2007 US \$ 1.00 = ¥ 117.38 = Rp.9,128 Rp.1.00= ¥ 0.01286

List of Terms & Abbreviations

AARD	Agency for Agricultural Research Development
AAHRD	Agency for Agriculture Human Resources Development
ADB	Asian Development Bank
AIAT	Assessment Institute for Agricultural Technology
APBN	National Government Budget (Anggaran Belanja Pendapatan Nasional)
APBD	Local Government Budget (Annggaran Belanja Pendapatan Daerah)
APP	Agricultural Extension Academy
ASEAN	Association of Southeast Asian Nations
BALITKABI	Indonesian Legumes and Tuber Tuber Crops Research Institute (Balai Penelitian Kacang Kacangan Dan Umbi-Umbian)
BAPPEDA	Provincial Development Planning Agency (Badan Perencanaan Pembangunan Daerah)
BAPPENAS	National Development Planning Agency (Badan Perencanaan Pembangunan Nasional)
BBDA	Agribusiness Training Center (Balai Besar Diklat Agribisinis)
BCA	Bank Central Asia
BDA	Agribuisness Training Center (Balai Diklat Agribisinis)
BDS	Business Development Services
BIMAS	Mass Guidance Program (Bimbingan Massal)
BIPP	Agricultural Extension Information Centre (Balai Informasi dan Penyulunan Pertanian)
BKD	Village Credit Institutions, Village Credit Board (Badan Kredit Desa)
BLM	Community Direct Assistance under Ministry of Agriculture (Bantuan Langsung Masyarakat)
BMT	Integrated Independent Business Institution as a Non-Bank Microfinance Institution operated by YINBUK/PINBUK (Baitul Maal wat Tamwil in Arabic, Balai-Usaha Mandiri Terpadu in Indonesian language), People's economic institution which develop productive business & investment in improving economic activities of small entrepreneurs according to Syariah Principles & Cooperative Principles
BNI	State Bank of Indonesia (Bank Negara Indonesia)
BPD	Regional Development Bank (Bank Pembangunan Daerah)
BPML	Community Direct Loan Assistance (Bantuana Pingaman Langsung Masyarakat)
BPP	Extension Office (Balai Penyuluhan Pertanian)
BPR	People's Credit Bank (Bank Perkreditan Rakyat)
BPS	Statistics Indonesia: Central Bureau of Statistics (Badan Pusat Statistik)
BPTP	Agricultural Technology Extension Agency (Balai Pengkajian Teknologi Pertanian)
BRI	State Owned People's Bank (Bank Rakyat Indonesia)
BRI Unit	Village Unit of State Owned People's Bank (Bank Rakyat Indonesia Unit Desa)
ВРТР	Center for Research and Development of Agriculture Technology (<i>Balai Pengkajian dan Pengembangan Teknologi Pertanian</i>)
BULOG	National Logistics Agency (Badan Urusan Logistik)
BUMDes	Village Owned Enterprises (Badan Usaha Milik Desa)
CF	Counterpart Fund
JCIF	Japan Center for International Finance
CRIFI	Central Research Institute of Fisheries
CU	Credit Union
DAC	Development Assistance Committee
DAFEP	Decentralized Agriculture and Forestry Extension Project, financed by World Bank
DELIVERI	Decentralized Livestock Services Project in Eastern Indonesia

DEPTAN	Ministry of Agriculture: MOA (Departemen Pertanian)
DG	Directorate General / Director General
DINAS	Service Office for Agriculture and Industry & Trade, Kabupaten / Kotamadya / Kota level
DOD	Day Old Duck
DOLOG	Regional Logistic Agency (Depot Logistik)
DPD	Regional Representative Council under MPR (Dewan Perwakilan Daerah)
DPR	People's Representative Council under MPR (Dewan Perwakilan Rakyat)
DPM-LEUP	Capital Strengthen Fund for Rural Economic Business Institution under Ministry of Agriculture (Dana Penguatan Modal Lembaga Usaha Ekonomi Pedesaan)
EKUIN	The coordinating Ministry of Economic Affairs (Kementerian Koordinator Bidang Perekonomian Republik Indonesia)
FAO	Food and Agriculture Organization of the United Nations
FY	Fiscal Year
GDP	Gross Domestic Product
GNI	Gross National Income
GOI	Government of Indonesia
GOJ	Government of Japan
GRDP	Gross Regional Domestic Product
GTZ	German Technical Cooperation
HRD	Human Resources Development
IBRA	Indonesian Banking Restructuring Agency
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
IPB	Bogor Agricultural University (Institut Pertanian Bogor)
IPM	Integrated Past Management
Jabar	West Java (Java Barat)
Jatim	East Java (Java Timur)
JICA	Japan International Cooperation Agency
JBIC	Japan Bank for International Cooperation
JCIF	Japan Center for International Finance
Kab.	District (Kabupaten)
Kec.	Sub-District (Kecamatan)
ККР	Food Security Credit (Kredit Ketahanan Pangan)
Koptan	Farmer's Own Cooperative (Kooperasi Tani)
КРК	Self-Help Group (Kelompok)
KSP	Saving & Loan Cooperative (Koperasi Simpan Pinjam)
KT	Farmers' Groups organized under Agricultural Extension Workers (Kelompok Tani)
KTNA	Farmers and Fishermen's Groups (Kontak Tani dan Nelayan Andalan)
KUB	Kelompok Usaha Bersana
KUD	Village Cooperative Unit (Koperasi Unit Desa)
KUF	Kalimantan Upland Farming System Development Project
KUMKM	Cooperatives, Micro, Small and Medium Enterprise
KUT	Farm Credit Scheme (Kredit Usaha Tani)
LDKP	Rural Credit Fund Institution (Lembaga Dana Kredit Pedesaan)
LDR	Loan to Deposit Ratio
LKM	Micro-Finance Institution (Lembaga Kredit Mikro)
LKM-A	Micro-Finance Institution-Agribusiness (Lembaga Kredit Mikro Agribusnis)

LKM-B3K	Non-Bank / Non Cooperative Micro-Finance Insititution (Lembaga Kredit Micro)
LMDH	Village Community and Forestry Institute
LUED	Village Economy Institution (Lembaga Usaha Ekonomi Desa)
MFI	Micro Finance Institution
MOA	Ministry of Agriculture (Departemen Pertanian: DEPTAN)
MOF	Ministry of Finance
MOHA	Ministry of Home Affairs
MOU	Memorandum of Understanding
MPR	People's Representative House or Parliament (Majelis Perwakilan Rakyat)
MSME	Micro, Small and Medium Enterprises
NBNC MFIs	Non-Bank Non-Cooperative Micro-Finance Institutions
NGO	Non Governmental Organization
NPFS	National Program for Food Security
NPL	Non-Performing Loan
NRS	National Regulator & Supervisor (proposed under draft Law of MFI, ProFi)
PINBUK	Center for the Incubation of Small Businesses, regional chapter of YINBUK (Pusat Inkubasi Bisnis Usaha Kecil)
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
P2KP	Urban Poverty Program under World Bank (Proyek Penanggulangen Kemiskinan di Perkotaan)
P4K	Rural Income Generation Project, Ministry of Agriculture's Micro-Credit Project for Farmers and Fisherfolk (Proyek Peningkatan Pendapatan Petani-Nelayan Kecil)
P4S	Centre of Participatory Agricultural Training in Rural Area (Pusat Pelatihan Pertanian Pedesan Swadaya)
PEMP:	Empowerment of Coastal and Small Island Population under Ministry of Marine Affairs and Fishery (Pengembangan Ekonomi Masyarakat Pesisir)
PINBUK	Micro Enterprise Incubation Center (Pusat Inkubasi Bisnis Usaha Kecil)
PKK	Family Welfare Empowerment
PMAM-PMUK	Strengthening Group Business Capital (Pemberdayaan Masyarakat Agribisnis Melaui Penguatan Modal Usaha Kelompok)
PNM	(Permodalan Nasional Madani)
PPD	Regional Empowerment Project under Ministry of Home Affair and Regional Autonomy (Proyek Pemberdayaan Daerah)
РРК	Kecamatan Development Program under Ministry of Home Affairs and Regional Autonomy (Program Pengembangan Kecamatan)
PPL	Agricultural Extension Worker (Petugas Penyuluh Lapangan)
PPP	Agricultural Training Center (Pusat Pelatihan Pertanian)
ProFi	Promotion of Small Financial Institutions under BI & MOF supported by GTZ
PROPENAS	National Development Plan (2000 – 2004) (Program Pembagunan Nasional)
REI	Resource Exchange International
Renstra	Strategic Plan (Rencana Strategi) RIGK Rural Income Generation Project under Ministry of Agariculture, P4K
RPJM	Mid Term Development Plan (Rencana Pembangunan Jangka Menegah)
RT	Neighborhood Association, smallest unit under Desa/Kelurahan (Rukun Tetangga)
RW	Citizens Association, smallest unit under Desa/Kelurahan (Rukun Warga)
SBI	Bank Indonesia Certificate (Prime Rate: Interest Rate of Government Bond: Sertifikat Bank Indonesia)
SHG	Self-Help Group

SKR	Second Kennedy Round
SL-PHT	Field School Approach for Integrated Pest Control
SME	Small & Medium Enterprise
SM-MFIs	Small & Medium Micro-Finance Institutions
SOEs	State Owned Enterises
SP-3	Agricultural Financing Services Scheme
SSN	Social Safety Net
SUB-DOLOG	DOLOG for a Distrcit (refer to DOLOG)
SWOT	Strength, Weakness, Opportunity and Threat
S/W	Scope of Work
UED	Village Economy Enterprise (Usaha Economi Desa)
UI	University of Indonesia (Universitas Indonesia)
UNHAS	University of Hasanuddin located at Makassar of South Sulawesi (Universitasi Hasanuddin)
UNDP	United Nations Development Program
UPPKS	Family Welfare Income Generation Project under National Family Planning Coordination Board (Usaha Penengkatan Pendapatan Keluarga Sejahtera)
UPTD	Regional Technical Implementatgion Unit / Functional Position Group (Unit Pelakasana Teknis Daerah)
USAID	United States Agency for International Development
UU	Law (Undang Undang)
WTO	World Trade Organization
WUA	Water Users Association
YINBUK	Foundation for the Incubation of Small Businesses, NGO (Yayasan Inkubasi Bisnis Usaha Kecil)

CHAPTER 1 INTRODUCTION

1.1 General

This is the Final Report for "the Study on the Improvement of Farmers' Income: Agricultural Processing and Rural Micro-Finance" (the Study), prepared in accordance with the Scope of Work (SW) for the Study agreed between the Japan International Cooperation Agency (JICA) and the Ministry of Agriculture (MOA) dated November 5, 2004. This report presents all the results of the Study including the background, present situation of the sample Kabupaten, business models and implementation models of agricultural processing and rural microfinance, and policy recommendation for promotion of agricultural processing and development of microfinance schemes.

1.2 Background of the Study

After the Currency Crisis happened in 1997, the Indonesian economy has been recovering through various efforts and GDP per capita of Indonesia reached US\$1,280 in 2005. However, population under the poverty line is around 35.3 million people and of which around 65% are mostly farmers living in rural area. In order to alleviate the poverty in rural area, therefore, it is important to improve farmers' income.

In the improvement of farmers' income, Government of Indonesia (GOI) recommends the value added to agricultural products through processing the primary products products, however it is still difficult to add values by processing at the farmers' level.

Rural microfinance is one of effective measures on funding for agricultural processing and economic activities by poor farmers. However, various difficulties have not been settled yet and sustainable rural microfinance scheme has not been established yet.

Taking this situation into account, GOI requested the Government of Japan (GOJ) to render the technical assistance to conduct the Study on agricultural processing and rural microfinance. In response to the request, JICA conducted the Preparatory Study during the period from October 18 to November 11 in 2004 for discussion with GOI on the scope of the Study, and the S/W for the Study and the Minutes of Meeting (M/M) were concluded between GOJ and GOI on November 5, 2004, as attached to the Attachment-1.

1.3 Objectives of the Study

The objectives of the Study are:

(1) To prepare policy recommendations for the GOI in its formulating/ implementing

possible future policies for the promotion of agricultural processing and rural microfinance to improve farmers' income.

(2) To transfer relevant technical skills/knowledge to the Indonesian counterpart personnel through on-the-job training during the course of the Study.

1.4 Study Area

(1) Agricultural processing

To facilitate the Study related to agricultural processing, sample commodities (sweet potatoes, duck, and mango) are selected by GOI. Based on the production area of the sample commodities, the following sample sites are selected as the Study area extending over about 4,300 km² of 5 Kabupatens (Districts) as shown in the Location Map:

Province	Sample Site (District)	Sample Commodity	Area
West Java	Kuningan	Sweet Potatoes	220 km^2
	Majalengka	Sweet Potatoes	$1,070 \text{ km}^2$
	Cirebon	Duck	960 km ²
East Java	Kediri	Mango	1,390 km ²
	Mojokerto	Duck	690 km ²
2 Province	5 Kabupatens	3 Commodities	$4,330 \text{ km}^2$

 Table 1
 Sample Site and Sample Commodity

(2) Rural Microfinance

In terms of rural microfinance, the Study collects information outside as well as inside the sample sites.

1.5 Scope of the Study

The Study is carried out over one and half years from December 2005 to June 2007 as outlined in the schedule below.

	20	05			2006				2007								
Study Period		Year 2005)			2nd Year (JFY2006)				3rd Year (JFY2007)								
	Nov.	Dec.		July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.
Work in																	
Indonesia	1	st Work				2	nd Wor	k			3rd Wo	rk		4th V	Vork		
Work in														**			
Japan	Prepara	toty Wo	ork							1st Wo	rk		2n	d Work	3rd Wo	ork	
Report		\wedge							Δ	Δ		Δ		Δ		Δ	
Report		lc/R							Pr/R(1) It/R		Pr/R	2)	Df/R		F/R	

JFY: Japanese Fiscal Year, Ic/R: Inception Report, Pr/R (1): Progress Report 1, It/R: Interim Report, Pr/R (2): Progress Report 2 Df/R: Draft Final Report, F/R: Final Report.

Figure 1 Work Schedule

The scope of the Study is stipulated in the S/W as follows:

- 1) Review of the existing information and data on agricultural processing and rural microfinance
- 2) Collection of basic information of the sample sites: natural condition, socio-economic condition, on-going activities, etc.
- 3) Agricultural processing: clarification of current situation, needs by stakeholders, identification of possible solutions, preparation of recommendation
- 4) Ruralmicrofinance: clarification of current situation, needs by stakeholders, identification of possible solutions, development of new rural microfinance scheme
- 5) Linkage between agricultural processing and rural micro-finance
- 6) Policy recommendations for promotion of agricultural processing and establishment of rural microfinance scheme.

1.6 Study Organization

Bureau of Planning under the Secretariat General is the coordinating agency in MOA for the Study. For smooth implementation, the Coordination Committee was established for the Study under the chairmanship of the Director of the Bureau of Planning, and the members are the Directorate General (DG) of Food Crops, DG of Horticulture, DG of Livestock, DG of Processing and Marketing, Center for Agricultural Finance, Agency for Agricultural Human Resources Development.

1.7 Study Activities

The preparatory work was carried out in Japan in November 2005, and the draft Inception Report was prepared through preliminary analyss of available data and information as well as scheduling and planning of study activities.

The 1st work in Indonesia was conducted early December 2005 for i) an explanation and discussion on the draft Inception Report to the Coordination Committee, ii) finalization of the Inception Report (refer to Attachment-2).

The 2nd work in Indonesia was carried out over the period of four months from July 24th to December 29th 2006. The work during this period consists of: i) review of the study purpose and approach among the Coordination Committee, ii) field survey to grasp the present situation and activities of processing, marketing, microfinance, institution and etc., iii) collection and analysis of data and information on socio-economy, processing,

marketing, finance, institution and other relevant matters, and iv) preparation of improvement approach based on the field survey and analysis of collected data. The study result was compiled into the Progress Report 1, and the report was explained and discussed with counterpart (Attachment-3).

In addition to the above, the Study team prepared six draft project proposals for utilization of the SKR-CF (Second Kennedy-Round Counterpart Fund) through preliminary examination of processing and micro-finance, and explained to the counterpart personnel in late November to mid December 2006. After modification of the drafts, the agencies concerned submitted the proposals to the SKR-CF Secretariat under Bureau of International Cooperation (MOA Secretariat General). The proposals were approved for implementation as of middle of March 2007.

The 1st work in Japan was conducted in early January 2007 to prepare the business models and improvement models for agricultural processing and draft rural microfinance scheme based on the basic approach, and the Interim Report was prepared along with the draft implementation model.

The 3rd work in Indonesia was carried out over the period of 1.5 months from late January to early March 2007. The main works were 1) explanation and discussion on the Interim Report among the Coordination Committee (Attachment-4), 2) socialization and discussion with stakehoders in 5 Kabupatens inviting DINAS provinces, 3) modification of implementation models based on the comments and opinions. Result of the study is compiled into the Progress Report 2, and the report is to be discussed in the Coordination Committee (Attachment-5).

Based on the result of the socialization in each Kabupaten, the 2nd work in Japan was carried out in early May 2007. The main works were to prepare the Draft Final Report through preparation of policy recommendation for agricultural processing and rural microfinance.

The 4th work in Indonesia was carried out in May to June 2007, and dissemination seminars were held in Cirebon for West Java on May 22, Surabaya for East Java on May 29, Jakarta for MOA on May 31. In the seminars, revised business models and policy recommendations were explained the stakeholders, and opinions and comments were obtained. Then, the Draft Final Report was finalized in the 3rd work in Japan during the period from mid June to July 2007.

CHAPTER 2 SOCIO-ECONOMIC CONDITION AND AGRICULTURE SECTOR POLICY

2.1 Socio-Economic Conditions Surrounding Agriculture

In 1998, the Indonesian economy was heavily damaged by the Asian currency crisis, and the real gross domestic product (GDP) had dropped by 13.1% in 1998, however, the agriculture, forestry and fishery sector showed only 1.3% down (refer to Table 2 below). One of the reasons that the crisis had a small effect on the sector is that the agricultural production heavily depends on food crop production, which is less sensitive to economic changes.

10010	- 01011			Constant I			
	1995	1996	1997	1998	1999	2000	2001
Total Real GDP Growth Rate	8.2%	7.8%	4.7%	-13.1%	0.8%	4.9%	3.8%
Agriculture, forestry, fisheries	4.4%	3.1%	1.0%	-1.3%	2.2%	1.9%	4.1%
Mining	6.7%	6.3%	2.1%	-2.8%	-1.6%	5.5%	0.3%
Manufacturing	10.9%	11.6%	5.3%	-11.4%	3.9%	6.0%	3.3%
Public work ^{*1}	15.9%	13.6%	12.4%	3.0%	8.3%	7.6%	5.0%
Construction	12.9%	12.8%	7.4%	-36.4%	-1.9%	5.6%	4.4%
Trade and tourism	7.9%	8.2%	5.8%	-18.2%	-0.1%	5.7%	3.7%
Transport.& communication	8.5\$	8.7%	7.0%	-15.1%	-0.8%	8.6%	8.1%
Finance	11.0%	6.0%	5.9%	-26.6%	-7.2%	4.6%	6.6%
Service	3.3%	3.4%	3.6%	-3.9%	1.9%	2.3%	3.2%

 Table 2
 Growth Rate of GDP (1993 Constant Price)

*1: Electricity, gas, and water supply. Source: Statistical Yearbook, BPS.

Since 2000, all the economic sectors came to achieve the positive growth, and the real GDP in 2004 and 2005 was increased over 5% per annum. Although the agriculture showed at 4.1% of growth higher than the total GDP growth in 2001, the sector declines its growth rate to 2.5% in 2005, as shown in Table 3 below.

	2001	2002	2003	2004*1	2005^{*1}
Total Real GDP Growth Rate	3.83%	4.50%	4.78%	5.05%	5.60%
Agriculture, forestry, fisheries	4.08%	3.13%	3.79%	3.26%	2.49%
Food Crops	1.52%	2.13%	3.64%	2.89%	2.57%
Non-Food Crops	9.85%	5.83%	4.37%	2.21%	2.23%
Livestock	8.36%	6.52%	4.13%	3.35%	2.07%

 Table 3
 Growth Rate of GDP in Agriculture Sector (2000 Constant Price)

*1: Preliminary figures in 2004 and 2005. Source: Statistical Yearbook, BPS.

Regarding the sub-sectors in agriculture shown in the above table, the food crops sub-sector showed the low growth rate at 1.5 to 2.5% per annum. Non-food crops and livestock showed the higher growth rate than the total GDP in 2001 and 2002, and contributed to increase the agricultural GDP. But after 2004, their growth rate has been decreasing at about 2% in 2005, less than the food crop sub-sector.

Until 1999, the agriculture sector was the second largest sector, next to the manufacturing, with share of 16 to 17% in the nominal GDP. Due to the declining of GDP growth in the sector, the share of agriculture sector decreased to the third position, but still maintains at 13% (refer to Table 4). Shares of each sub-sector in the nominal GDP are shown in the following table. Food crops sub-sector has been producing about half of the agriculture GDP, followed by non-food crops and livestock.

	2001	2002	2003	2004^{*1}	2005^{*1}
Share of Agriculture in Total GNP	15.6%	15.5%	15.2%	14.6%	13.4%
By Sub-Sector within Agriculture					
Food Crops	52.3%	51.9%	51.6%	49.9%	50.2%
Non-Food Crops	13.9%	15.3%	15.3%	15.6%	15.8%
Livestock	13.1%	12.2%	12.2%	12.2%	11.8%
Other (Forestry & Fisheries)	20.7%	20.6%	20.9%	22.3%	22.2%

 Table 4
 Share of Agriculture in Nominal GDP (Current Price)

*1: Preliminary figures in 2004 and 2005. Source: Statistical Yearbook, BPS.

The agriculture sector employs more than 40% of the total working population of 94.9 million (refer to Table 5 below). Out of the total employment population in this sector, proportion of agriculture is 97% and that of forestry and fisheries is 3% according to the 2000 population census.

	Tabl	e 5	Employment	i Situat	ION			
	2002		2003		2004		2005	
	People in thousands	%	People in thousands	%	People in thousands	%	People in thousands	%
Working Population	100,779	100.0	100,316	100	103,973	100	105,802	100
Employed Population	91,647	93.9	90,785	91.9	93,722	90.1	94,948	89.7
Unemployed Population	9,132	6.1	9,531	8.1	10,251	9.9	10,854	9.5
Employment by Sector								
Agricu./Forestry/Fisheries	40,634	45.3	42,001	43.8	40,608	39.1	41,814	44.0
Mining & Manufacturing	12,744	13.0	11,656	13.3	12,105	12.9	12,461	13.1
Construction	4,274	3.9	4,107	4.2	4,417	4.7	4,427	4.6
Others	33,998	37.9	33,02	38.7	36,592	43.3	37,974	38.3
Total Employed Population	91,647	100	90,785	100	93,722	100	94,948	100

Table 5 Employment Situation

Source: Labor Force Situation in Indonesia, BPS for 2002~2005, Central Bureau of Statistics of Indonesia.

Export from this sector, including processed goods, was valued at US\$10 billion, which is equivalent to 16% of the country's total export earnings of US\$61.1 billion in 2003. It can be concluded that the agriculture sector plays an important role in the Indonesian economy, producing 14% of the GDP, providing employment opportunities for more than 40% of the employees and earning foreign currency.

Nominal GDP per employment during the period from 2001 to 2005 is estimated as the sectoral productivity for the agriculture and other sectors. Productivity in the agriculture sector, US\$880 per employee in 2005, is far lower than that in other sector, 20% of the other sectors (US\$4,490 per employee in 2005), as shown below.

Table 0	Nominal GDF	per Employme		nce)	
Sector	2001	2002	2003	2004^{*1}	2005^{*1}
Agriculture Sector					
- Nominal GDP (Rp. Billion)	263,328	281,591	305,784	331,553	365,560
- Employees ('000 persons)	39,744	40,634	42,001	40,608	41,814
- GDP per Employee (Rp. million)	6,600	6,900	7,300	8,200	8,700
(US\$ equivalent)	(US\$630)	(US\$770)	(US\$860)	(US\$880)	(US\$880)
Other Sectors					
- Nominal GDP (Rp. Billion)	1,420,953	1,540,234	1,707,891	1,941,589	2,364,149
- Employees ('000 persons)	51,064	51,014	47,793	53,114	53,134
- GDP per Employee (Rp. million)	27,800	30,200	35,700	36,600	44,500
(US\$ equivalent)	(US\$2,670)	(US\$3,380)	(US\$4,220)	(US\$3,940)	(US\$4,490)
(Exchange rate against US\$)	10,400	8,940	8,465	9,290	9,900

 Table 6
 Nominal GDP per Employment (Current Price)

*1: Preliminary figures in 2004 and 2005. Source: Statistical Yearbook, BPS.

The population below the poverty line (Table 7) rapidly declined between the mid-1970s and 1996, one year before the currency crisis. The number of poor people in 1996 was 22.5 million, which represents 11.3% of the total population in Indonesia. However the currency crisis had a negative impact on the people. The poor population increased up to 37.5 million, 18.2% of the total population, which is more than 1.5 times that in 1996.

	Poverty-lin	ne Populatio	n (million)	Pov	erty Rate (%)
	Urban	Rural	Country	Urban	Rural	Country
1976	10.0	44.2	54.2	38.8	40.4	40.1
1980	9.5	32.8	42.3	29.0	28.4	28.6
1990	9.4	17.8	27.2	16.8	14.3	15.1
1996	7.2	15.3	22.5	9.7	12.3	11.3
1998	17.6	31.9	49.5	21.9	25.7	24.2
1999	12.4	25.1	37.5	15.1	20.2	18.2
2000	12.3	26.4	38.7	14.6	22.4	19.1
2001	8.6	29.3	37.9	9.8	24.8	18.4
2002	13.3	25.1	38.4	14.5	21.1	18.2
2003	12.2	25.1	37.3	13.6	20.2	17.4
2004	11.3	24.8	36.1	12.1	20.1	16.7
2005	12.4	22.7	35.1	11.4	19.5	16.0

Table 7Population below the Poverty Line (1976 - 2005)

Source: Statistical Yearbook of Indonesia

According to the Data and Information of Poverty (2003 and 2004, BPS), about 60% of total poverty population are located in Java Island, 20% in the Sumatra Island, and the remaining 20% in the other outer islands. Regarding occupation of poor household, 59% are engaged in agriculture, 32% in industry and other sectors, and 8% not working. This indicates that, for poverty reduction, economic development in the rural area would contribute to reduce the poverty through providing income generation opportunity, particularly agriculture based industry in the Java Island.

2.2 Finance

2.2.1 Economic Situation Related to Microfinance

(1) Post Currency Crisis (1998-2000)

After the currency crisis in 1997 IMF played a vital role in recovering the economy, guiding the economic and fiscal policy. As a result, the economy bottomed in the fourth quarter of 1998, and then, it turned out to be growing again. The rise of oil price and domestic consumption contributed to the recovery of economy in 2000, recording 4.9% growth rate in the same year.

			-	
Items	Pre-crisis	Crisis	Post-	erisis
Items	(1993-96)	(1998)	(2002-05)	2005
GDP growth rate (%)	7.7	-13.1	4.9	5.6
Exchange rates (annual average per US\$)	2,210	10,013	9,133	9,705
Exports (US\$ billion)	43.0	48.8	68.8	85.6
Imports (US\$ billion)	36.0	27.3	42.0	57.5
Trade balance (US\$ billion)	7.0	21.5	26.8	28.0
International reserves (US\$ billion)	13.8	23.6	26.8	34.7
Inflation rates (CPI)	8.7	58.5	8.8	17.1

 Table 8
 Indonesia's Economy: Before and After Crisis Comparison

Itoma	Pre-crisis	Crisis	Post-crisis		
Items	(1993-96)	(1998)	(2002-05)	2005	
Fiscal balance (% of GDP)	1.2	-2.0	-1.0	-0.5	
Unemployment rate (%)	-	-	9.7	10.3	

Source) World Bank, Snapshot of Indonesia's Economy, 2006

(2) Restructuring of bank

The banking sector in Indonesia went through restructuring process after the currency crisis in 1997. Overall non-performing loans (NPL) reached the highest point of 58.7% in March 1999, and after that, it turned to be decreasing, the NPL ratio of overall banking sector decreased to 18.8% at the end of 2000 as shown in Table 9.

		-		-					
	98/3	99/3	99/12	00/12	01/12	02/12	03/12	04/12	05/12
NPL of Commercial Banks	19.8%	58.7%	32.8%	18.8%	12.1%	8.1%	8.2%	5.8%	8.3%
C I C I I		D ' (0.0					

Table 9 Non Performing Loan (NPL) of Commerci

Source: Japan Center for International Finance (JCIF), 2006

From 1998 to 2004, various measures were taken to address the banking sector reform, and IBRA (Indonesian Banking Restructuring Agency) was established to transfer the NPL from the banks, and many banks were closed or merged. As a result, commercial banks were reduced from 239 in 1996 to 131 at the end of 2005. With this restructuring effort, NPL ratio decreased to less than 10% in 2002 and thereafter. IBRA was dissolved in February 2004 completing its mission. As for the function of deposit protection, Deposit Insurance Institution established in September 2005 succeeded this function. For these reasons, it can be concluded that restructuring of banking sector was completed in 2004 to 2005.

(3) After 2000 to Present

The economy of Indonesia gained its stability after 2000, achieving the growth rate between 3.8% and 5.6% as shown in Figure 2.

The stable economic growth has been achieved due to recovery of investment activities, increase of domestic private consumption. Construction activities recovered its momentum. On corporate activities, investment in facilities and equipment became active during this period. In 2004 and 2005, both consumption and investment lead the economic growth.



However, toward the end of 2005, the economic growth has been slowed down due to higher inflation and interest rates triggered by GOI's policy to cut down fuel subsidies and to raise administered price of petroleum products by an average of more than 120%, in order to safeguard the national budget. The government tried to mitigate the shock of poor households through Direct Cash Transfer Program, and during the first distribution phase launched on 1 October 2005, the government disbursed Rp.4.6 trillion for 15.5 million households, through PT Pos Indonesia via its network of branches.

Figure 3 shows the recent trend of rising inflation and interest rate in 2005 and 2006. Although the year 2005 recorded the highest GDP growth of 5.6%, toward 2006, the economic growth has been slowed down. Bank Indonesia pointed out that stability of oil prices still remains as one of the risk of the country's economic situation in 2006.



Interest rate in Indonesia (represented by one-month SBI rate¹) has been in the range of around 10 to 15% till the mid 1990s. After the currency crisis, it rose up to maximum of 70.6% in September 1998. After this peak, the rate has been falling down, and in 2005, the range was between 7.42% and 12.75%.

2.2.2 Banking Sector

(1) Overview of Banking Sector

Banking Law No. 7/1992 categorizes the banks into two categories: General Commercial Banks and People's Credit Banks (BPR). Both Commercial Banks and BPRs carry out business activities conventionally and/or on the basis of the Syariah principle in their operations/ Meanwhile, BPRs are not allowed to provide money transfer transactions. From an operational point of view, Commercial Banks in Indonesia are further classified into four categories, as shown in Table 10 below:

Description	2001	2002	2003	2004	2005*
1. State Owned Banks	5	5	5	5	5
2. Private National Banks	80	77	76	72	71
3. Foreign & Joint Venture Banks	34	34	31	30	30
4. Regional Development Banks (BPD)	26	26	26	26	26
General Commercial Banks Total	145	142	138	133	132
5. BPR Total	2,432	2,747	3,299	3,507	3,081
Banks Total	2,577	2,889	3,437	3,640	3,213

Table 10Number of Banks

Source: BI -2005 Economic Report on Indonesia. * September 2005

The outstanding loans by commercial banks before the currency crisis were growing steadily. After the crisis, however, these loan assets changed into NPLs and they were mostly transferred to IBRA as bad debts. Since this transfer, there had been over-liquidity situation where the deposit amount well exceeded outstanding loan amount, and the abundant cash was not utilized in the form of loan. This led to the decrease of financial intermediary function of banks and the commercial banks pushed the money collected through deposits to SBI, especially when the deposit rate is lower than SBI rate (see Table 11 below).

¹ Sertifikat Bank Indonesia. SBI rate means "Discount Rate on Bank Indonesia Certificate". SBI can be issued with the maturity of 1 to 12 months. They are sold to banks and non-bank financial institutions as means of monetary policy.

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
SBI Rate (1-months)	20.0%	38.4%	12.5%	14.5%	17.6%	12.9%	8.3%	7.4%	12.3%
Deposit rate ^{*1}	20.0%	39.1%	25.7%	12.5%	15.5%	15.5%	10.6%	6.4%	10.7%
Lending rate ^{*2}	21.8%	32.2%	27.7%	18.5%	18.6%	19.0%	16.9%	14.1%	15.9%

Table 11 Long-Term Trends of Interest Rates in Indonesia

*1: Deposit interest rate: yearly average of 3-month time deposits at commercial banks, *2: Lending interest rate: working capital loan to private enterprises, Source: JCIF, 2006

The recent performance of the commercial banks is indicated in Table 12 below. Both deposits and lending has been growing. Of late, the loan to deposit ratio (LDR) has improved and that more money is going into lending.

Key Indicator	2001	2002	2003	2004	2005
Total Assets (Rp trillions)	1,099.7	1,112.2	1,196.2	1,272.3	1,469.8
Depositor Funds (Rp trillions)	797.4	835.8	888.6	963.1	1,127.9
Credit (Rp trillions)	358.6	410.29	477.19	595.1	730.2
LDR: Loan to Deposit Ratio (Credit/Funds)	45.0	49.1	53.7	61.8	64.7
NII: Net Interest Income (Rp trillions)	3.1	4.01	3.2	6.3	6.2
ROA: Return on Assets (%)	1.37	1.9	2.5	3.5	2.6
NPLs: (Non-Performing Loans Gross (%)	12.1	8.1	8.2	5.8	8.3
NPLs net (%)	3.6	2.1	3.0	1.7	4.8
CAR: Capital Adequacy Ratio (%)	20.5	22.5	19.4	19.4	19.5

 Table 12
 Commercial Banks Performance Indicators

Source: Bank Indonesia, Economic Report on Indonesia 2005, p.145, Table 8.2

(2) Growth of Micro, Small, and Medium Enterprise (MSME) Lending

According to Bank Indonesia 2005 Economic Report, loan disbursements (loan up to Rp.500 million per customer) to MSMEs increased sharply during 2005. Total loans outstanding to MSMEs reached Rp.354.9 trillion, up 30.9% over the same period in the previous year and representing 51.0% of total bank lending. This shows that the banking system sees lending to the MSMEs sector as viable and commercially profitable activity.

Agriculture sector MSME lending has also grown from Rp. 6.6 trillion in 2001 to Rp.12.6 trillion in 2005, however, its share among MSME lending is on the declining trend from 5.5% in 2001to 3.6% in 2005. MSME lending is dominated by industry and trade sectors.

(3) Efforts to Link MSMEs and Banks

Credit Bureau Division of Bank Indonesia (BI) is conducting various trainings for, and theoretical research on, banks and BDS Providers (BDSPs). By giving training to BDS Providers (BDSPs), BI is expecting them to be able to support micro enterprise. BDSP has a function as an intermediary (facilitator) between micro enterprise and Banks. In addition, BI has conducted training for duck and sweet potato farmers, aiming to increase farmers' saving. Their research includes lending models for 76 kinds of commodities, including models of mango and duck, and the study on cluster to understand what type of loan is needed by cluster. Their cluster study concludes that for underdeveloped cluster, financing should be subsidized with low interest rates and no collateral, and facilitated by University and BDS. Lending should be to the groups instead of individual.

Among the efforts by BI is to establish Banking Partner Financial Consultants (KKMBs). BI in 2005 provided trainings for 1,605 individual KKMBs coming from 780 BDSPs, and also for 2,530 banking staff. The participants are mainly Account Officers in charge of MSMEs belonging to both Commercial Banks and BPRs. Training conducted by BI requires 20 participants. BI bears maximum 50% of the cost for training addressed to banks and maximum 30% for training to BDSP.

(4) Onset of Syariah Financing

Based on Law No. 10/1998 concerning Banking System, it was enabled to carry out banking activities based on Islamic Principle, and the government developed instruments and regulation for Syariah Banking in 1999. Currently, there are three Syariah Banks in Indonesia, Bank Muamalat Indonesia, Bank Syariah Mandiri, and Bank Syariah Mega Indonesia. Besides, there are 19 divisions of Syariah banking in National Banks (Commercial Banks which are able to operate shariah banking offices) and 104 Shariah-based BPRs (BPR Syariah).

There are two considerations in understanding and developing Syariah Bank: (a) legal issue, where the idea of interest is prohibited, and (b) economic issue, where justice in economy is emphasized. In conventional banking, depositors obtain interests whether the bank gets profit or not, while in Syariah banking, there is profit and loss sharing. Syariah Banks invest the funds to the real sector, and they are not allowed to invest in speculation.

(5) Safety Net for Natural Disasters

In order to support the economic recovery from natural disaster, the government through Ministry of Finance issued Decree No. 31/PMK.07/2005 and Government Policy No. 14/2005. These regulations let the State Owned Banks (BRI, BPD, Bank Mandiri and BNI) to write off some of its loans in Aceh after tsunami. In this case, the government does not inject any liquidity, but write off must be off-set by capital reserve.

BI deems it necessary to provide special treatment for credit in the form of relaxation in assessment of credit quality and the requirements for regular reporting to Bank Indonesia. Then, BI issued several regulations to support the recovery of banking activities in the area hit by natural disaster.

2.2.3 Overview of the Microfinance Sector

(1) Microfinance Landscape

The microfinance sector in Indonesia comprises government programs, institutional finance, and informal finance.

Government Programs

There are microfinance targeted programs and poverty alleviation programs with microfinance component.

The government targeted programs are agricultural finance and MSME finance. Currently, the major agricultural finance program is the Food Security Credit (KKP), a subsidized loan

for food crop and livestock, and Strengthening Group Business Capital (PMAM-PMUK), a revolving fund for farmers' groups. As for MSME finance, currently based on BI Regulation, banks set moral obligation to lend to MSMEs and required to commit MSME loan in their business plan. The loan size for micro enterprises is up to Rp. 50 million.

Indonesia has many poverty alleviation programs with microfinance component. According to the GTZ ProFI Report as of 2005, the numbers reach up to seventy, and they compiled the information on 16 programs shown in Table 13:

Ministry / Institution	Program	Budget (2002) (million Rp.)
National Family Planning Coordination Board	Family Welfare Income Generation Project (Usaha Penengkatan Pendapatan Keluarga Sejahtera: UPPKS)	1,370,833
Ministry of Agriculture	Rural Income Generation Project (RIGP or P4K)	19,855
Ministry of Public Work	Urban Poverty Project (Program Penanggulangan Kemiskinan di Perkotaan: P2KP)	438,910
Ministry of Industry and Trade	1) Partnership Program (Program Kemitraan), 2) Establishment of New Entrepreneurship, 3) Business Clinic Development	3,483
Ministry of Cooperatives	Revolving Fund Provision for USP / KSP / LKM Program	90,000
and Small and Medium Enterprises	Capital and Financial Institution Strengthening through Provision of Initial Capital and Funding (MAP)	8,225
Ministry of Marine Affairs	Empowerment of Coastal and Small Islands Population (PEMP)	1,028,000
and Fishery	Management and Exploitation of Small Islands	8,225
Ministry of Home Affairs and Regional Autonomy	1) Kecamatan Development Project (Proyek Pembangunan) and Regional Autonomy Kecamatan (PPK), 2) Regional Empowerment Project (Proyek Pemberdayaan Daerah: PPD)	1,028,000
Ministry of Women Empowerment	Women Empowerment through Local Economic Development (Pemberdayaan Perempuan melalui Pengembangan Ekonomi Lokal: P3EL)	4,000
Central Bureau of Statistics	Evaluation of Poverty Indicator Methodology, Regional Calculation of Poor Population in Social Economic Survey 2002	206
National Land Use Agency	Land Use Management (land redistribution) for Sharecroppers	944
	TOTAL	2,964,456

 Table 13
 Central Government Poverty Alleviation Program

Source: ProFI (2005) Indonesia: Background Paper on Microfinance Policy and Strategy

At local government level, there are many poverty alleviation programs. The programs related to the Sample Kabupaten and Province are described in the later section. Most of the programs are microfinance to the group in micro business, and there seem to be blurred objectives of poverty alleviation and micro business promotion.

Institutional Microfinance

Institutions which offer microfinance services include (i) Commercial Banks (mainly BRI Units), and People's Credit Bank (*Bank Perkreditan Rakyat* : BPR), (ii) savings and loan cooperatives (*Koperasi Simpan Pinjam*: KSP) and units of savings and loan (*Unit Simpan Pinjam*: USP) of multipurpose cooperatives, (iii) village credit institutions (*Badan Kredit Desa*: BKD), and rural credit fund institutions (*Lembaga Dana Kredit Pedesaan*: LDKP), and (vi) pawnshops. Other than BRI Units, other commercial banks attempt to enter in the microfinance sector by channeling funding through above MFIs and/or setting up units.

Institution Name	Units	Loan Amount (in Rp.000)	Client	Savings (in Rp.000)
BRI Unit (BRI, Dec. 2003)	3,916	14,182,000	29,870,000	27,429,000
BPR (BI, Dec. 2004)	2,158	12,150,000	5,760,000	11,160,000
KSP (MENKOP, Apr. 2000)	1,097	531,000	N/A	85,000
USP (MENKOP, Apr. 2000)	35,218	3,629,000	N/A	1,157,000
BKD (BRI, Mar. 2004)	5,345	200,000	460,000	28,500
LDKP (BI, June 2000)	2,272	358,000	N/A	334,000
Pawnshop ^{*1}	42	21,000	No savings	No savings
BMT ^{*2}	3,038	157,000	N/A	209,000
CU ^{*3}	1,022	395,721	207,147	272,124
NGO ^{*4}	124	110,008	81,931	11,969
Total	54,232	31,733,729	36,379,078	40,686,593

 Table 14
 Microfinance Institutions

1*: Pawnbroker Institute July 2004, 2*: PINBUK December 2001, Some 30% of BMT are not registered as savings and loan cooperatives. 3*: CU Headquarter December 2002. Some 70% of CUs are not registered as savings and loan cooperatives, 4*: 16 NGOs (out of 500) December 2003.

Source: ProFI (2005) Indonesia: Background Paper on Microfinance Policy and Strategy.

Microfinance in Informal Sector

Informal sector is consisted of thousands of self-help groups (SHGs) both voluntary formed and formed under government programs, informal savings & loan cooperatives, *Baitul Maal wat Tamwil* (BMT) and Credit Unions (CUs)², NGOs, *arisan*, money lenders, and traders.

(2) Legal Framework for Microfinance Institutions

Current Legal Set-Up

Banks including BPRs are regulated under the Law No.7/1992 which allows to take deposits from the public. It was amended in the Law No.10/1998, to accommodate the growing Islamic banking industry and to regulate banking operations based on Syariah principles, under the supervision of BI. According to the Article 16 of the Banking Law, non-bank non-cooperative microfinance institutions are not allowed to take deposits.

Among non-bank financial institutions, only cooperatives (supervised by the Ministry of Cooperative and SMEs) are allowed to take deposit (savings), but from members and not from the public, under the Law No. 25/1992. Some cooperatives take deposit from non-members, calling them "potential members", which is not legally allowed. Another type of non-banking financial institution, pawnshops are the state-owned enterprise (SOEs) operating under the Law No.103/2000, supervised by Ministry of Finance. (MOF).

BKD operation is legally recognized by the Government Gazette of 1929 of Java Island Finance Department under Dutch Colonial time. They were supposed to convert to BPR under the Banking Law/1992, but none did, because they do not fulfill the level of required capital. LDKPs were established by various provincial governments under provincial regulations. They were also required to convert to BPR under the Banking Law/1992, but only 630 out of 2,244 did so. Both BKD and LDKP are deemed to be in gray zone in the sense that they are not allowed to take deposits if they are not converted to BPR.

NGOs operate under the 2001 Law of NGO. They implement in a variety of donor funded

² The majority of them are not registered under cooperative law.

projects or formation of groups and linking them to formal banking institutions, but some take deposits (savings) from the public. They are not supervised by any authorities.

More than two persons can form an association on profit or non-profit purpose, under the Association Law of Year 1848, to be registered under the Ministry of Justice, and get the legal status. But it is not used for microfinance institutions according to the ADB (2003) Final Report of Rural Microfinance Project.

Movement towards the Legalization of Non-Bank Non-Cooperative MFI

There are many non-bank non-cooperative Microfinance Institutions (NBNC MFIs: LKM B3K), not registered as cooperatives, and very small institutions such as groups, associations, and arisan, which are officially not allowed to take deposits, but in reality they grew from the needs of the community and they exist as deposit (savings) taking institutions. On the other hand, there are cooperatives taking deposits (savings) from non-members, which are not allowed under the current legal system. The legal framework does not reflect such reality of the microfinance on the ground. Based on the evidence from literature research and our field survey, micro business and poor people really need financial services of NBNC MFIs due its service flexibility. Therefore these NBNC MFIs need a legal base to enable them to operate their business sustainable. Without legal status, these institutions are hampered to grow healthy and cannot serve to the needs of the community properly.

It is against this background that GTZ's microfinance support program: Promotion of Small Financial Institutions (ProFI) has coordinated an exercise to assist stakeholders to develop a microfinance policy and strategy, to have a Government Regulation authorized by an Act of Parliament through an amendment of the Banking Law. In 2001, the Initiative Team consisted of BI, Ministry of Cooperative & SME, Ministry of Finance, and State Secretary proposed a Draft Law of Microfinance Institution (MFI=LKM). Until 2006, the status of this draft was still under discussion among the stakeholders. Now, the preparation of finishing this draft involves the Regional Representatives Council (DPD), in order to accommodate the need of MFI in the region. DPD would like to reopen the discussion of this Draft Law through some socialization.

DPD through its Ad Hoc Team has prepared *Academic Script for the Draft Law of LKM*. The objectives of the Academic Script are as follows:

- a. To reveal the inconsistency of the existing regulation with the need of Microfinance Institution Non Bank Non Cooperative.
- b. To provide general description of Microfinance Institution Non Bank Non Cooperative completely.
- c. To provide some inputs of the legal certainty for Microfinance Institution Non Bank Non Cooperative.

To fill the urgent need of MFI Law, Ministry of Cooperative and SME initiated the draft of President Regulation concerning *National Policy and Strategy for Microfinance Development*, which is coordinated by Coordinating Ministry of Economy. This draft was submitted to Ministry of Finance, still being in the process of analyzing the definition, scope,

articles of association and legal aspect of MFIs, before being proposed to the President to be issued as President Regulation. This President Regulation will be considered as the umbrella to the rapid growth of existing MFIs and also, to fill the inexistence of MFI regulation, since *the draft Law of MFIs* is still in the process and will be scheduled to be put in the National Legislation Program in 2007.

The recommended legal framework constitutes the strata of MFIs as follows:

LDKP, BKD or cooperatives to deal with the public shall in principle, fall under SM-MFIs (Small and Medium MFIs) under Tier 3. Institutions having a big volume of deposits shall move up to become Large MFIs (L-MFIs) in Tier 2. The legal framework to enable this is



at national level, the amended Banking Act (MFI legal window 1) allowing to issue Government Regulation or Presidential Decree to create the legal framework for MFIs, and Cooperative Act (MFI legal window 2) to govern savings and loan activity of cooperatives and shall be amended to require very large KSP/USP to comply with directives of the National Regulator and Supervisor (NRS). And there shall be the MFI Regulation which sets out parameters for deposit mobilization from the public by NBNC MFIs (to create MFI legal window 3). At regional level, the provincial laws / regulations and district regulations /decrees are required to create legal framework for SM-MFIs.

The possible minimum capital entry point range (deposit threshold) for L-MFI is suggested to range from Rp. 200 million to Rp. 1,500 million.

For the village level set-up, recently the Law on Regional Administration was launched, where the Village Owned Enterprises (*Badan Usaha Milik Desa*: BUMDes) will be legal entities. This would be able to administer the microfinance activities, based on the related draft regulation by the Ministry of Home Affairs.

(3) Financial Intermediary (Re-lending) to Microfinance Institutions

While some commercial banks attempt to enter into microfinance market directly, others take indirect way of entering the market, by strategically lending to MFIs. Some of them even play the role of building the capacity of MFIs by themselves, others work with capacity building partners. These banks are Bank Bukopin, Bank Mandiri, Bank Syariah Mandiri, Permodalan Nasional Madani (PNM), Bank Rakyat Indonesia (BRI), and Regional Development Bank (BPD)..

(4) Capacity Building of MFIs

Other than banks, there are government programs including a component of building up the financial institution: Rural Income Generation Project (RIGP or P4K) and Development of MFIs in Agribusiness (LKM-A) under MOA, Urban Poverty Project (P2KP) under the Ministry of Public Works, Revolving Fund for USP/KSP/LKM, and Productive Empowerment Project for Medium Business Loans (P3KUM) under the State Ministry of Cooperatives, PEMP under the Ministry of Marine Affairs and Fisheries, and Kecamatan Development Project under the Ministry of Home Affairs and Regional Autonomy. Another institution having MFI capacity building facility is PINBUK.

(5) Donor Programs in Microfinance Sector

GTZ implements **ProFI** since 1999 together with Bank Indonesia and Ministry of Finance, setting up a comprehensive microfinance program to cover from micro level MFI strengthening in Bali and West Nusa Tenggara, meso level capacity building of MFI staff certification, and to macro level policy environment as described earlier. It has also started the intervention in the earthquake area of Yogyakarta and Central Java to reconstruct the microfinance system.

World Bank (WB) implements two major poverty reduction projects with microfinance components, Kecamatan Development Project (KDP) since 1998, and Urban Poverty Project (UPP), which started in 1999.

Asian Development Bank (ADB) funds Community Empowerment for Rural Development Project (CERDP) from 2001 to 2007 in eleven districts in six provinces of Kalimantan and Sulawesi, which has a component of finance institution development and village economy. ADB also started the Earthquake and Tsunami Emergency Support Project (ETESP) in 2005, which is providing rehabilitation and reconstruction assistance to mitigate damage caused by the devastating earthquake and tsunami happened in 2004. ETESP has a component of livelihood restoration which includes microfinance.

Japan Bank for International Cooperation (JBIC) signed the FY 2006 ODA Loan Package for Indonesia in March 2007, which includes **Regional Infrastructure for Social** and Economic Development Project in order to increase employment for the poor and improve their access to social services by developing basic infrastructure based on community needs and by piloting microfinance in communities where poverty is prevalent.

2.3 Agriculture Sector Policy

2.3.1 National Medium-Term Development Plan (RPJMN)

The National Medium-Term Development Plan (RPJMN: Rencana Pembangunan Jangka Menegah) for 2004 to 2009 was enacted on January 19th 2005 as the President Decree No.7/2005, focusing on the three agenda as the main pillar: i) Creation of safe and peaceful country, ii) Establishment of justice and democracy and iii) Improvement of people's welfare. Targets under the RPJMN are set to reduce the below poverty line to 8.2% of the population,
increase in economic growth from 5.5% to 7.6%, and reduction in unemployment from 9.7% in 2004 to 5.1% by 2009.

Under the agenda, nine priority areas are selected: 1) poverty reduction, 2) improvement of employment opportunities, investment and export, 3) revitalization of agriculture and rural area, 4) improvement of education and health, 5) law enforcement, corruption eradication and bureaucratic reform, 6) reinforcement of defense capacity, stabilization of security and order as well as conflict settlement, 7) mitigation and management of disasters, 8) acceleration of infrastructure development, and 9) development of border area and isolated regions. The main points in each priority area are listed in Table 2.3.1.

Under the priority area of "revitalization of agriculture and development of rural area", the main focus of agriculture sector is given to the following items: i) national food security, ii) improvement of quality of agricultural, fishery and forest production growth, iii) development of rural economy and rural infrastructures and iv) development of natural resources for renewable energy sources, as shown Table 2.3.2.

2.3.2 Agricultural Development Plan 2005 to 2009

Agenda for agricultural sector in the RPJMN are "Revitalization of Agriculture" in order to enhance welfare of rural households and place foundation for economic development in rural community. Under this agenda, Ministry of Agriculture formulated the Agricultural Development Plan 2005 to 2009 as its medium term development plan and published in January 2005.

The Agricultural Development Plan puts emphasis to improve 1) Food security, 2) Value added and competitiveness of agriculture products and 3) Farmers' welfare, and the targets set in the period are i) Average GDP growth rate of 3.3% per annum in the agriculture sector, ii) Employment creation of 44.5 million in 2009, iii) Increase in value added at the rate of 5% per annum, iv) Growth of labor productivity at the growth rate of 1.4% per annum, v) Reduction in rural poverty to 15.0% by 2009. In order to achieve the above targets, three development programs are formulated as 1) Food Security Improvement Program, 2) Agribusiness Development Program and 3) Farmer Welfare Improvement Program.

2.3.3 Agricultural Processing and Marketing

The Directorate General of Processing and Marketing of Agricultural Products formulated the policy and strategic plan for the year of 2006 - 2009 on the basis of vision and mission of the Ministry of Agriculture as well as the National Development Plan. The strategic plan sets the objective and goal for agricultural processing and marketing, as summarized below:

Objectives:

(a) To encourage farmers and agro-businessmen able to access technology of product processing and post-harvest, as well as market information.

- (b) To extend processing industry of agricultural products in the village in order to increase competitive ability and add value, as well as to create employment opportunity and to increase people's welfare.
- (c) To stimulate people in order to like domestic agricultural product.
- (d) To increase volume, value and variety of both fresh and processed product.

Goals:

- (a) Increasing farmer's capacity and ability in doing their business,
- (b) Decreasing of losses of agricultural product,
- (c) Establishment of self-sufficiency and food security,
- (d) Increasing value added and competitiveness of agricultural product,
- (e) Increasing farmer's income and welfare, and
- (f) Increasing currency exchange from agricultural product export.

In order to achieve the above objectives and goals, the strategy and policy are set for agricultural processing and marketing, as summarized below:

- (a) Increasing capacity and empowering human resources as well as institution in processing and marketing of agricultural products.
- (b) Increasing innovation and dissemination of processing and post-harvest technology.
- (c) Increasing efficiency of agricultural products marketing, processing and post-harvest.
- (d) Increasing market share of domestic and international markets.
- (e) Industrial development approach through cluster concept to support the sustainability.

Under the above strategy and policy, activities are listed in three main programs, namely: i) program of increasing food security, ii) program of agribusiness development and iii) program of increasing farmers' welfare, as shown in Table 2.3.3.

As for institutional improvement of marketing issues, "the Study on Improvement of Institutions and Information Systems of the Market for Agricultural Products" was conducted by the Ministry of Industry and Trade under the assistance of JICA in 2004. As a result of the Study, the study recommends (i) to establish local and regional distribution centers; (ii) to improve traditional market; (iii) to improve market information system by comprehensive approach; and (iv) to establish relevant legal framework.

2.3.4 Rural Microfinance and Agricultural Finance

(1) Ministry of Agriculture Policy and Program

The finance policy of the Ministry of Agriculture (MOA) is described in the Strategic Plan (2005-2009) of MOA, and in that of Center for Agriculture Financial Services under MOA.

The government had been providing liquidity credit through Bank Indonesia (BI) up to the year of 1999, when it was stopped. Now in principle, the main avenue to assist farmers is through commercial finance, and the government's role is to facilitate, regulate, motivate, and promote the access to financial services by the farmers.

In order to achieve the targets set in the Strategic Plan, the funds required for agriculture development is Rp.77 trillion for 5 years, but only 6% is estimated to be financed from banking institutions. According to the problem analysis by MOA, inadequate access to the capital, especially by the small-holder and landless farmers in the rural community, is caused by, firstly, the limitation of existing formal financial institutions; secondly, procedures and requirements needed by existing formal financial institutions are difficult for rural community to be carried out; and thirdly, farmers are unable to access credit due to the regulation and high interest rate applied to commercial businesses. The banking system thus far is not supporting the rural economy, particularly agriculture and tends to drain capital from rural areas.

The essence of finance policy by MOA is to stimulate the community fund by spending budget allocation of APBN and APBD, in the form of program credit, intervention to commercial credit, and facilitating capital access through non-bank finance. In order to realize this mandate, the Center for Agriculture Financial Services was set up in 2005 under the Secretary General, which has the sections of credit program, Syariah finance, commercial finance, and administration. The strategy taken by the Center is as follows:

- (i) modification of the existing funding policy
- (ii) increase accessibility of farmers/stakeholders to the existing bank/non-bank finances
- (iii) socialization of existing financing sources
- (iv) intensification of cooperation with financial institutions and donors
- (v) development of: (a) the existing credit scheme for agriculture/agribusiness; (b) credit interest subsidy scheme, (c) credit guarantee scheme, (d) Syariah finance scheme, (e) MFIs for rural areas and agricultural SMEs, (f) concept of agribusiness funding agency, (g) agriculture commodity insurance and agency.

Major finance program implemented by MOA is listed as follows and summarized in Figure 2.3.1.

- (a) BIMAS Credit (Bimbingan Masal): Mass Guidance Credit
- (b) KUT (Kredit Usaha Tani): Farm Credit Scheme
- (c) KKP (Kredit Ketahanan Pangan): Food Security Credit
- (d) DPM-LUEP (*Dana Penguatan Modal Lembaga Usaha Ekonomi Pedesaan*): Capital Strengthening Fund for Rural Economic Business Institution
- (e) P4K (Proyek Peningkatan Pendapatan Petani Kecil): Rural Income Generation Project
- (f) BLM (Bantuan Langsung Masyarakat): Community Direct Assistance
- (g) BPLM (Bantuan Pinjaman Langsung Masyarakat): Community Direct Loan Assistance
- (h) PMAM-PMUK (Pemberdayaan Masyarakat Agribisnis Melalui Penguatan Modal Usaha Kelompok): Program of Empowerment of Agribusiness Community through Strengthening Group Business Capital

- (i) LKM-A (Lembaga Keuangan Mikro Agribisnis): MFIs in Agribusiness
- (j) SP-3 (*Skim Pelayanan Pembiayaan Pertanian*): Agriculture Financing Service Scheme

Other than these, MOA has minor programs to improve financial access in agriculture sector such as the study on Syariah Banking on Agriculture Commodity, and program of linking agribusiness to venture capital service.

The series of MOA finance programs can be categorized in to two based on their objectives: (i) community welfare improvement, and (ii) agribusiness promotion, with overall goal of food security. Regarding the community welfare improvement, the efforts have been made not only by MOA but also by other Ministries and local governments, which also have various kinds of financial programs.

Lesson learned from the review of MOA finance programs are that the assistance for capacity development of farmers groups is strongly required so as to enable farmers' groups to manage fund as well as to function as business entities.

(2) Provincial and Kabupaten Government Policy and Program

The rural and agriculture microfinance policy of Provincial and Kabupaten governments currently focuses on food security and poverty alleviation. They have financing programs for food crop cultivation, and cooperatives and small and medium enterprises (KUKM), which include agribusiness entity. They also aim at fostering cooperative MFIs. In general, their programs concentrate on capital support and lack in technical guidance.

2.3.5 Agricultural Extension

(1) Background of Agricultural Extension

Before the period of 1980s, in the agriculture sector, priority was given to achieve national self-sufficiency of food. In compliance with this policy, agricultural extension was carried out to satisfy this central target through strong government initiatives. Bimas Programme, the Agricultural Intensification Agency, for instance, was really successful with its green revolution irrigated rice development programme. Kelompok Tani, farmers' group as an unit of extension, was actively established.

After food self-sufficiency is enhanced, and since the establishment of joint decree of Ministry of Internal Affairs and Ministry of Agriculture No. 54/1996 and No. 301/Kpts/LP.120/4/1996 about guidelines to agriculture extension, more attention is given to the empowerment of communities with farmers' participation based on decentralization policy, from which many methodology and guidelines are prepared.

Main programs in terms of agricultural extension in recent years to better meet farmers' need and to accommodate regional differences, some of which are as follows: (i) Partnership Training Process (PROSPEK), (ii) Kalimantan Upland Farming System Development Project (KUF), (iii) Decentralized Livestock Services Project in Eastern Indonesia (DELIVERI), (iv) Field School Approach for Integrated Pest Control (SL-PHT), (v) Rural Income Generation Project (P4K) and (vi) Decentralized Agriculture and Forestry Extension Project (DAFEP).³

(2) Kelompok Tani Registration Process

Number of Kelompok Tani and Agriculture Training Center (Pusat Pelatihan Pertanian) established in the late 1990s to 2001 is tabulated in Table 15:

	1997	1998	1999	2000	2001
1. Kelompok Tani / Nelayan					
- Beginner	117,542	127,339	123,064	122,344	338,975
- Intermediate	108,073	119,971	117,597	119,812	122,344
- Advance	71,288	73,814	77,597	73,802	119,812
- Developed	21,800	23,016	27,379	23,017	73,802
Kelompok Tani Total	318,703	344,140	345,637	338,975	654,933
2. Agriculture Training Center	50	58	60	121	137

 Table 15
 Number of Kelompok Tani and Agriculture Training Center Established

Source: JICA (2002), Basic Study for Vitalization of Rural Economy in Indonesia (Present Situation, Direction and Key Issues of Agribusiness, Marketing and Financial System)

Famres' group, Kelompok Tani, registration process is illustrated in Figure 5 and explained as follows:⁴

- (a) *Potential Group Identification*: Potential farmers' group is identified by DINAS, BPP and KPPKP by reviewing group profiles consisting of its location, current activities, number of members and so forth.
- (b) Meeting and Socialization: Meetings (musyawarah) are organized by extension worker and farmers at candidate groups. Village officer (pamong desa) and community leader also attend this meeting. The subject of the meeting is: purpose of farmer group, advantages to be member of the group, process of establishment of group, Value added activities etc.



(c) *Training*: Special training is provided by extension worker and DINAS. The subject of the training is: group and business management (1 to 2 weeks). Regular meeting should be

business management (1 to 2 weeks). Regular meeting should be held after this training to make sure that training

- (d) *Scouring of the Group*: Scoring of farmers' group is made based on training result by DINAS. (four grades)
- (e) *Report to Bupati*: Training result is reported to Kabupaten through DINAS. Registration and approval is made by Bupati.
- (f) *Regular Training and Monitoring*: Regular training (half days) is provided every fortnight as well as regular monitoring by extension workers.

³ As introduced in Departemen Pertanian (2001), *Pedoman Penyelenggaraan Penyuluhan Petranian Partisipatif Spesifik* Lokal, Indonesia

⁴ Interview from Majalengka Agriculture DINAS Officer and Departemen Pertanian, Pusat Penyuluhan Pertanian (1997), Pembinaan Kelompoktani-Nelayan

(3) Agricultural Extension Institution s

Agricultural Extension Information Center (BIPP) was an important institution to carry out agricultural extension which were organized at each before decentralization Kabupaten. It was responsible to control and supervise Extension Workers (BPPS), to approve action plans on extension activities prepared by Kecamatan offices, and to evaluate and monitoring extension activities. Currently, some Kabupaten have been changed their organization into agency, technical implementation unit (UPTD), sub-division, section or functional position group and others, to implement extension works.

Province	BIPP	Agency	Office	UPTD	Sub- division	Section	Functional Position Group	Others
West Java	1	0	7	1	5	0	9	1
East Java	4	0	7	0	7	2	17	1

 Table 16
 Agricultural Extension Institution

Source: JICA (2005), the support Program for Agriculture and Fisheries Development in the Republic of Indonesia.

With regard to the agricultural extension, MOA is in charge of formulating guidelines, conducting monitoring and providing technical assistance to extension workers through Kabupaten DINAS. This organizational set-up, however, is different between Kabupaten. Some Kabupaten still remains BIPP while others have both BIPP and UPTD, latter of which cause confusion of responsibility sharing in terms of extension works. In order to improve the situation, it would be necessary to systematically reformulate the framework of agricultural extension by considering decentralization.

CHAPTER 3 PRESENT CONDITION OF THE STUDY AREA

3.1 Survey Procedure

3.1.1 Field Survey and Kelompok Tani Selection

Kelompok Tani surveyed under the Study were selected based on the discussion with DINAS and on the production data of sample commodities of Kecamatan. In general, 5 to 9 Kelompok Tani were listed for sample commodities and other 2 or 3 Kelompok Tani was chosen for sub-commodities as a reference for other Kabupaten.

In each Kabupaten, field survey was carried out for the selected Kelompok Tani over a week. Based on the survey, qualitative evaluation was made from the view points of: (i) finance, (ii) socio-economy, (iii) organization, (iv) production and processing technology level, (v) marketing potential and (vi) future plan, each of which has sub-items as shown in Table 17:

Item	Sub-Item
a Finance	1) Saving & Loan Experience, 2) Loan and/or Government Grant Management Capability, 3) Balance Sheet & Profit Loss Availability, 4) Access to Financial Institution
b Socio-economy	1) Poverty Headcount Ratio, 2) Gender Balance of the Group, 3) Environmental Impact
c Organization	1) Leadership, 2) Profit Sharing, 3) Functions, 4) Group Activities Level, 5) Network with Other Groups
d Production & Processing Technology Level	 Production Technology Level, 2) Processing Technology Level, 4) Adoption Capability of New Technology for Production & Processing, Production & Processing Equipment Maintenance Capability
e Marketing Potential	1) Market Concept, 2) Market Development Capability, 3) Market Availability
f Future Plan	1) Availability of Future Development Plan of the Group, 2) Feasibility of the Plan
6 Items	21 Sub-Items

Table 17	Evaluation Items of Kelompok Tani Selection
	2 with a second of the point family second

Through the screening process by giving weights are given to each sub-item, 2 or 3 Kelompok Tani were selected as model groups in each Kabupaten for conducting such detailed survey as household survey and interviews on household income and expenditure, asset level, education background, and savings & loan experience. These items were also confirmed by poverty ranking exercise, and field workshops for each group were also organized to identify problems and constraints and to derive opinion from the community.

3.1.2 Field Workshop and Poverty Ranking

<u>General</u>

Field workshop was organized at selected Kelompok Tani. Through the session, following information was collected in order to assess the needs and collect the opinions

of the target groups with regard to the agricultural processing and rural microfinance.

- The needs, constraints and perception of participants on agricultural production, processing, marketing, and microfinance
- Identification of problems and their ranking experienced by the target groups so as to help increasing their income
- Identification of solutions to the identified problems by: (i) considering short-term and long-term solutions; (ii) initiating action desired by the target groups themselves; and (iii) stating the body responsible for the action and those expected to cooperate.

The duration of the field workshop was one day. Each session of the workshop commenced with the explanation of the objectives and the methodology of the workshop as farmers' participatory approach to the attendants. The program are, then, problem and constraints identification (so called as problem sensus), institutional linkages and follow-up action preparation, which are in a manner of group discussion and focus group discussion using various tools including Mobility Mapping and Institutional Diagram.

Poverty assessment (called as the Poverty Ranking) is separately carried out for half days at each community of selected Klompok Tani. In this session, poverty level is classified into four: (i) Poorest, (ii) Poor, (iii) Fair, and (iv) Rich. Poverty is multi-dimensional, complex, and each local community embraces different concepts of risks. Classification is, therefore, made from the view point of (i) income level, (ii) asset owned, (iii) education level, (iv) satisfaction level of basic human needs, and (v) financial transaction with financial institutions, and levels of each item are determined by each workshop attendants.

As summarized in Table 18, 23 Kelompok Tani were surveyed in West Java Province and 11 in East Java Province. Out of those Kelompok Tani, filed workshop and poverty ranking was carried out at 8 Kelompok Tani in West Java and 5 in East Java respectively.

Province	Vahupatan	Kelompok Tani			
Province	Kabupaten	Basic Research	Field Workshop		
West Java	Cirebon	9	3		
	Kuningan	7	2		
	Majalengka	7	3		
	West Java Total	23	8		
East Java	Mojoketro	5	3		
	Kediri	6	2		
	East Java Total	11	5		
Total		34	13		

 Table 18
 Number of Kelompok Tani Surveyed

3.2 General Condition

3.2.1 Location and Administration

Administrative overview of target Kabupaten is shown in Table 19. Population of Kabupaten in the Study area extends from 908,000 in Mojokerto to over 2 million in Cirebon, of which majority live in rural area.

Province	Kabupaten	Population	Population Density	No. of	No. of
FIOVINCE	Kabupaten	Fopulation	Population Density	Kecamatan	Desa
West Java	Cirebon	2,057,000 2,076 per km ²		31	424
	Kuningan	1,056,100	1,309 per km ²	29	373
	Majalengka	1,166,600	969 per km ²	23	331
East Java	Mojoketro	981,900	1,368 per km ²	18	304
	Kediri	1,513,500	1,092 per km ²	26	332

Table 19Administrative Overview

Source: Data and Code of Administration Area West Jawa and East Jawa Province (2005)

Accordance to sector-based population data presented BPS (2003), Village Potential Statistics 2003, although share of agriculture in GRDP is recently decreasing, agriculture population is still dominant in the Study area as illustrated in Figures 6 to 10:



3.2.2 Natural Condition

(1) Temperature and Rainfall

Mean rainfall and temperature in Kabupaten Cirebon and Kediri is shown below Figures:



Climate in the target area is generally characterized by high temperature and humidity.

Dry season is from May to September while rainy season extends from October to April. 80% of the rainfall is concentrated in the rainy season. Mean temperature of all the target area is nearly 26 degrees Celsius.

Rainfall pattern shows little difference between East Java and West Java Province. Relatively, annual rainfall in East Java Province is lower, approximately 2,000 mm, than that in West Jawa, from 2,400 to 2,600 mm. East Java is clearly distinct between dry and rainy seasons. All the sample Kabupaten faced serious drought decreasing 30% of annual average rainfall in 2002 which caused the decrease of agriculture production.

(2) Land Use

Land use pattern of the target area is shown in Figure 13 through Figure 17:



Kabupaten Cirebon has been the most developed with irrigation due to its flat topographic condition. In addition, Cirebon is characterized by the fishery development utilizing its coastal area. On the other hand, Kabupaten Kuningan, Majalengka and Kudiri is mountainous areas, therefore, the land is largely occupied by the forest and upland field.

3.2.3 Socio-Economic Condition

Poverty line by BPS is based on the level of expenditure necessary to purchase 2,100 kcal of diet and other basic-needs non-food commodities, and the nationwide poverty line is estimated at Rp. 152,847 per month per person as of March 2006.

In general, poverty ratio in East Java Province is higher than that in West Java Province. Target area, 5 Kabupaten, has higher poverty headcount ratio than the average of each province. Poverty line, poor population and poverty head count ratio of each Kabupaten is shown in Table 20.

Province	Kabupaten	Poverty Line	Poor Population	Poverty
Flovince	Kabupaten	(Rp./capita/month)	(person)	Headcount Ratio
West Java	Cirebon	120,074	352,400	17.3%
	Kuningan	123,267	201,700	19.5%
	Majalengka	129,547	203,700	17.7%
	West Java average	-	-	12.9%
East Java	Mojoketro	140,862	166,100	17.2%
	Kediri	112,907	289,200	19.6%
	East Java average	-	-	20.9%

Table 20 Poverty Index

Source: UNDP (2004), National Human Development Report 2004.

In addition, basic social indicators of five Kabupaten, life expectancy, adult literacy rate, mean year of schooling and infant mortality rate, is in Table 21:

Province	Kabupaten	Life Expectancy	Adult Literacy Rate	Mean Year of Schooling	Infant Mortality (per 1,000)
West Java	Cirebon	63.3 years	87.0%	6.0 years	55.5
	Kuningan	65.1 years	90.5%	6.4 years	48.4
	Majalengka	63.5 years	91.0%	6.4 years	54.7
	West Java average	64.5 years	93.1%	7.2 years	47.0
East Java	Mojoketro	68.1 years	89.4%	6.6 years	35.8
	Kediri	68.1 years	87.5%	6.6 years	36.3
	East Java average	-	83.2%	6.5 years	47.0

Table 21 Basic Social Indicators

Source: UNDP (2004), National Human Development Report 2004

Most of the indicators in three Kabupaten in West Java shows lower than the Provincial average while two Kabupaten in East Java shows higher than Provincial average. In order to improve this situation, poverty alleviation program will be essential for the Study area.

3.3 Kabupaten Cirebon

3.3.1 General

(1) Kabupaten Policy of Livestock Development and Sample Commodity

In accordance with the strategic plan 2005-2009, Cirebon focuses on promoting livestock-based agribusiness in order to increase farmers' income. In this vision, Kabupaten aims to increase livestock production by 1.8% to 12.2% from 2005 to 2009. Among those, highest attention is paid to duck meat, DOD (day old duck) and pullet as future potential exportable products. Investment to livestock sector will be, therefore, planned to be increased by 12.2% during 2005 - 2009 period. In the vision, 4 programs are prioritized: i) food livestock sources security enhancement program, ii) livestock business empowerment program, iii) animal health control and veterinary community health program and iv) human resources and infrastructure development program.





Duck production is illustrated in Figure 18. Although the Kabupaten focuses on duck, its production is not necessarily in increasing trend. Peak production is observed in 2002 while in 2005, production decreased by 20% from 2002. Kabupaten DINAS applies focal approach to promote duck production. Duck production is concentrated on such focal areas located in the coastal Kecamatans as Gebang (66,500 tails), Panguragan (49,700 tails), Kapetakan (48,220 tails), Losari (39,900 tails), and Cirebon Utara

(17,600 tails), which occupies 81% of total production.

(2) Local Administration

Dinas Livestock consists of five division: (i) Livestock Production Division, (ii) Livestock Business Development Division, (iii) Animal Health Division, (iv) Livestock Infrastructure Division, and (v) Administrative Division. Functional Professional Group are separately organized from those five division to support DINAS technical activities instructed by the head of DINAS.

3.3.2 Characteristics of Kelompok Tani

(1) Kelompok Tani Field Survey and Evaluation Result

Nine Kelompok Tani were surveyed, and their characteristics are summarized in Table 22:

 Table 22
 Summary of Kelompok Tani Surveyed in Kabupaten Cirebon

	Salient Features							
	Advantage	Disadvantage						
Finance	• Out of 9 groups, 6 groups have savings & loan experiences.	• Previous financial assistance and transaction not recorded. Revolving fund not properly work.						
Socio-economy: Poverty Head Count Ratio: 0.28 to 0.47 ^{1*}	• No negative environmental impact is observed.	• Women's participation relatively inactive in most of group (less than 20% of the member).						
Organization	• Partnership agreement is made among 4 groups.	 Profit by group activities is mono- polized by limited members. Profit sharing mechanism is not clear. 						
Production and Processing Technology Level	• Roll sharing through said partnership agreement among groups effectively works.	• It is difficult to disseminate such system to other group due to DINAS's budget limitation.						
Marketing Potential	• Marketing through said Partnership agreement among group (4 group) effectively works.	• Marketing is carried out by individual rather than group at most of group.						
Future Plan	• Future plan in duck development well prepared, particularly 4 groups as introduced above.	 Some groups are weak for plan preparation. Dinas support is lacking at such small groups. 						

1*: Smeru Research Institute (2000), Peta Kemiskinan Indonesia 2000 (Poverty Map of Indonesia 2000)

Each Kelompok Tani has different levels of activities in production and processing as well as the relationship with their marketing target. Some Kelompok Tani sell their products within Desa surroundings of the groups. On the other hand, Tigan Mekar focuses on wide area of the markets including outside Province. Kelompok Tani is, therefore, classified into three categories according to the market features: (i) nearby Desa, (ii) within Kabupaten and (iii) cross provinces, and the qualitative scouring is made as tabulated in Table 23 as follows:

Marketing Type	Kelompok Ta	ani	Finance		Finance Socio- Economy		Oganization		Production & Processing		Marketing Potential		Future Plan		Total	
		(Full Mark)	18.	0	9.0)	26.	5	16.	0	18.5		12.0		100	.0
	Jumbul Jaya 7	Kec. CRBN Utara Desa Babadan	4.8	27%	5.4	60%	9.0	34%	10.4	65%	10.5	57%	7.2	60%	47.3	47%
Markets nearby Desa	Jumbul Jaya 6	Kec. Panguragan	4.8	27%	4.2	47%	14.5	55%	8.8	55%	12.5	68%	6.0	50%	50.8	51%
	Sigranala Indah	Kec. Kaliwedi	4.8	27%	5.4	60%	20.6	78%	12.8	80%	16.1	87%	10.8	90%	70.5	71%
	Trubus	Kec. Kapetakan	4.8	27%	5.4	60%	9.0	34%	10.4	65%	10.5	57%	7.2	60%	47.3	47%
Markets within Kabupaten	Bebek Jaya	Kec. CRBN Utara	13.8	77%	4.2	47%	23.2	88%	11.2	70%	11.1	60%	7.2	60%	70.7	71%
	Branhangan Putih	Kec. Losari	18.0	100%	4.8	53%	22.2	84%	13.6	85%	14.8	80%	9.6	80%	83.0	83%
	Sych Magelury Sakti	Kec. Kapetakan	8.4	47%	5.4	60%	15.8	60%	12.0	75%	13.8	75%	6.0	50%	61.4	61%
Markets cross Province	Tigan Mekar	Kec. Panguragan	9.0	50%	5.4	60%	23.2	88%	11.2	70%	14.5	78%	9.6	80%	72.9	73%
	Sari Sejahtera	Kec. Geban	11.4	63%	4.8	53%	19.8	75%	12.8	80%	14.8	80%	8.4	70%	72.0	72%

 Table 23
 Evaluation Result of Kelompok Tani in Kabupaten Cirebon

Based on the scoruring result and discussion with DINAS, Sigranala Indah for markets nearby Desa group, Bebek Jaya for markets within Kabupaten group and Tigan Mekar for markets cross province group were selected to carry out further study and field workshop, and to prepare improvement plan as sample duck Kelompok Tani model in Cirebon.

From each category, Sigranala Indah (markets nearby Desa group), Bebek Jaya (markets within Kabupaten group) and Tigan Mekar (markets cross province group) were respectively selected to carry out further detailed study and field workshop, and to prepare improvement plan as sample duck Kelompok Tani model in Cirebon.

(2) Institutional Linkages and Production-Marketing Flow

Institutional linkage map is prepared to explain what kind of institutions are related with the community in what kind of degrees, and each group has different institutional linkages. In Sigranala Indah, the community has close connection with financial institution such as BRI and BPR. Although physically located far, pawnshop is also one of the important linkages recognized by the group members.

The member of Babadan village in which Bebek Jaya is located recognized that they have

been influenced especially by District Animal Husbandary Service, Perambanbulan "Al-Qomariyah" Cooperatives, District Irrigation Services and Feed Trader.

On the other hand, Tigan Mekar has been benefited and/or influenced particularly by District Animal Husbandry Service and "Sumber Rejeki" Cooperatives.

(3) Poverty Ranking

The result of poverty ranking at three communities of Kelompok Tani is shown in Figure 19 on the right category, Poorest and Poor percentage is significantly high in Sigranala Indah according to attendants understanding.

(4) Problem, Solution & Follow-up

During the field workshop, problems currently faced by the community is



Figure 19 Community Poverty Percentage (Kabupaten Cirebon)

listed and ranked as respectively summarized from Table 24 to Table 26:

Table 24	Problem Ranking (Kelompok Tani Sigranala Indah)	
----------	---	--

Rank	Problem				
Ι	Lack of capital to finance the business				
II	Dependency of raw material from the rice mill				
III	Unavailability of water during dry season				
IV	Imperfectness of the cages due to unavailability of permanent location				
V	High cost of transportation				

Table 25	Problem Ranking (Kelompok Tani Bebek Jaya)
----------	--

Rank	Problem
Ι	Low price of eggs
Π	Low population of ducks
III	High price of feed
IV	Difficulty in looking for market access
V	Limited amount of credit from Cooperative Al-Komariah (limited to Rp. 1 000 000,-)

Table 26	Problem Ranking (Kelompok Tani Tigan Mekar)

Rank	Problem
Ι	There are not yet special space planning on location for duck farming
Π	Lack of capital to increase breeding and marketing scale
III	Lack of water supply
IV	Lack of transportation facilities
V	Marketing to the outer islands is hampered due to the issue of flu diseases and price instability

The problems faced by Kelompok Tani focus on: (i) capital insufficiency to expand business, (ii) limited marketing activities and (iii) unstable price of egg and duck products. Physical constrains are the problems for the group to develop and expand their activities such as lack of water supply facilities and accessibility to the market. Based on the discussion, each group prepared solution and follows-up for highly ranked problems.

3.3.3 Agricultural Processing

In Cirebon, work-sharing system among farmers' group started in 1990th and this method contributed the development of the industry in Kabupaten Cirebon. This is called as the "Triangle System". The MOU (Memorandum of Understanding) was exchanged between groups in charging fertile egg producing and supply group, DOD (day old duck) supply group and pullets/layer supply group.

Triangle system is effective to newcomers to start duck business by supplying core products. Before establishment of the triangle system became, a lot of inflows of duck products flowed into Cirebon from neighboring Kabupatens, then, there are



certain amount of outflow of duck products from Cirebon to other Kabupaten nowadays, a reputation as a successful approach is established in the country owing to the efforts of Dinas Pertanakan through supports of equipment like hatchery to farmers groups.

Main activities of duck industry can be categorized into 5 items: (i)Fertile Egg Production & Supply, (ii) DOD (Day Old Duck) Production & Supply, (iii) Layer (Pullets) Production & Supply, (iv) Salty Egg Production & Supply, and (v) Other Activities: Meat Duck, Feather, Smoked Ducks, etc.

The variety of ducks in Cirebon is generally Rambon Aking that needs much of water so called wet duck. There are two types of duck breeding system in Cirebon. One is traditional Herding System (*Angon*) and other is fence system. The difference of this 2 system is in Table 27.

Traditional	Semi-Intensive	Intensive				
Employing shepherding	Sometime use shepherding	No shepherding system				
100% feed from field	50% feed from filed and	100% fabricated feed				
	50% from fabricated feed					
Simple cage without reservoir	Cage near river	Dry cage with reservoir				
No medicine and vaccine	Give medicine and vaccine	Intensive use of medicine				
	occasionally	and vaccine				

 Table 27
 Type of Duck Breeding System

Souse: Bank of Indonesia

The traditional free-range duck farming (*Angon*) sets off ducks to paddy fields after harvest where fallen paddy or snails are available as a feed. Farmer migrant with ducks from village to village or crossing District/Provincial borders.

3.3.4 Marketing

According to the interview with DINAS and middlemen, middlemen (bandar, tengkulak,

etc.) are involved in the majority of duck-related transactions (more than 60%) made by Kelompok Tanis. Main Players between farmers (individuals/ groups) and retailers in the market of duck-related product in Cirebon are 1) bandar and tregkulak, 2) village collectors (pengepul), 3) processor, and 4) trader and grosir:

Bandar and tengkulak buy duck product from farmers or collectors, and sell or process to other buyers. Bandar acts as finance provider in the form of loan to farmers or collectors. Many farmers and some collectors are bound by this financing system to sell their product to the finance provider: Bandar. The loan can be in cash or input like duck feed, and the repayment is usually made by eggs. Bandar is usually in higher position and of bigger size in business than tengkulak and collectors.

Village collectors or pengepul are the nearest to farmers in transaction and based in their own village. They buy products from farmers and sell to tengkulak or bandar. In Cirebon, however, village collectors are limited, because of (a) relatively strong duck farmers' groups as represented by partnership by Kelopmpok Tani, (b) more competition caused by no market dominating middlemen's group and (c) low seasonality of duck product unlike fruits and vegetables.

Processors or their groups process to make duck-related product like salted eggs, DOD, pullet for marketing.

Trader and grosir are the nearest to retailers in transactions. Compared with Bandar, they handle more variety of products and have no finance service.

The above market participants including farmers and retailers are in many cases multi-players, like same persons act as sometime farmers and sometime traders. Therefore, marketing channels of duck business in Cirebon rather complicated. Actual examples are:

- (i) Farmer, chairperson and members of groups = Bandar or Tengkulak
- (ii) Bandar or Tengkulak = Collector
- (iii) Bandar or Tengkulak = Processor
- (iv) Retailer = Processor

According to DINAS Livestock Cirebon, 55% to 60% of duck farmers organized into groups, while independent farmers are 30 to 40%. Remaining 5 to 10% of farmers are organized by middlemen. As described before, duck business are conducted through middlemen (bandar, tengkulak), and more by individual member farmers than by groups. More than 60% of duck transaction in farmers groups is conducted by middlemen.

As for supply and demand of duck product in Cirebon, much of fresh duck eggs are incoming from other Kabupatens and Provinces due to shortage of supply, while DOD are outgoing. Every movement of the product gives middlemen a chance for business. Salted eggs and pullets are reported to be in equilibrium as a whole. Table 28 indicates the rough estimate made by DINAS Peternakan, Cirebon for the last year (2005).

Table 28 Supply and Demand of Duck Product in Kabpa	en Cirebon (2005)
---	-------------------

Duck product	Supply (Quantity)	Demand (Quantity)			
Fresh eggs (fertile 80%, infertile 20%)	1,200,000	4,000,000			
DOD	2,600,000	650,000			
Areas of partners (Kabupatens/Provinces): Subang, Kerawang, Indramayu, Garut, Bekasi and Majalengka					
(West Java), Mojokerto (East Java), Brebes, Jegal and Cilacap (Central Java), Lampung, Riau, Kalimantan					
Tengah and Irian Barat (Other Provinces)					

Range and average of the prices of duck products are summarized in Table 29. This suggests that a margin of middlemen and retailer is approximately 10 to 15% in gross and 5 to 10% in net, assuming the cost at Rp.50/egg), seems to be within a reasonable range.

 Table 29
 Summary of Selling Prices Data in Kabupaten Cirebon (Rp./piece)

		Fresh Egg		Salted Egg					
	Farmers	Middlemen	Retailers	Farmers	Middlemen	Retailers			
Range	600 - 850	740 - 900	(N.A.)	(N.A.)	575 - 1,100	950 - 1,150			
Average	697	789	(N.A.)	(N.A.)	916	1,064			
D		D							

Data Source: KTs, Middlemen, Pasars, by interview in Aug-Nov 2006.

Retail price of salted duck eggs in Jakarta indicate are 50% higher than in local retail prices in Cirebon.

3.4 Kabupaten Kuningan

3.4.1 General

(1) Kabupaten Policy of Agriculture Development and Sample Commodity

Agriculture-based development is stressed to improve rural community in Kabupaten Kuningan according to BAPPEDA. BAPPEDA prepared the policy on "Agropolitan Area Development" in 2006, this policy divides Kabupaten into four zones respectively centered by four Kecamatan: Cilimus, Ciawigebang, Luragung and Kuningan. Each zone has different focus and target of commodities depending upon its own potentiality. Out of four zones, Cilimus zone is directed to be a production center of sweet potato.

In the Strategic Planning 2004-2008, Kabupaten put priority on the following programs:



Source: Data By Dinas Agriculture Kabupaten Kuningan, 2006



(i) Agriculture Human Resources Quality Improvement Program, (ii) Food Security Enhancement Program, and (iii) Agribusiness Development Program, according to the strategic plan 2004 - 2008.

Sweet potato, a sample commodity in this Kabupaten, is one of the prioritized commodities in Kuningan. Sweet potato production is illustrated in Figure 21. The Figure, the year 2002 shows better production while production in recent three years is stagnant. Sweet potato production center is Kec. Cilimus and

Cigandamekar, according to the Kabupagten statistical yearbook 2003. These area produces 59,500 ton of sweet potato equivalent to 54.8% of total production in Kabupaten followed by Kec. Jalaksana (16,500 ton), Pancalang (9,900 ton) and Cipicung (7,100 ton).

(2) Local Administration

Dinas Agriculture of Kabupaten Kuningan consists of five divisions: (i) Food Security and Programming Division, (ii) Food Crop and Horticulture Division, (iii) Livestock and Fishery Division, (iv) Extension and Resource Development Division, and (v) Administrative Division. DINAS Agriculture is in charge of both agriculture and livestock sector. Functional Professional Group are also separately organized from those five division to support DINAS technical activities instructed by the head of DINAS.

3.4.2 Characteristics of Kelompok Tani

(1) Kelompok Tani Field Survey and Evaluation Result

Seven sweet potato Kelompok Tani extending four Kecamatan including sweet potato center Kec. Cilimus and Cigandamerkar were surveyed. The characteristics are summarized in Table 30:

	Salient Features							
	Advantage	Disadvantage						
Finance	expand savings & loan activities since its organizational strength.	 Savings & loan experiences are rare, only 4 groups have experience with low performance. 						
Socio-economy Poverty Head Count Ratio: 0.31 to 0.50	 No negative environmental impact is observed for sweet potato production and processing activities. 	• Women member is very limited at all group.						
Organization	• 1 group, Andayarasa, have relatively strong group cohesion and potential.	• Most of the group remains weak from the view point of profit sharing and functions.						
Production and Processing Technology Level	production while other 4 are processing. Clear roll sharing.	 Local consumption is only approximately 30 % of total production. Sweet potato conservation technology is not acquired by group. 						
Marketing Potential	• No "dominat" influential bandar is there, and fare and open competition.	 Marketing depend on individual, and group marketing is still challenging. 						
Future Plan	• Two large scale sweet potato factories exist in Kabupaten.	• Only 2 groups have future plan.						

 Table 30
 Summary of Kelompok Tani Surveyed in Kabupaten Kuningan

Surveyed Kelompok Tani can be largely classified into two: (i) Kelompok Tani engaged in production and (ii) those engaged in processing. Firstly, Kelompok Tani are classified into such groups and qualitative evaluation was made to select model Kelompok Tani from each category as tabulated in Table 31:

Main Activities	Kelompok Tani		Kelompok Tani		Fani Finance		Socio- Economy		Oganization		Production & Processing		Marketing Potential		Future Plan		Total	
		(Full Mark)	7.2	2	3.6	6	10.	6	6.4	ŀ	7.4	1	4.8	3	40.	0		
	2 Mekarsari	Kec. Cigandamekar Desa Indrapatra	1.2	17%	1.2	33%	0.0	0%	1.6	25%	3.7	50%	0.0	0%	7.7	19%		
Production	3 Harapenmulya 1	Kec. Jalaksana Desa Manisior	1.2	17%	1.2	33%	3.7	35%	2.4	38%	3.7	50%	2.4	50%	14.6	37%		
Floadction	5 Tiltamulya	Kec. Cipicung Desa Cimaranten	0.0	0%	1.2	33%	2.4	23%	0.8	13%	1.4	19%	0.0	0%	5.8	15%		
	7 Andayarasa	Kec. Cilimus Desa Bandorasa Wetan	4.8	67%	1.8	50%	10.0	94%	1.6	25%	7.4	100%	4.8	100%	30.4	76%		
	1 Harapenmulya	Kec. Cigandamekar Desa Indrapatra	0.6	8%	1.2	33%	4.4	42%	2.4	38%	3.7	50%	0.0	0%	12.3	31%		
Processing	4 Binakarya	Kec. Jalaksana Desa Manisior	0.6	8%	1.2	33%	2.4	23%	4.8	75%	4.7	64%	4.8	100%	18.5	46%		
FICESSING	6 Jatimulya	Kec. Cipicung Desa Cimaranten	0.0	0%	1.8	50%	0.0	0%	1.6	25%	1.4	19%	2.4	50%	7.2	18%		
	8 Linggasari 2	Kec. Cilimus Desa Lingga Indah	4.2	58%	1.8	50%	7.3	69%	5.6	88%	3.8	51%	0.0	0%	22.7	57%		

 Table 31
 Evaluation Result of Kelompok Tani in Kabupaten Kuningan

On the basis of scouring result, Kelompok Tani Andayarasa in Kec. Cilimus having high level of evaluation result in most of the aspects was selected from production group while two Kelompok Tani, Bina Karya and Linggasari 2 were selected as the group currently specialized in processing.

(2) Institutional Linkages and Production-Marketing Flow

Institutional linkages and production-marketing flow were prepared through the field workshop organized at Andayarasa, Bina Karya and Linggasari 2. In Andayarasa, financial institution consisting of BPP Cilimus and BRI Cilimus has been beneficial and influential to the group. In addition, since the group has been promising in sweet potato production due to its well-maintained irrigation facilities, the groups paid great attention to Water Users' Association (WUA).

As for the communities of Bina Karya, benefit/influence from government services including extension worker and DINAS Irrigation are significant according to the attendants.

One of the remarkable points observed in Linggasari 2 is that many parties are related

with the group and the village community. Among others, the Village Government, traders, financial institutions are key players to be influential to the group.

(3) Poverty Ranking

The result of poverty ranking at three Kelompok Tani is shown Figure 22 on the right shows that percentage of



Figure 22 Poverty Percentage of Communities (Kabupaten Kuningan)

Poorest and Poor category, 30 to 40%, is recognized relatively lower than that of duck farmers' group in Kanbupaten Cirebon.

Problems, Solution and Follow-up (4)

During the field workshop, problems currently faced by the community is listed and ranked which is tabulated in Table 32, Table 33 and Table 34:

Rank	Problem
Ι	High price of fertilizer
II	Lack of capital for land cultivation (hiring labor)
III	Difficulty to conduct regular meeting
IV	Difficulty in overcoming lanas (borer) pest
V	No government control for price stability of sweet potato

Table 32	Problem Ranking (Kelompok Tani Lingassari 2)

Table 33 Problem Ranking (Kelompok Tani Andayarasa)						
Rank	Problem					
Ι	Limited capital to purchase fertilizer and pesticides					
II	High price of fertilizer and pesticides					
III	The price of sweet potato is determined by the croupier (trader)					
IV	Lanas pest cannot be overcome					
V	Unsatisfactory yields as well as income					

able 33	Problem F	Ranking (Kelompok	Tani Anda	yarasa)	

	Table 34	Problem Ranking	(Kelompok Tani	i Bina Karya)
--	----------	------------------------	----------------	---------------

Rank	Problem					
Ι	Decreased production due to decreased water supply					
II	Limited knowledge and skill on processing technology					
III	Financial institution has not reached (benefited) Farmers' Group Bina Karya					
IV	Inability to practice balanced fertilizer due to the high price of fertilizer					
V	Decreased price of plant products during harvest time					

Production-related problems are ranked higher through the discussion such as (i) high price of fertilizer, (ii) limited capital to purchase fertilizer, (iii) unstable and decreased production, and (iv) insufficient capital for cultivation. Based on the discussion, each Kelompok Tani prepared problem solution and follows-up for highly ranked problems.

3.4.3 Agricultural Processing

Productivity and production of sweet potato in Kabupaten Kuningan is quite good, and unit yield reaches to 20 ton/ha. Most areas of sweet potato locate in foot of Mount Ciremay and its slope is fertile with good irrigation system.

Farmers groups work on various sweet potato processing, and popular products are Keremes, Dodol, flour and chips. Some farmer groups challenge unique processing such as ice cream or *Sambal* sauce production under the leadership of the group leader. All of these works are small-scale and their markets surround their domiciles only. The biggest issues being small-scale activity of them are lack of capital for business expansion, weak marketing capability and lack of approach to new products/technology.

Such farmer group's work on those traditional products within their cottage-level work yard, they rather can keep the cohesiveness among them because each processing skills are almost same level such as at KT Jatimulya, KT Tiltamulya. However, in case required processing technology is not ordinary and belongs to a personnel, the operation tends to be a personnel business although some official assistances are arranged, such as at Binakarya for *Sambal* sauce production and Lingasari 2 for ice cream making.

For establishing modern processing operation of Kelompok Tani, there are a lot of problems to be tasked such as development of members' ownership and cooperation, management capability, marketing ability, transparency of book-keeping, fair profits sharing and so on.

Two large-scale sweet potato processing factories are operating in Kabupaten Kuningan. One is PT. Galih Estetika located at Kec. Cilimus. This company produces sweet potato paste for export to Japan, Korea and China, and employs about 250 workers from surrounding area. Galih Estetika processes about 10,000 ton of fresh sweet potato annually. They use Bogor variety as a raw material, rich in sugar contents, and purchase it from Kabupaten Majalengka through collectors. Farmers in Kuningan reported that the climate and soil condition are not fit to Bogor variety causing low production yield, so farmers don't produce this variety in Kuningan.

According to a company manager, he is reluctant to purchase raw material directly from a farmer or farmers group. Main reasons were that farmers were not keeping the promise to supply the required quality, to deliver the amount on time and at reasonable prices.

The other sweet potato processing factory is PT. Global Agro-Inti located at Kec. Ciganda Mekar. Their product is sweet potato flour. As the operation started in December 2005, they do not start full operation yet but they plan to produce 3,500 ton of sweet potato flour using 10,000 ton of raw sweet potato annually. The required variety of sweet potato is AC white/red, popular in Kuningan.

Global Agro-Inti equips large-scale modern machines such as high-speed slicing machine, huge rotary dryer with kerosene burner and pin mills. Sweet potato flour has market demand as adding flour to wheat flour. So wheat flour price strongly influence to sweet flour prices. If the prices of wheat flour become lower, the sweet potato flour's prices are lowered. Wheat flour prices in Indonesia is around Rp.4,000/kg currently, the acceptable prices of sweet potato flour in markets is lower than Rp.3,500/kg. This company is positive to procure dried sweet potato chips from farmers for processing material. But their experience shows that dried chips produced by farmers are dried on bamboo trays in the open air, and had contamination problems of dust or sand. Quality assurance is essential on this matter by farmers when they will start.

On the other hand, solar energy as heat source draws attention to researches and trials in Indonesia. For example, IPB (Bogor Agricultural University) developed several types of solar dryers applicable to vegetable, fruits, tubers and fish drying. Such new developments and technologies should be disseminated to rural area. Concrete planning

and supporting arrangement on technical and financial matters is required for the improvement of farmer's income through agricultural processing.

3.4.4 Marketing

(1) Marketing Channels

Overall marketing channels of sweet potato in Kabupaten Kuningan are outlined in Figure 26. According to the interview to DINAS, middlemen like bandars are involved in the majority of sweet potato related transactions (about 80%). Main players acting between farmers and retailers in the market of sweet potato in Kuningan are 1) bandar, 2) village collectors (pengepul), 3) processor and 4) traders and grosir. Market participants are in many cases multi-players.

Many farmers are bound by using middlemen's loan to sell their product to the finance provider (middlemen) at the latter's initiatives. Big bandars have their own shops in big marketplaces (pasar induk).

Village collectors and Pengepul are the nearest to farmers in transactions and based in their own village, usually acting in between farmers and bandars. Since no market dominating bandar groups exist in Kuningan, village collectors in this Kabupaten seem to be rather free, compared with Majalengka case.

According to the estimate of DINAS Agriculture, 40% of sweet potato farmers are organized into group. Sweet potato business in Kuningan are conducted mostly (80%) through middlemen and bandar, and more by individual member farmers (including chairpersons) than by groups. Out of the transactions through middlemen, 90% is destined to grosirs or processors in other Kabupatens and provinces. Thus, more than 70% of sweet potato produced in Kuningan are outgoing through middlemen in fresh form. Remaining 30% is distributed to local processors and wholesalers. As described before, there is no bandar group dominating sweet potato market in Kuningan, however, more fair and open competition is observed among middlemen.

Range and average of prices and margins are summarized in Table 35, and it shows that a margin of middlemen and bandar is about 5-10%, this seems to be a fair level acceptable by farmers, and reflect some competitive situation among middlemen in Kuningan.

Table 55	initial chief s benning i rices and margin	is in Rubupaten Runngan (Rp./itesn Rg)
	Selling Prices	Margin in net
Range	1,300 - 1,450	40 - 150
Average	1,380	93

 Table 35
 Middlemen's Selling Prices and Margins in Kabupaten Kuningan (Rp./fresh kg)

Source: KTs / Middlemen / Pasars, by interview in Aug-Nov 2006.

Price data in Jakarta indicate that differences in retail prices of fresh sweet potato between supermarkets in urban area and local market (Kuningan) are much bigger than in wholesale prices.

3.5 Kabupaten Majalengka

- 3.5.1 General
 - (1) Kabupaten Policy of Agriculture Development and Sample Commodity

Kabupaten Majalengka agriculture development policy focuses on two main issues: food security and agribusiness development through integration of available natural and human resourcess in a sustainable manner according to the strategic plan in 2003 and 2004.

The policy puts priority on seven programs under two categories of general programs and special programs. General programs includes two programs: (i) Food Security Enhancement Program and (ii) Agribusiness Development Program. Special program consists of: (i) Agriculture Human Resource and Institution Development Program, (ii) Potential Agribusiness Area Development Program, (iii) Agribusiness Competitive Commodity Area Mapping Program, (iv) Agriculture Production Development Program and (v) Infrastructure and Facility Development Program.



Production data of sweet potato, a sample commodity for Majalengka, is illustrated in Figure 23 on the left. Although there was a depression in 2003 due to unfavorable climatic condition, sweet potato production in Majalengka shows 60% increase since 2001.

Sweet potato production is concentrated on five Kecamatan. Most productive area is Kec. Maja producing 4,018 ton, 30% of total production followed by Cigasong (2,130 ton), Argapura (1,352 ton), and Majalengka (952 ton),

according to the Kabupaten statistical yearbook 2004.

(2) Local Administration

Dinas Agriculture of Kabupaten Majalengka consists of five divisions: (i) Paddy & Secondary Crop Division, (ii) Horticulture Division, (iii) Livestock Division, (iv) Fishery Division, and (v) Administrative Division. DINAS is in charge of both agriculture and livestock sector. Functional Professional Group are also separately organized from the five divisions to support DINAS technical activities instructed by the head of DINAS.

3.5.2 Characteristics of Kelompok Tani

(1) Kelompok Tani Field Survey and Evaluation Result

Eight Kelompok Tani extending four Kecamatan were surveyed in Majalengka, characteristics of which are summarized in Table 36:

	Salient Features							
	Advantage	Disadvantage						
Finance	• Saving & loan experience at groups GPK Mitra Binangkit and Delima 2 is illustrious.	• groups except for two remain quite low level in financial management experience and performance.						
Socio-economy Poverty Head Count Ratio: 0.18 to 0.32	 No negative environmental impact is observed for sweet potato production and processing activities. Active women's participation are observed at 3 groups. 	• Irrigation ratio is not low level, most groups surveyed are located in mountainous area thereby facing insufficient irrigation facilities and unstable water supply for cultivation.						
Organization	 Above-mentioned 3 groups have more transparent activities. Profit sharing would be better. Groups supported by P4K shows better performance (Delima 2). 	• Except for women-led 3 groups, there are no outstanding activities as a group.						
Production and Processing Technology Level	• Bogor variety is suitable to be grown and has a potential foreign market through private company (P.T. Galih Estetika).	 Processing remains home industry level, large scale sweet potato factories. Sweet potato conservation technology is not acquired by groups. Production is affected by poor irrigation facilities. 						
Marketing Potential	• Loan is provided and marketing is somehow ensured by influential bandar group.	• Sweet potato marketing is highly dominated by bandar group. Nearly 70% of total production is traded through this group.						
Future Plan	• Women-led 3 groups have clear future plan.	• Others do not have clear future plan.						

 Table 36
 Summary of Kelompok Tani Surveyed in Kabupaten Majalengka

Kelompok Tani surveyed were firstly categorized into two: (i) "Production" Kelompok Tani and (ii) "Processing" Kelompok Tani. Evaluation was made considering such point and groups were selected. Scouring result is summarized in Table 37.

Main Activities	Kelompok Tani		Finance		Socio- Economy		Oganization		Production & Processing		Marketing Potential		Future Plan		Total	
		(Full Mark)	18.	0	9.0)	26.	5	16.0	C	18.	5	12.	0	100	.0
	1 Sawah Lega	Kec. Majalengka Desa Kawunggirang	3.6	20%	4.2	47%	9.4	35%	7.2	45%	5.1	28%	4.8	40%	34.3	34%
Production	2 Ciminyak	Kec. Majalengka Desa Kawunggirang	3.6	20%	4.2	47%	8.0	30%	4.0	25%	5.1	28%	2.4	20%	27.3	27%
FIGULEION	3 Serang	Kec. Maja Desa Banjaran	3.6	20%	4.2	47%	8.0	30%	8.0	50%	5.1	28%	4.8	40%	33.7	34%
	4 Sawah Loa	Kec. Maja Desa Cihaur	3.6	20%	4.2	47%	11.4	43%	8.0	50%	5.1	28%	8.4	70%	40.7	41%
	5 GPK Mitra Binangkit	Kec.Cigasong Desa Tajur	11.4	63%	6.6	73%	19.2	72%	7.2	45%	13.5	73%	7.2	60%	65.1	65%
Processing	6 Sindang Mulya	Kec. Maja Desa Sindang Kerta	3.6	20%	6.6	73%	19.2	72%	6.4	40%	5.1	28%	4.8	40%	45.7	46%
	7 Delima 2	Kec. Telega Desa Tarikolot	12.0	67%	7.2	80%	20.1	76%	7.2	45%	14.8	80%	9.6	80%	70.9	71%

 Table 37
 Evaluation Result of Kelompok Tani in Kabupaten Majalengka

Kelompok Tani Delima 2 in Kec. Telega and GPK Mitra Binangkit in Kec. Cigasong were selected from "Processing" group. Kelompok Tani categorized into "Production" group is in primitive and unstable level of production and still challenging for starting

processing. Therefore, they needs to stabilize production through the assistance by DINAS, then commence processing gradually in the next stage.

(2) Institutional Linkages and Production-Marketing Flow

Institutional Linkages and production-marketing flow shows that Mitra Binangkit has been benefited particularly by the government services consisting of DINAS Agricultural, BPP and extension offices. Financial institution such as BRI Cab Majalengka is also an important institution for the group. Although BPR was listed up as Community Empowerment Institute (LPM), they have relatively low influence toward the group.

In Delima 2, the attendants also raised benefit and/or influence from the Government Services consisting of District Agriculture Services, Irrigation Services and Estate Crop Services. Different from Mitra Binangkit, influence from LPM is recognized as "Very Big." Fianancial institution, BRI Cabang Majalengka is listed up as beneficial and influential institutions as similarly seen in Mitra Binangkit.

From the institutional mapping prepared in three Kabupaten in West Java Province, similar pattern is observed related with closeness of Kelompok Tani with existing institution. Kelompok Tani have closer relation with government agencies particularly DINAS Agriculture and Livestock and extension worker. Financial institution was also listed up through the mapping, however, accessibility differs among the group members. Many of the group mentioned that the group account is owned using chairman's name. Accessibility as a group is not necessarily high. Marketing development is still developing process at most of the groups, therefore, traders are also one of the important parties toward the activities by Kelompok Tani.



(Kabupaten Majalengka)

The result of poverty ranking at two Kelompok Tani is shown, Figure 24 shows that the Poor population in the communities where Delima 2 is in place is in low percentage than Mitra Binangkit.

(4) Problems, Solution and Follow-up

During the field workshop, problems currently faced by the community is listed and ranked which is summarized in Table 38 and Table 39:

	Table 56 Troblem Ranking (Reformpor Tam Dennia 2)				
Rank	Problem				
Ι	Limited capital to increase the sales				
II	No means of transportation owned by the group				
III	Traditional processing equipment (manual and no safety measure)				
IV	Limited processing skills among members				
V	Limited raw material				

Table 38Problem Ranking (Kelompok Tani Delima 2)

 Table 39
 Problem Ranking (Kelompok Tani Mitra Binangkit)

Rank	Problem					
Ι	Lack of capital to buy raw material					
II	Low level of profit					
III	Limited marketing (warung/small shop, pedagang keliling/peddler, and order)					
IV	Lack of skills (in processing and marketing)					
V	Unsatisfactory packaging of products					

Both Kelompok Tani rose that "insufficient capitals" is the most considerable problems in the group. Processing and marketing related problems are also listed particularly current low processing and packaging skills. Based on the discussion, each Kelompok Tani prepared problem solution and follows-up for highly ranked problems.

3.5.3 Agricultural Processing

Productivity and production of sweet potato in Majalengka District is lower than Kuningan District. In this area, farmers plant sweet potato usually one time in a year during wet season. Majority of areas planting sweet potato have not irrigation canal, so farmer plants sweet potato or paddy in wet season. On the contrary, unit yield of sweet potato planted in wet season is lower than that in dry season. It is also reported that farmers do not use superior seed intensively; the production yield and tolerance to diseases are getting deteriorated year by year. It is important to establish the seed multiplication and supply system of quality seed of sweet potato by Dinas Agriculture.

In Majalengka, many small women's groups engage in producing and selling traditional sweet potato products. For example, 37 women (no male member) formed KT Mitra Binagkit at Kec. Cigasong 1992 and started producing traditional *Keremes, Kecemplung* and *Papais*. Production equipment is ordinary house ware such as kerosene stove, manual slicing tool, frying pan and kitchen knives. The group leader is responsible to marketing and takes a public bus to go to pasar twice a week and deliver their products to retailers and collect the payment. As the production and marketing scale are quite small, the additional incomes to each member is limited at around Rp.400,000/year per each member. KT Mitra Binagkit wishes to have financial assistance officially to enlarge their business scale.

KT. Delima 2 located at Kec. Talaga, with 16 members (5 men and 11 women) produces fried chips of Sweet Potato, Banana, Cassava, Taro and *Keremes* everyday. They sell neighboring Talaga marke, and have regular business with 20 shops in the market. Payment term is cash on deliver style. They can produce 23 traditional items but

normally they produce 10 items only. Their main issue for the production and sales of traditional products is difficulty to collect raw materials like immature banana. Delima 2 also wishes to have a soft loan from Government for the business expansion.

These farmers' activities for the income generation are small-scale in terms of production facility and business scale utilizing locally available materials. Expansion of marketing area for those products is difficult. This business type is classified as "Local Production and Local Consumption/Marketing using Local Produces".

Another women group named Asri Rahayu in Majalengka city produces various agricultural processed products like fried mango chips, processed by vacuum fryer and traditional fried chips, *dodol, keremes*, etc. Their marketing area spreads over to Cirebon and Bandong. Packages are better than of other group. They have been supported by Dinas Industry.

3.5.4 Marketing

One particular middlemen's group dominates more than 70% of sweet potato market in Majalengka.

DINAS Pertanian Majalengka estimates that out of sweet potato production, 3% is for seed for next crop, 2% for farmers' self consumption and the remaining 95% is for distribution in the market. Main market of processed product seems to be rural area.

Main Players actors in between farmers and retailers in the market of sweet potato in Majalengka are 1) bandar and tengkulak, 2) village collectors (pengepul), 3) processor, 4) trader and grosir. These market participants are in many cases multi-players.

As for bandar and tengkulak, described before, one particular middlemen's group ("Sinar Ubi") dominates the majority of sweet potato market in Majalengka. Many farmers (in many cases collectors too) are bound by using middlemen's (bandars') loan to sell their product to the finance provider (middlemen) at the latter's initiatives.

Village collectors (pengepul) are the nearest to farmers in transactions and based in their own village, usually acting in between farmers and bandars. In the areas dominated by the particular bandar group, village collectors are linked with them.

According to DINAS, one dominating middlemens' group (Sinar ubi) accounts for 70% of total production. Main destination of the product through this group is big processors for export in other Kabupatens and provinces, and demand of sweet potato in Majalengka is limited. In the areas dominated by the said middlemen's group, sweet potato farmers sell their sweet potato to village collectors linked with the group before harvest. Harvesting work is to be conducted by the collectors at their cost. Finance services (loan) are provided from the group to collectors and in same way from collectors to farmers. Prices are determined at the group's initiatives. Farmers have no choice for marketing. In other areas, however, marketing by farmers seems to be more open.

Selling prices of sweet potato product were collected at every point of marketing channels. Although number of samples is limited, average of the prices are summarized in Table 40. This data indicate quite low selling price at farmers and a high margin at middlemen in the group's dominating areas, compared with Kuningan and non-dominant areas in Majalengka. This shows that no or less competitive situation among middlemen cause more disadvantage to farmers.

	"Sinar	Ubi" dominatii	ng areas	Non	-"Sinar Ubi" a	ireas
	Farmers	Collectors*	Middlemen	Farmers	Farmers Collectors	
Average	565	800	1,250	989	(N.A.)	1,137

* Collectors' transactions are mostly made before harvest, so, prices include harvesting/transportation cost, Source: Farmers and middlemen, by interview in August to November 2006.

Price in Jakarta indicates that differences in retail prices of fresh sweet potato between urban areas (supermarket) and local market (Majalengka) are much bigger than in wholesale prices.

3.6 Kabupaten Mojokerto

3.6.1 General

(1) Kabupaten Policy of Livestock Development and Sample Commodity

According to the strategic plan 2001–2005 prepared by Mojokerto DINAS Livestock and Fishery, one of the six missions is "to increase livestock production and productivity through breeding, feed development and livestock technology application." In this vision, DINAS aims to increase livestock population by 2.1% annum for big animals and 1.6% per annum for small animals as well as egg and milk production of 2.0% per annum. Sample commodity, duck is one of the focuses to be developed.

There are five programs under DINAS initiative: (i) fishery and livestock production development program, (ii) a million cattle artificial insemination program, (iii) food security enhancement program through supplying animal protein sources and Empowerment of fishermen activities, (iv) fish seed infrastructure and facility empowerment program and (v) prevention and observation of animal diseases, Periodical Livestock Vaccination and Examination of Meat and Milk Quality.



Source: Appendixs of Annual Report 2005 Prepared By Central Bureau Satistics Kabupaten Majalengka Figure 25 Production of Duck (Kabupaten Mojokerto)

In addition, DINAS Agriculture is paying attention to community development through promoting highly competitive and sustainable market oriented agriculture, particularly agri-business development. Duck production and processing is clearly justified by those strategies.

Duck production in Kabupaten is shown in Figure 25 on the right depicting gradual growth in recent five years although there is no Kecamatan basis data available. Total duck production of Kabupaten in 2005 is 206,900 tails equivalent to approximately 15% increase from 2001.

(2) Local Administration

DINAS Livestock and Fishery Services of Kabupaten Mojokerto consists of six divisions: (i) Program and Extension Division, (ii) Production and Development Division, (iii) Veterinary Division, (iv) Farming System and Processing Division, (v) Fishery Development Division and (vi) Administration Division. Functional Professional Group are also separately organized from those six division to support DINAS technical activities instructed by the head of DINAS. Local Technical Implementation Unit (UPTD) is placed directly under the Head of DINAS to be in charge of field extension.

3.6.2 Characteristics of Kelompok Tani

(1) Kelompok Tani Field Survey and Evaluation Result

Five Kelompok Tani in five Kecamatan were surveyed, characteristics of which are summarized in Table 41:

	Salient Features							
	Advantage	Disadvantage						
Finance	• Accessibility to financial institution is comparatively better even through they are still individual level.	• Saving & loan is not so active except for Group Lestari Sejahtera.						
Socio-economy Poverty Head Count Ratio: 0.21 to 0.27	• No serious negative environmental impact is assumed by promotion of duck production and processing.	• Lestari Sejahtera has active participation of women while others not.						
Organization	• No specific advantage is observed.	No partnership agreement like Cirebon is observed.Network with other groups is weak.						
Production and Processing Technology Level	• Different from Kabupaten Cirebon, male DOD demand is high and the price is good.	• There is no partnership agreement (MOU) among Kelompok Tani such like Cirebon.						
Marketing Potential	Marketing development capability of groups relatively strong.Duck collectors are active.	 Demand of duck products within Kabupaten is small. Products are to other Kabupatens and Provinces. 						
Future Plan	• Male DOD potential can be considered for future development.	• No specific future development idea is available at DINAS Peternakan.						

 Table 41
 Summary of Kelompok Tani Surveyed in Kabupaten Mojokerto

Based on the field survey, following qualitative evaluation is made to select model Kelompok Tani as shown in Table 42:

Kelompok Tani		Finar	nce	Soci Econo		Oganiz	ation	Produc & Proces		Marke Poter	0	Future	Plan	Tot	al
(Full Mark)		18.0		9.0		26.5		16.0		18.5		12.0		100.0	
1 Karya Tani	Kec. Pungging Desa Pungging Dusun Punging	9.6	53%	4.2	47%	18.3	69%	11.2	70%	11.1	60%	8.4	70%	62.8	63%
2 Tani Mulyo	Kec. Bangsal Desa Mejoyo Dusun Jumpat	12.6	70%	6.6	73%	16.6	63%	9.6	60%	12.1	65%	8.4	70%	65.9	66%
3 Mulyo Tani	Kec. Mojo Anyar Desa Sadar Tengah Dusun Sadar	4.8	27%	4.2	47%	9.7	37%	9.6	60%	11.1	60%	4.8	40%	44.2	44%
4 Baski	Kec. Bagsal Desa Salen Dusun Dadapan	10.2	57%	4.2	47%	11.7	44%	9.6	60%	11.1	60%	4.8	40%	51.6	52%
5 Lestari Sejahtera	Kec. Mojo Sari Desa Modopuro Dusun Gedung	12.0	67%	6.6	73%	10.5	40%	11.2	70%	14.8	80%	7.2	60%	62.3	62%

 Table 42
 Evaluation Result of Kelompok Tani in Kabupaten Mojokerto

Field survey clarified that, currently, duck market in Mojokerto is actively driven by collectors and the demand of duck commodity is really high, so called sellers' market. With the help of such active collectors, market is expanding in Surabaya and surrounding area. Selection is, therefore, made based only upon the qualitative score. From this exercise, three Kelompok Tani consisting of Karya Tani, Lestari Sejahtera and Tani Mulyo are selected for model groups.

(2) Institutional Linkages and Production-Marketing Flow

In Karya Tani, government services have been beneficial and influential to the group, services of which include PPL, village government and family welfare empowerment. P4K, supporting the group, is also an important connection as having been recognized. As a financial institution, BRI Pungging is raised as very important.

Attendant Lestari Sejahtera also pointed out the importance of Government Services. Different from Karya Tani, importance of Religious Organization, Muslimat NU was



(Kabupaten Mojokerto)

additionally mentioned. Benefit from financial institution is comparatively small in the community of Karya Tani.

"Most Biggest" connection in the community of Tani Mulyo is village government, financial insititution (BRI Bangsal), and Muslimat NU which is same as Lestari Sejahtera. Production- marketing flow showing direction flow and of production-marketing process made by farmers as a system.

(3) Poverty Ranking

The result of poverty ranking at three Kelompok Tani is summarized in Figure 26 on the right. Poorest and Poor category shows comparatively lower percentage in the

community of Kelompok Tani Tani Mulyo.

(4) Problems, Solution and Follow-up

During the field workshop, problems currently faced by the community at three Kelompok Tani is listed and ranked as summarized in Tables 43, 44 and 45:

Rank	Problem							
I	Limited fund to increase duck cages							
	Limited fund to increase duck population							
II	Traditional feed mixing equipment							
III	High level of mortality (10-15% within ages of $0-20$ days)							

Table 43Problem Ranking (Kelompok Tani Karya Tani)

Table 44	Problem Ranking (Kelompok Tani Lestari Sejahtera)	
	D 11	1

Rank	Problem
Ι	High price of feed
II	Lack of capital to buy feed and fuel
III	Increased price of fuel
IV	Instability of DOD price
V	Weather changes

	Table 45 Troblem Kanking (Kelompok Tam Tam Wuryo)
Rank	Problem
Ι	Limited capital to develop duck production
II	Instability of egg production
III	High price of feed and fuel
IV	Instability of price of the products (DOD, egg, and duck)
V	Limited population of ducks

Table 45 Problem Ranking (Kelompok Tani Tani Mulyo)

Limited capital to expand their activities is pointed out as higher ranked problem at all the Kelompok Tani. "Fuel price increase" although as an external factor is also discussed and ranked as serious problem through the session. Problem solution and follows-up for highly ranked problems are prepared by the attendant.

3.6.3 Agricultural Processing

The basic technologies of duck farming and its recover ratio such as breeding, DOD production and salty egg processing are same as in Cirebon. The price formulation is almost same situation. However, following differences are observed.

There is no definitive nucleus suppliers system of fertile egg, DOD and pullet duck like in Cirebon causing restriction of the development of duck breeding business in Mojokerto. It is difficult for new comers to enter into duck business or existing duck breeders who want to expand his business. Dinas Peternakan is recommended to start establishing such triangle scheme in Mojokerto for the development of duck industry.

There is the biggest farmers group engaged in duck business in Modopura Village, KT Lestari Sejahtera in which all members of this group (47 persons) have hatchery and they can produce required numbers of DOD for their own use and fertile eggs, salty eggs and

meat ducks. Smoked duck processing is their special product. The other Keronpok Tani located near KT Lestari Sejatera has tried to develop duck business with technical and finance supports from Dinas since 2001 but this trial is not took root in this village as yet. This village has 200 households but the number of farmers selected by Dinas for starting duck business was only 28 families. Further, houses in village are rather closing up and non-selected farmers disliked the smell and noise from duck. The promotion of new business requires a lot of consideration in all aspects such as the location, environment, human relation, leadership, skill of the management, accounting, transparency of the business, marketing condition, infrastructures and so on.

For hatching process, farmers in this district also use simple technologies; kerosene lamp as heater and hand feel to knowing temperature is common doing by farmers. However, to control temperature of eggs, they not only shut down the kerosene lamp and open the door of hatchery, but they also swap the eggs by wet cloth or spray water over every egg by hand-sprayer. They roll up the eggs in hatchery is reported as only 3 times in a day (in the morning, at noon, and in the evening). New technology such as semi-automatic hatchery with electric heater is not yet introduced to this region.

Variety of most of ducks is Mojosari (local variety and registered as super variety) that is called as dry duck that does not needs much water. Duck meat supply is very active in Mojokerto. Male DOD is bred for meat until 40 - 60 days old, so the selling prices of male and female DOD are sometime exactly same value, not like in Cirebon.

For salty egg processing, beside dry method such as in Cirebon, some farmers groups adapt a wet method. Wet method is that raw eggs are soaked in salty water during 10-12 days only without battering of salt and soil. This wet method is simpler even though quality is lower than battering method but the price in market is almost same. Even the dry method, farmers in this area do not use ash in batter, saying that the taste is no different but they can reduce production cost and work volume. Such new approach should be examined by the authority and be disseminated to other areas if they accept.

Farmers in Mojokerto usually herd their duck when 20 days up to 5 months old (ready to laying). When the ducks start lay, farmers will grow them in fence. Duck house made of brick and roof made of tile, so it looks semi permanent and more cleans than duck house in Cirebon.

Main constraints faced by ducks farmers on ducks farming are same with farmers in Cirebon, that is feed price relatively high but price of raw eggs is relatively low. Also they need capital supporting for business expansion because most of the duck farmers groups are lack of capital.

3.6.4 Marketing

(1) Marketing Channels

Interview with several DINAS officers indicated that middleme are involved in the

majority of duck-related transactions. Main products distributed in duck business in Mojokerto are fresh eggs, salted eggs, DOD and meat duck.

Main players acting in between farmers and retailers in the market of duck-related product in Mojokerto are 1) bandar and tengkulak, 2) village collectors and pengepul, 3), and 4) traders. These market participants are in many cases multi-players. It is not unusual that Kabupaten government staffs are bandar or collectors.

Many farmers are bound by using middlemen's loan to sell their product to middlemen at the latter's initiatives.

Village collectors and pengepul is the player in some kechamatans, and various types of transactions are observed between duck farmers and collectors, such as:

- (i) Commitment basis trading e.g. sell DOD for breeding to and later buy pullet from farmer. Share profit and settle cost at the end.
- (ii) Procure various rejects from food company in other Kabupatens and make it to duck-feed for selling to farmers at rather low prices.

In Mojokerto, no market dominating middlemen's group exists. Under the competitive situation, middlemen (particularly village collectors) have to make an utmost effort to seek marketing opportunity at risk for survival.

According to the estimate of DINAS Livestock Mojokerto, duck farmers belonging to KTs account for 70% of total. Middlemen's own farmers' groups are limited. Duck business is conducted mostly through middlemen and bandar, and more by individual member farmers including chairpersons than by groups.

Although official data are not available, in recent years, a lot of fresh eggs, DOD salted eggs are outgoing to other Kabupatens and Provinces due to strong demand in Surabya and surrounding areas.

Selling prices of each duck product were collected at every point of marketing channels. Although number of samples is limited, range and average of the prices are summarized in Table 46. The data suggest that margin of middlemen is less than 5%, which seems to be a fair level acceptable by farmers, and reflect some competitive situation among middlemen (particularly collectors) in Mojokerto.

Table	Table 46 Summary of Selling Prices Data in Kabupaten Mojokerto (Rp./pce)												
	Fresl	n Egg	Salted Egg										
	Farmers	Middlemen	Farmers	Middlemen									
Range	620 - 760	680 - 700	800 - 850	(N.A.)									
Average	671	695	833	(N.A.)									

 Table 46
 Summary of Selling Prices Data in Kabupaten Mojokerto (Rp./pce)

Source: KTs / Middlemen / Pasars, by interview in Aug-Nov 2006)

Partnership agreement among KTs as observed in Cirebon does not exist in Mojokerto at the moment.

3.7 Kabupaten Kediri

3.7.1 General

Kabupaten agriculture development policy puts priority on: (i) increasing agriculture productivity, (ii) promotion of processing industry particularly increase of value addition through primary processing, (iii) development of production center of prospective products, based on facilitating farmers' group participation. Following five programs are prioritized in Kabupaten agriculture policy: (i) Food Crops Security Improvement Program, (ii) Agribusiness and Agro-industry Development Program, (iii) Development of Best Quality of Fruits and Vegetables Program, (iv) Agriculture Infrastructure



Central Bureau Satistics Kabupaten Majalengka Figure 27 Production of Mango (Kabupaten Kediri) Development Program and (v) Human Resources Development Program.

A sample commodity in Kabupaten Kediri, mango production is shown in Figure 27. Although mango is a kind of perennial crops, production shows significant fluctuation. The production in 2003 demonstrated highest in recent 5 years while the production in 2005 merely reached to the 66% of the production in 2003.

As for the Kecamatan basis production, Tarokan is the most developed in mango production (15,300 ton) followed by Semen (10,100 ton), Grogol (7,700 ton), and Banayakan (7,600 ton).

These 4 Kecamatan dominate nearly 84% of total mango production in Kediri.

Among many varieties of mango produced in Kediri, particularly, Kabupaten put priority on the production of Podang variety as a strategic commodity which are recently cultivated in Kecamatan along Brantas river. Podang variety is officially best mango variety as stated in the Ministry of Agriculture Decree No. 336/Kpts/TP. 240/6/2003.

(2) Local Administration

DINAS Agriculture of Kabupaten Kediri consists of five divisions: (i) Agriculture Production Division, (ii) Business Farming Division, (iii) Land and Plant Protection Division, (iv) Agriculture Infrastructure and Facilities Division, and (v) Administration. Functional Professional Group are also separately organized from those six division to support DINAS technical activities instructed by the head of DINAS.

3.7.2 Characteristics of Kelompok Tani

(1) Kelompok Tani Field Survey and Evaluation Result

Six Kelompok Tani extending four Kecamatan were surveyed, and their characteristics of are summarized in Table 47:

	Summary of Kelompok fam Surveyed in Kabupaten Keurr										
	Salient	Features									
	Advantage	Disadvantage									
Finance	• 2 groups, Budi Daya and Makmur Jaya, are supported by P4K, savings & loan activity is better, particularly, Makmur Jaya was better financial practice evaluated by BRI.	• Access to financial institution is not physically good due to its mountainous topographic condition.									
Socio-economy Poverty Head Count Ratio: 0.29 to 0.42	 No negative environmental impact. Women's participation is relatively higher than other Kabupaten. 	• Physical accessibility is currently hamper the access to the market, which needs to be improved.									
Organization	• Groups in which women is participating is well organized and active in mango cultivation.	• No business alliance is observed like duck farmers' group.									
Production and Processing Technology Level	• Technical assistance from the University Brawijara in Malang is available in order to promote processing.	 Only 2 groups (Budi Daya and Lestari) carry out processing out, and processing technology was not acquired by groups. No mango processing industry exist. Vacuum flyer provided by DINAS is not function at groups Budi Daya. 									
Marketing Potential	• There are marketing options for farmers, Penebas and Pengepul, for farmers, anyhow.	 Demand of mango within Kabupaten is small, and more than 50% of the production are to outside Kabupaten. Group marketing is still challenging. Mango price is made low particularly during peak harvest season. 									
Future Plan	• Qualified Podang and Gedhong Gincu variety can be as potential to improve income of the group.	• Future plan of most of the group is still vague.									

 Table 47
 Summary of Kelompok Tani Surveyed in Kabupaten Kediri

Based on the field survey, following qualitative evaluation is made to select model Kelompok Tani in Kabupaten Kediri:

Kelompok Tani		Finance		Socio- Economy		Oganization		Production & Processing		Marketing Potential		Future Plan		Total	
(Full Mark)		18.0		9.0	9.0		26.5		16.0		5	12.0		100.0	
1 Budi Daya	Kec. Banyakan Ds. Triton	15.0	83%	6.6	73%	17.9	68%	11.2	70%	9.2	50%	7.2	60%	67.1	67%
2 Lestari	Kec. Semen Ds. Pugung	6.6	37%	5.4	60%	15.9	60%	9.6	60%	10.1	55%	4.8	40%	52.4	52%
3 Karya Makmur II	Kec. Tarokan Ds. Bulusari	10.2	57%	5.4	60%	13.9	52%	6.4	40%	8.8	48%	4.8	40%	49.5	50%
4 Makmur Jaya	Kec. Tarokan Ds. Tarokan	10.2	57%	6.6	73%	13.9	52%	7.2	45%	11.4	62%	4.8	40%	54.1	54%
5 Sri Rejeki I	Kec. Grogol Ds. Kalipang	4.2	23%	5.4	60%	14.3	54%	8.8	55%	11.4	62%	4.8	40%	48.9	49%
7 Sumber Makmur	Kec. Grogol Ds. Kalipang	5.4	30%	4.2	47%	13.3	50%	6.4	40%	10.1	55%	4.8	40%	44.2	44%

 Table 48
 Evaluation Result of Kelompok Tani in Kabupaten Kediri

As mentioned above, out of six Kelompok Tani surveyed, only two Kelompok Tani, Budi Daya and Lestari, are engaged in processing. Mango processing is still in the developing and, conversely, most of the Kelompok Tani is generally in the same level in processing. Therefore, different from sweet potato in Kuningan and Majalengka, Kelompok Tani were

not classified into production and processing group but only compared using qualitative score for the selection. From this exercise, Kelompok Tani Budi Daya having competitive in most of the aspects and Makmur Jaya particularly predominating in marketing are selected as model groups.

(2) Institutional Linkages and Production-Marketing Flow

Institutional linkage and production-marketing flow is prepared through the workshop at Kelompok Tani Budi Daya and Makmur Jaya. The community of Budi Daya has been benefited and influenced particularly by Muslimat (religious organization), Village Community and Forestry Institute (LMDH), and Kelompok Tani Hutan located nearby which would have some business relationship. Connection with financial institution is comparatively small at present. This is because of the fact that farmers must indicate collateral before having credit from formal financial institutions. Therefore, farmers in Budi Daya is largely dependent on informal institutions such as brokers as well as money lenders.

On the other hand, at the community of Kelompok Tani Makmur Jaya, benefit/influence given by financial institution, BRI Tarokan, is "Very Big." Relation to the Government Services is also significant including LMDH, District Agriculture services together with Extension Worker, village government and education services. In addition, production-marketing flow showing direction and flow of production-marketing process made by farmers as a system. Mango farmers are primarily dependent on middlemen and trader for mango marketing.



(4) Problems, Solution and Follow-up

During the field workshop in two Kelompok Tani, problems currently faced by the community is listed and ranked as summarized in Table 49 and Table 50 as follows:
Rank	Problem			
Ι	Lack of transportation and bad road condition			
п	Lack of cultivation practices, use of fertilizers, and use of pesticides			
II	The group has not utilized fully the existing financial institution			
III	Traditional packaging (bamboo basket, wooden box)			
IV	Lack of guidance by relevant Government Services/Institutions			
V	Marketing is still local market, the price is not satisfactory			

 Table 49
 Problem Ranking (Kelompok Tani Budidaya)

Table 50Problem Ranking (Kelompok Tani Makmur Jaya)

Rank	Problem
Ι	Irregular market price
II	Lack of knowledge and skills to overcome mango pests and the use of pesticides
III	Bad road condition (from Geneng to Banyakan Market) that makes high cost of transportation
IV	Difficulties in getting capital for production
V	Difficulties in getting fertilizers

Physical accessibility from both Kelompok Tani to the market is notably serious, therefore, it is understandable that lack of transportation and road condition was raised from the attendants as one of the highest raking problems. Common issues also raised were (i) insufficient skills on mango cultivation and (ii) insufficient marketing activities. Based on the discussion, each Kelompok Tani prepared problem solution and follows-up in both long term and short term for highly ranked problems.

3.7.3 Agricultural Processing

DINAS Pertanian East Java promotes Podang mango as the main commodity in Kabupaten Kediri, but until now, no much attention is paid on post harvest handling, processing and marketing from the related institution, then, during harvesting time the price of the mango is sharply drop (before the peak harvest seasonunit price is Rp.2,000/kg but it drops sharply down to Rp.300-400/kg during peak season).

Mango Podang processing is not developed in mango areas (Kec. Tarokan, Semen, Grogol, and Banyakan). Some farmers' groups intend to carry out processing of Podang mango, but they don't have knowledge to process and sell the products. Besides that, most of them are lack of capital to process the mango. Up to now, most of farmers sell their mango in fresh to collector, consequently, in peak season they do not get enough profit due to too low price to cover cost of harvesting.

A women farmers group (KT Budidaya) have got a vacuum fryer for mango and trained from BPTP (Center for Research & Development of Agriculture Technology) Malang. However, mango processing is still in trial stage. They produced mango juice with traditional simple method without pasteurization process, and it lasted long for 1 day only.

As farmers strongly desire to sell out all mango fruits, 75% of mango is sold to collectors before the harvest. This transaction is named as *"Ijon"* system and widely practiced in Java, for mango and such other crops like fruits, tuber like sweet potato, cassava and root

vegetable, even for paddy sometime. The middlemen and collectors made verbal agreement with farmers to purchase such produce based on the bulk of fruit tree or acreage, not by weight or volume and fix the terms of payment before the harvest. Farmers can get cash partially in advance to harvest without risk of wasting products. Hired labors by the collector carry out harvesting, but the farmers do not join harvesting.

Cash amount of mango fruits to the farmer is estimated and decided by buyer (collector) through visual examination at the farm based on his experience. It would be high risk but high return system for a collectors because he can secure to procure the product at farm and negotiate price with farmers in advance. For fruits harvesting in other countries, fruit maturity are different by branch, and farmers harvest the fruit showing well matured first, he never pick up all fruits at once. It seems *Ijon* system is very rare case that farmers sell fruits by a tree or by acreage without farmers' harvesting works. Their attitude and custom of *Ijon* system would be changed before new technologies of harvesting or marketing to be extended to farmers.

There are two worth noting activities have started recently in Kabupaten Kediri. One is dried chip processing of mango fruits at Kelompok Tani level. A NGO named REI Indonesia (Resource Exchange International) located at Bandong started mango processing at KT Sumber Mulyo, Desa Tiron, Kec. Banyakan. REI installed fruits dryer with kerosene burner and conducted technical supervision to the members. At the same time REI Indonesia obtained technical supports from BPTP, Malang. This business was just started from October 2006, and REI has a plan to export dried mango chips to USA and Japan in the near future.

Other worth noting activity is pineapple processing by KT Lohginawi, located at Kec.. Ngancar. Young farmers of this group started production of pineapple juice, vacuum fried pineapple, virgin coconut oil and others since 2002. They receive technical advice of BPTP Malang, Brawijaya University and Dinas Industry Kediri. Their equipment is simple and inexpensive but using latest heat-sealer for plastic cups. KT has 75 members and 10 young members tackle this new business for the income generation. They supplied supermarket chain before but due to unfavorable payment, they now stopped supplying the products but appointed 4 agents who stayed in urban area and responsible to the development of markets. This segregation of duties, i.e. farmer concentrates to production and appoint other team for the marketing in urban area will be a solution to farmers' fears for securing the markets of their processed commodities.

Podang mango is seasonal fruit, so any processing mango activities are running in harvesting season, only about 3 months of November to January. In off-season the equipment is idle and this condition is not feasible in view of business. Therefore, mango processing is to be combined with processing of other fruits in order to expand the operation period. In order to sustain agro processing, capability on marketing and business capacity of group is to be identified, as the first step to start support by soft loan.

3.7.4 Marketing

Middlemen, bandars and collectors are involved in the majority of mango related transactions made by Kelompok Tanis (KTs) and non-KT member farmers.

Main players acting in between farmers (individuals/ groups) and retailers in the market of Mango in Kediri are 1) bandar and tengkulak, 2) village collectors and pengepul, 3), and 4) traders. These market participants are in many cases multi-players. Many village collectors have dual functions; penebas and pengepul.

Bandar in Kediri usually procures fresh mango from village collector and sell it to other kabupatens. They are said to be in higher position, of bigger business size and covering wider marketing areas than collectors.

Village collectors are the nearest to farmers in transactions and based in their own village, usually acting in between farmers and bandars. Particular feature of mango transaction with farmers in Kediri is an existence of "penebas" who is village collector but buy product from farmers before harvest (called "tebas system"). The majority of fresh mango transactions are made between farmers and penebas, with farmers' strong desire to secure an outlet of their product. Ordinary collectors buying product after harvest is called "pengepul".

According to DINAS Pertanian Kediri, mango farmers belonging to KTs account for 60% of total. Mango business in Kediri are conducted mostly through middlemen, bandar, collector, and by individual member farmers including chairpersons, not by groups.

Out of fresh mango produced in Kediri, approx. 75% is sold from farmers to penebas before harvest, 15% sold to ordinary village collector (pengepul) after harvest and 10% to bandar. Pengepul sell 80% to bandar and 20% to retailer.

Farmers' selling prices to pengepul are totally determined by the latter's initiatives with payment in cash. Prices become the lowest in harvest season (usually Nov to Dec), and reach the peak right before harvest (Oct to Nov). In harvest season, village collectors become less available because of low market prices. So, farmers are forced to sell by themselves to the market with substantial losses (damage, unsold, etc.). This situation leads to "tebas system" (transaction before harvest) by penebas and farmers.

In case of "tebas system", criteria for determination of farmers' prices to penebas are (a) number and size of trees per unit area, (b) quality of fruits, (c) time of harvest, etc. However, there is no clear standard for assessment of the quality of fruits. Payment is usually in installments and the terms differ much by case. According to DINAS, typical case is 10 % on contract (mostly verbal agreement, 1 to 2 months before harvest), 50 % on commencement of harvest and 40 % on its completion. Because of time lag between the contract and the sales of harvested commodity, penebes also has some risk. It is not unusual that penebas change a mutually agreed price later unilaterally to its advantage depending on market situation. Although transaction with penebas is said to be more

negotiable for farmers than pengepul cases, the initiative for price decision is usually taken by penebas.

More than 50% of fresh mango is outgoing to other kabupatens/ provinces through middlemen (bandar), due to limited demand in Kediri to supply. There exists a "fruits market " located in Kec. Banyakan, the center of mango production area in Kediri. About 80% of local fresh mango gathers to the market in harvest season, but buyers from other kabupatens/ provinces are more than local ones.

Selling prices of mango product were collected at every point of marketing channels. Although number of samples is limited, range and average of the prices are summarized in Table 51. The data indicate that a margin of middlemen (particularly collectors including "penebas") is approx. 30-35% in gross and more or less 20% in net (assuming the cost at Rp.300-400/kg). The data suggest that collectors seem to take a high margin to cover above-mentioned risks, while farmers are forced to sell their product at relatively low prices. For more precise analysis, however, further research needs to be done, since prices differ so much even on same basis, in addition to limited number of samples.

	Fresh Mang	go (Podang)
	Farmers	Middlemen
Range	750 - 2,500	2,000 - 2,700
Average	1,583	2,425

 Table 51
 Selling Prices Data in Kabupaten Kediri (Rp./kg)

Source: KTs / Middlemen / Pasars, by interview in Aug-Nov 2006.

For information, price data collected in Jakarta indicate that differences in retail prices of fresh mango between urban areas (supermarket) and local market (Kediri) are much bigger than in wholesale prices.

3.8 Rural Microfinance

3.8.1 Overview of Financial Services Available for the Farmers' Community

(1) Physical Accessibility

The basic research in the Study revealed that most of the farmers and rural population have physical access to a few commercial banks except for some farmers' groups (Kelompok Tani) in Mojokerto, and to microfinance and informal finance. The microfinance accessed by the selected Kelompok Tani is (i) banks (BRI Units, BPD, and BPR), (ii) registered cooperatives (KSP, USP, KUD), (iii) BKD, pawnshops, and (iv) informal sector including Kelompok Tani and non-registered farmers cooperatives, *arisan*, traders, moneylenders, and *warung*. The financial services physically available in the community of the selected Kelompok Tani are summarized in the following tables.

	Community of Kelompok Tani	Bank and BPR	Non-Bank	Others
	Tigan Meker	• BRI Unit Panguragan	 Cooperative Sumber Rejeki 	• Trader
	Karanganyar Village	 BRI Unit Gegesik 	 Pawnshop 	
	Kec. Panguragan	 BPR Panguragan 	 Village Bank 	
ıck	Bebek Jaya	 BRI Unit Kapetakan 	 Syariah KSP 	 Feed trader
Dr	Bayalangu Village	BPR Cirebon Utara	Prambabulan Al	
on,	Kec. Cirebon Utara	(handled at BPR	Qomariyah	
Cirebon, Duck		Kapetakan)	• KUD ^{*1} Mina Waluya	
ü	Sigranala Indah	 BRI Unit Gegesik 	 Pawnshop 	 Middlemen
	Bayalangu Village	 BRI Unit Cilimus 	 Village Bank 	 Arisan
	Kec. Gegesik	 BPR Kapetakan 	 KUD Karya Bakti 	
		BPR Gegesik	 Moneylender 	
	Andayarasa	 BNI Kuningan 	 KUD Bangkit Abadi 	• Trader
•	Bandu Rasa Wetan	 BRI Unit Cilimus 	 Moneylender 	 Arisan
tato	Village	 Bank Jabar Cilimus 	 Pawnshop 	
Kuningan, Sweet Potato	Kec. Cilimus	BPR Cilimus		
'eet	Binakarya	 BRI Unit Jalaksana 	• KUD	• Trader
Sw	Manis Lor Village	 BRI Unit Cilimus 		 Warung
an,	Kec. Jalaksana	 BRI Unit Kramat Mulya 		
ing		Bank Jabar Cilimus		
(nn	Linggasari 2	 BRI Unit Cilimus 	 KUD Gemah Ripah 	• Trader
X	Lingga Indah Village	BPR Cilimus	 Pawnshop 	 Arisan
	Kec. Cilimus			
	Mitra Binangkit 2	• BRI Majalengka (far	 KUD Makar Tani 	 Arisan
	Tajur Village	from the community but		
ika ato	Kec. Cigasong	P4K)		
eng Pot		 BPR Cigasong 		
Majalengka Sweet Potato	Delima 2	• BRI Majalengka (far	-	 Arisan
Ms Swe	Lampuyang	from the community but		
	Kec. Talaga	P4K)		
		BRI Unit Talaga		

 Table 52
 Financial Services Available in the Community of Kelompok Tani in West Java Province

* Financial institutions in *bold italic* are used by one or more Kelompok Tani members for financing production / processing, in addition to the Kelompok Tani savings and loan.

	Community of Kelompok Tani	Bank and BPR	Non-Bank	Others
	Lestari Sejahtera	 BNI Mojokerto 	• Livestock cooperative	 Feed collector
	Modopuro Village	 BRI Unit Mojosari 	Sejahtera	 Arisan
	Kec. Mojosari	 BRI Unit 	• Village Credit Bank	 Moneylender
		Wonokusumo	(BKD)	
		 Bank Danamon 		
ck		 BCA Mojosari 		
Du		 Bank Syariah Mandiri 		
to,		 Bank Jatim Mojokerto 		
ker		 BUKOPIN 		
Mojokerto, Duck		 BPR Mojosari 		
Μ	Karya Tani	 BRI Unit Pungging 	 KUD Pungging 	 Middlemen
	Pungging Village	 Bank Jatim Mojokerto 		
	Kec. Pungging	 BPR Pungging 		
	Tani Mulyo	 BRI Unit Bangsal 	Village Credit Bank	 Feed collector
	Mojoyo Village,	 BRI Unit Mojosari 	(BKD)*1	 Moneylender
	Kec. Bangsal	 BNI Mojokerto 	 Cooperative 	

 Table 53
 Financial Services Available in the Community of Kelompok Tani in East Java Province

	Community of Kelompok Tani	Bank and BPR	Non-Bank	Others
		 Bank Danamon 	 Pawnshop 	
		 BUKOPIN 		
		 BCA Mojosari 		
		 Bank Jatim Mojokerto 		
	Budi Daya	 BRI Kediri (for P4K) 	 Cooperative Budi Daya 	-
	Tiron Village,	• BRI Unit Banyakan	(registered but not active,	
	Kec. Banyakan	(10km)	savings and loan section	
			of the Kelompok Tani)	
0	Makmur Jaya	 BRI Kediri (for P4K) 	 KSP Bina Usaha Makmur 	 2 Warung
ang	Tarokan Village,	• BRI Unit Kaliboto (6km)	 Pawnshop 	 Arisan
Kediri, Mango	Kec. Tarokan	• BPR Gregol (Bank		
iri,		Pasar)		
Ked		(Followings are far from		
Ť		the village:		
		• BNI		
		 Bank Mandiri 		
		• BCA		
		 Bank Jatim Kediri) 		

* 1 BKD is not recognized under the Banking Law, thus categorized under Non-Bank here.

* 2 Financial institutions in *bold italic* are used by one or more Kelompok Tani members for financing production processing, in addition to the Kelompok Tani savings and loan.

Two women's Kelompok Tani (Mitra Binangkit 2 and Delima 2) in sweet potato processing, and one mango Kelompok Tani (Budi Daya) in Kediri are located in mountainous remote area, and they have access to only one or two bank and non-bank institutions, which are BRI Units or BPR. But Delima 2 raised the issue of transport, which costs them Rp. 10,000 for return to get to BRI Unit, which can eat up their savings or loan amount.

Other finance which is available for the farmers are the government finance program for agriculture sector, cooperatives, and MSMEs.

(2) Access by Poverty Level

Although there are various kinds of financial services, it was revealed from interview, workshop, poverty ranking, and household survey that not all the services are utilized by the all layers of community people, let alone farmers in the Kelompok Tani.

From the result of poverty ranking, in general, the fair and rich ranking people have access to banking institutions. The exceptions for this are the community of Bebek Jaya, (Cirebon, duck), Linggasari 2 (Kuningan, sweet potato), and Mitra Binangkit 2 (Majalenga, sweet potato), where only the rich was described to have access to banks. On the other hand, in the community of Tani Mulyo (Mojokerto, duck), it is the poor, fair, and rich who have access to banks.

Other categories, mostly very poor and poor, have access to moneylenders, *Arisan*, pawnshop, small shops (*warung*), and traders (middlemen). In some worst cases (the communities of Linggasari 2 in Kuningan, Delima 2 in Majalengka, Lestari Sejahtra , Tani Mulyo, Karya Tani in Mojokerto, Budi Daya and Makmur Jaya in Kediri), the very

poor category of people have no access to any of the financial services.

The financial access by poverty ranking is summarized in the Table below:

	Community of Kelompok Tani	Poorest	Poor		Fair	Rich	
	<u>-</u>	12%		28%	45%		15%
	Tigan Meker	Money lender	Money lender		Bank Cooperatives Arisan	Bank Cooperatives Arisan	
=		28%		25%	38%		9%
Cirebon	Bebek Jaya	Saving Rp. 10.000,-per month	Arisan Rp.50.000,-per n	nonth	Cooperatives	BRI Cirebon Utara, BPR	
		20%		45%	27%		8%
	Sigranala Indah	Money lender	Pawnshop Money lender		BRI unit Desa BPR Arisan	BRI Unit BPR Arisan	
		3%		25%	60%		12%
gan	Andayarasa	Money lender	Money lender Pawnshop		BRI Cilimus BPR Cilimus Kelompok Tani	Bank	
Kuningan	Bina Karya	11%		31%	42%		15%
Ku	Dilla Karya	Often small shops	Credit		BRI	BRI	
		18%		14%	58%		10%
	Lingasari 2	None	None		Farmers' Group Savings	BRI Cilimus	
a		9%		18%	65%		8%
Majalengka	Delima 2	None	None		BRI Unit Talaga Warung	BRI	
Aaj	Mitra Binangkit 2	11%		31%	42%		15%
ĸ	Wittia Dinangkit 2	Often small shops	Credit		Kelompok Tani	BRI Majaleng	gka
		4%		36%	50%		10%
	Lestari Sejahtera	None	None or Moneyl	ender	Arisan Bank	Arisan Bank	
		14%		31%	52%		3%
Mojokerto	Karya Tani	Moneylender	Moneylender Pawnshop		Arisan Kelompok Tani Bank	Bank	
Σ		6%		29%	57%		8%
	Tani Mulyo	None	Arisan Bank Moneylender		BRI Kelompok Tani Trader Pawn-shop	Bank Trader	
		38%		45%	14%		3%
÷E	Budi Daya	None	Kelompok Tani		BPR	BNI, BRI	
Kediri		26%	, î	51%	20%		3%
K	Makmur Jaya	None	None or Trader		BRI, BPR Farmers' Group	BRI, BCA, B Mandiri	ank

Table 54	Access to	Finance b	y Poverty	Ranking
	1100000 00		,	

3.8.2 Conditions of Finance Services

(1) Institutional Finance

Savings

Interest rates for savings at BRI Units are from 0 to 6% p.a., from the starting amount of Rp.25,000 to the minimum balance requirement of Rp.10,000. BRI branches require starting amount of Rp.200,000 for savings, and the minimum balance requirement is Rp.50,000. Other commercial banks such as BNI require Rp.150,000 for starting and the minimum balance of Rp.10,000, at the interest rate of 0 to 4% p.a. Bank Jabar savings require Rp.25,000 and the same amount to maintain the account, with the interest rate from 5 to 7% p.a. Savers at cooperatives are also the members and they normally have savings obligations at the entry and compulsory monthly savings which start from Rp.5,000. The savers get the profit sharing from the cooperative as a member.

	8						
Bank	BNI	BRI Branch	Bank Jabar	BRI Unit	Cooperative / Kelompok Tani		
Starting amount	Rp.150,000	Rp.200,000	Rp.25,000	Rp.25,000	from Rp.5,000 monthly compulsory savings		
Minimum balance	Rp.10,000	Rp.50,000	Rp.25,000	Rp.10,000	Entry fee start from Rp.5,000		
Interest rate	0-4% p.a.	5.5% on average	5-7% p.a.	0-6% p.a.	Profit Sharing		

Table 55Conditions for Savings

*Other than savings, commercial banks offer time deposits, with higher interest rates.

Loan

Loan conditions at BRI Units include no collateral up to Rp. 3 million (more amount require collaterals), with the minimum amount of Rp. 0.1 million to the maximum of Rp. 100 million, and the interest rate is 1.0 to 1.5 % per month. At BRI branches, the loan amount start from Rp. 0.2 up to Rp. 2 trillion, with the interest rate of 9 to 24 % p.a. BNI loan amount starts from Rp. 5 million and up to 350 million, with the interest rate of 14 to 22 % p.a. Bank Jatim loan starts from Rp. 1 million up to 350 million, with the interest rate of 6 to 22 % p.a. At one BPR, minimum loan amount is Rp. 15 million and maximum is Rp. 50 million, with the interest rate of 1.95 % per month. While at one KSP, minimum loan amount is Rp. 0.1 million and maximum is Rp. 5 million, with the interest rate of 2.75% per month for maximum 4 months.

Bank	Bank BNI		Bank Jatim	BRI Unit	Cooperative
Loan Amount	n Amount Rp.5 million -		Rp.1 million -	Rp.0.1million -	Rp.0.1 milion - Rp.5
	Rp.350million	Rp.2trillion	Rp.350million	Rp.100million	million
Amount offered without collateral of land or vehicles	N/A	N/A	N/A	up to Rp.3,000,000	Rp.0.1 million - Rp.1,000,000 depend on the situation
Interest rate	14-22% per year, sliding	9-24% per year, sliding	14 % per year, sliding	1.0 to 1.5% per month, flat	Profit Sharing or 2.75% per month, flat (depend on the situation)

Preference of Financial Institutions

The existence of banks near the community does not necessarily help to fill the gap of demand and supply. Commercial banks are in general limited to serve the customers who are within 5 km from their branches and units, while BPD (Bank Jabar and Jatim) cover the customers who are 10 km away from their cash offices. This policy and the fact that they handle more government programs, seem to complement them having less number of establishments (branches and cash offices) in the rural area, and achieve a level of outreach following BRI Units.

From the bank side, different banks have different priority areas, which are not necessarily agriculture sector. Currently banks started increasing micro, small, and medium enterprises (MSME) loan, but money is not flowing enough into the agribusiness.

Banks analyzed the difficulties of lending farmers as: (i) their low capacity of marketing, managing fund (how much loan they can handle), and book keeping, (ii) harvest risk, (iii) profit margin decrease due to the impact of kerosene price hike, and (iv) bird flu risk. All these would cause the delay in following the installment in time. Due to bird flu outbreak, some banks stopped to finance new chicken and bird farmers.

On top of these elements, Bank Jatim Kediri Branch analyzed the difficulties in serving rural poor as (i) poor transportation network, (ii) limited support by the government office to MSMEs, and (iii) less coordination among these offices in supporting MSMEs.

BRI Units mentioned some MSME customers can only handle simple book keeping, and for the purpose of loan application and administration, their staff has to help the customers to produce the necessary data for business plan and performance. Partly related to it, BRI Units also stated that some MSME customers do not know how much loan they can handle.

BRI has the biggest outreach through Units, and its priority is to serve micro, small, and medium enterprises, including agriculture and livestock farmers. But this does not stop them to serve big corporate customers. In addition, they handle most of the government programs for poverty alleviation, community empowerment, and rural credits. BRI Units, in particular, see the opportunities in keeping the current MSME customers including farmers, financing them to grow bigger.

Bank BUKOPIN has a priority to serve MSMEs including agriculture and livestock farmers, but reaching them through Kelompok Tani and cooperatives. BUKOPIN does not have lots of branches to cover all the districts, so it has a limited outreach.

On the other hand, Bank Danamon has started to have more outreach through establishing their *Simpan Pinjam* (savings and loan) branches, but these branches target traders, including those who handling farm products, but not the production farmers.

BNI used to include MSMEs in one of their priorities but recently it changed the policy to target industry, trade, and services and to more the cooperate clients

Bank Jabar handles Provincial Government programs, serving mainly for civil servants and individual farmers. Bank Jatim is also the agent of government programs, and serving civil servants, Kelompok Tani, and clients in the industry and trade sector. These BPDs would like to support farmers through the government finance program for MSMEs.

BPRs and KSP/USPs tend to prefer loanees in trading sector.

(2) Commodity (Cycle) based Finance

As loan repayment cycle or installment set by banks came out as one of the major barriers for farmers to borrow from banks, this is normally not the case with the credit supplied by traders (or middlemen and collectors) and feed suppliers. In fact, they are the main financer of farmers, following the banking, non-banking institutions, and Kelompok Tani. Among other forms of financial services, most frequently mentioned was that of traders, and in case of duck farmers, feed collectors as well.

The common practice of repayment is *yarnen* (farmers sell the products to the traders / suppliers after harvest, and they deduct the loan amount, and give back the difference to the farmers).

In most cases, they provide input credit in-kind (such as fertilizer, seeds and feeds) or cash. Some Kelompok Tani leaders are also the traders and some of them provide loan for Kelompok Tani members. In this case, Kelompok Tani is a disguised vehicle for traders to bundle the products and to secure the quantity and quality of them.

The power relations between the farmers and traders / suppliers differ case by case. Some farmers take it positively, to utilize the marketing network of traders / suppliers, and to secure the sales even before the harvest. Cirebon livestock cooperative Sumber Rejeki entered an agreement with the members of Kelompok Tani Tigan Meker for marketing, and utilizing the trader members' marketing capacity and network. This, in a way, is the formalization of trader-producer relationship and made the transaction more transparent and accountable by setting up a cooperative. Linggasari 2 sweet potato farmers even proposed to ask credit from traders as a short-term solution to tackle the lack of capital.

On the other hand, Cirebon Sigranala Indah and Mojokerto Tani Mulyo feel the relationship with feed supplier-cum-collector as bondage, stating that they are charged market price when they are supplied feeds on credit, and when their products are collected, the purchase price is lower than the prevailing market price.

Others who accept the payment after harvest are cooperatives, especially KUD, and local small shops (*warung*) which sell inputs and staple foods are more flexible in financing agriculture needs, in terms of repayment timing. They tend to accept the payment after harvest (*yarnen*).

Such new attempts of combining finance and marketing are observed as warehouse

receipt scheme and auction market, in order to give farmers better transaction terms. One is the warehouse receipt scheme, which was about to start in Majalengka, supervised by the Dinas Industry and Trade. Under this scheme, rice producing farmers can borrow money form financial institutions by making rice stored at the warehouse as collateral. This gives farmers better access to finance, and financial institutions can secure their loan better with collateral. In addition, with the warehouse facility, farmers can choose when to sell rice, avoiding the negative impact of price fluctuation.

The other attempt is auction market conducted by East Java Province Dinas Indusry and Trade, with the cooperation of Dinas Agriculture. The Dinas facilitates small farmers and small medium enterprises (SMEs) to sell their commodities and products through auction, even before the production, with a sample. So far the auction was held for 29 times and has realized the transaction of more than Rp. 700 billion. Farmers and SMEs can apply for production loan from Bank Jatim, where the auction is conducted. The main commodities handled are food crops including paddy and vegetables, but for certain commodities, less and less buyers are joining the auction.

(3) Ministry of Agriculture Programs

Among the financial support programs of the Ministry of Agriculture (MOA), there are three programs targeting Kelompok Tani and Self-Help Groups (SHGs) for agribusiness promotion and/or income generation.

Rural Income Generation Project (*Proyek Peningkatan Pendapatan Petani-Nelayan Kecil*: <u>P4K)</u>

P4K was supported by the loan amounting to US\$117.5 million from ADB and IFAD, supplied microfinance through BRI to poor small farmers and fishermen who were organized into small SHGs. It had three phases from 1979 to 2005, and had one year extension for tsunami emergency operation in 2006. P4K achieved high repayment rate (Phase I: 85%, and Phase II: 95%), and covered 58,118 SHGs. However, towards the end of the project period and after it was handed over to Kabupaten government and BRI branch in 2006, the number of new loans decreased. At the same time, the monitoring and supervision budget and incentives for field extension workers were not allocated of late, which contributed to the down turn of the performance. According to the tentative evaluation result for Phase III, total loan disbursement was Rp. 1.3 trillion and the percentage of arrears against the outstanding loan balance as of December 2005 was $32\%^{1}$.

It should be noted that under P4K, the exit strategy for SHG was conceptualized, to develop them into SHG Association (Gabungan KPK), and transform them into microfinance institutions (MFI, in Indonesian, LKM) including non-KPK members from the community, which were expected to be eventually registered as cooperatives. The purposes of forming Gabungan comprise (i) to facilitate government services, (ii) to

¹ ADB (2005) <u>The 4th Draft of Project Completion Report: Rural Income Generation Project P4K-Phase III</u>, Indonesia

obtain additional chance for business capitalization outside P4K credit, (iii) to enable loan service for members at appropriate time and amount with more simple procedure. This exit strategy part of P4K, however, seems not to be penetrating into Kabupaten governments.

Community Direct Assistance (Bantuan Langsung Masyarakat: BLM)

BLM is a revolving fund scheme for Kelompok Tani, which was introduced in 2000, and continued up to date by changing name to Community Direct Loan Assistance (Bantuan Pinjaman Langsung Masyarakat: <u>BPLM</u>), and then, to Program of Empowerment of Agribusiness Community through Strengthening Group Business Capital (Pemberdayaan Masyarakat Agribisnis Melalui Penguatan Modal Usaha Kelompok: <u>PMAM-PMUK</u>). Under the context of decentralization, the program was modified in 2002, to give bigger role to field extension workers to assess, select, and monitor target Kelompok Tani. The program covered 35,420 groups from 2000 to 2005 with the budget allocation of Rp. 2.7 trillion.

BLM has experienced problems such as (i) ad-hoc Kelompok Tani formed only to receive the fund, (ii) the fund not utilized for the set purpose in the group business plan, and (iii) the fund revolving poorly in the group. In order to solve these problems, adjustments and modification have been made. Where the Kelompok Tani loan developed from the revolving fund was not repaid, Kelompok Tani members were asked to make repayment to the bank account of Dinas. Another attempt is to transform Kelompok Tani into MFIs. A series of interview, however, revealed that staff of Sample Kabupaten government still face problems such as (i) farmers recognize the fund as grant, (ii) lack of close guidance and monitoring to utilize the fund for the set purpose – normally to improve agribusiness.

<u>Microfinance Institution Serving Agribusiness (Lembaga Keuangan Mikro – Agribisnis:</u> <u>LKM-A)</u>

The Center for Agriculture Financial Services of MOA initiated LKM-A in 2004. It is a capacity building (training, guidance, and capital support) program for Embryo of MFI (=Embryo LKM) and MFI (LKM) developed from Kelompok Tani, SHGs, and other savings and loan organizations in the community. It is a way of utilizing the funds managed by the community, which could finance farmers and agribusiness, and to facilitate the community to become self-reliant and autonomous. It is a clear step ahead from BLM/BPLM/PMUK pattern of funding, intending to show the exit for Kelompok Tani to graduate government support in the future and to become self sustainable. Japanese Government fund of CF-SKR partly finances the pilot project for LKM-A since late 2005, covering 60 Embryo LKM and LKM in West Java, Central Java, and Nusa Tenggara Barat. So far, socialization, disbursement of fund to the target, and the profit sharing based on the utilization of fund wthin the target is observed as it was planned. Total Embryo LKM and LKM-A program between 2004-2006 is 368 in 12 provinces. LKM-A utilizes the expertise of Center for the Incubation of Small Business (Pusat Inkubasi Bisnis Usaha Kecil: PINBUK), an NGO which fosters

community-based MFIs and micro-enterprise groups.

3.8.3 Financial Experience of Kelompok Tani

(1) Different Level of Group Activity

Most of the selected Kelompok Tani have some forms of savings and loan activity, except for the three (Sigranala Indah of Cirebon, and Bina Karya and Linggasari 2 of Kuningan). These three are deemed to have weak group cohesion, and it is the leader who dominates the whole group activity.

The Kelompok Tani which experience P4K presented the financial discipline and good team work, for example, Delima 2 (Majalengka), Lestari Sejahtera (Mojokerto), Makmur Jaya, and Budi Daya (Kediri).

The strong group activity case is drawn from Tigan Meker (Cirebon), which formed the Livestock Cooperative: Sumber Rejeki, with other Kelompok Tani. The Cooperative provides savings and loan service, and marketing members' products as well.

Bebek Jaya duck Kelompok Tani in Cirebon market together through the group and profit sharing is observed. The Kelompok Tani is a member of a Syariah KSP, which gives loan for duck production.

(2) Reliance on Government Program

Other points which should not be overlooked are government finance programs for farmers and for poverty alleviation.

Farmers, especially from Cirebon duck Kelompok Tani Tigan Meker have received a massive supports including revolving fund grant and soft loans from the Ministry and Dinas Cooperative, and technical assistance from Dinas Industry and Dinas Livestock. On top of these, Tigan Meker is said to receive Urban Poverty Project (P2KP) funding, and Bebek Jaya receiving BLM as well. Mojokerto Lestari Sejahtera members at the moment receive P4K loan and also received technical assistance from Malang Extension Research Center (Lestari Sejahtera).

Delima 2 and Mitra Binanggit 2 in Majalengka, Budi Daya and Makmur Jaya in Kediri, also benefits / benefited from P4K program. Linggasari 2 in Kuningan received BLM in 2002²

And other non-financial assistance program which provides duck in kind, food processing equipment and machine, and insecticide sprayers also help them financially at the end.

Some of the Kelompok Tani which received softer condition finance program seem to be ready for financial independence, from any form of grant or soft loan. In a way, for

² Rp. 16 million was said to be shared among members, each one them got Rp. 0.8 million. They designed to revolve by charging interest rate of 1% per month, for the loan period four months, and the interest rate income of the group to be share between the group and the members by 50%. It seems, however, it did not revolve as it was planned.

them to receive massive assistance, they were chosen as a showcase. But the cumulative assistance obviously contributed bigger expectation to additional financial program with soft terms.

On the other hand, those Kelompok Tani which have less or no experience of receiving government program presented more business minded attitude.

(3) Savings Experience

People save for the purposes of Sample Commodity production, accumulating capital for loan repayment, family use including education and daily goods, and some for religious reason (*haj* saving). Among the people who answered they had never saved, the reason in most cases is that they do not save because they do not have surplus to save. This Kelompok Tani thinks that if they had surplus, they would have saved, for education and building house. The minor answered that they do not see the necessity to save.

When people save, they save at the nearest banks and cooperatives. Safety, being near, and offering flexible conditions are the reasons for the people to save at banks and cooperatives. Some save in the form of *arisan*, because it is near and for establishing solidarity.

Some buy input for production whenever they have surplus, and that is their savings, for example, some duck farmers save in the form of duck and rice.

Regarding the nominal cash amount of savings, **Cirebon** duck farmers save from R. 2.5 to 8.4 million (except for one answered Rp.30 million), for the purpose of accumulating duck production capital. On the other hand, **Mojokerto** duck farmer savers, who save Rp. 1 to 25 million, most of whom are from Lestari Sejahtera women's Kelompok Tani, save for variety of reasons, not only for duck production but also for the family future, accumulating money for loan installment payment, and daily use.

Kuningan savers save Rp.0.5 to 6 milion, for sweet potato farming, but also for children's education, emergency, and family daily needs. **Majalengka** sweet potato processing women's Kelompok Tani respondents save Rp.0.05 to 0.7 million mostly for education, except for the compulsory savings for P4K.

Not many **Kediri** mango farmer respondents answered they save, except for the few who save 3 to 5 million for house construction. P4K compulsory savings were not reflected in the household survey answers.

(4) Different Loan Accessibility among Members

People borrow from banks because they are near and they can afford to offer collaterals, most of which are land certificates, and some are car certificates. Those who borrow from cooperatives added the reason of easy application process.

Most farmers borrow from BRI Units, Kelompok Tani and cooperatives they belong to, and some from group leaders. The loan from banking institutions are, if not from BRI

Units, from other banks which are not necessarily that near from their community, but this is more the case with the group leader-cum-traders, member-cum-traders, and land owners.

Within the Kelompok Tani, the bank customers are more the group leaders or a few members of the group, who happened to be traders as well. In some cases, Kelompok Tani leaders (some of them are traders) borrowed from banks and re-lend it to group members.

(5) Characteristics of Loan Utilization by Commodity

Commodity-wise, duck farmers utilize more the banks than mango and sweet potato farmers and processors, except for Kelompok Tani members who are on the P4K program.

Most of **Cirebon duck** farmer respondents have borrowing experience either from BRI or Syariah KSP, and their current loan balance ranged from Rp.0.5 to Rp. 5 million, for the purpose of duck production and trading. **Mojokerto** Lestari Sejahtera **duck** farmer respondents borrow money at the range of Rp. 3 to 20 million from BRI, and other Kelompok Tani with the amount of Rp. 0.1 to 5 million from within the group, for duck production.

The loan from traders seems to be phenomena especially for duck and sweet potato production. This did not come out clearly in the household survey, but more from the interview to the traders. The impression is that farmers who are not organized in formal Kelompok Tani are more organized by the traders for them to secure the stable quantity and quality of the commodity production.

Kuningan sweet potato farmer respondents when they borrow, mostly borrow from BRI for the different reasons, not only for sweet potato production but for their other source of income, and a few for education. The current loan balances ranged from Rp.0.4 to 6 million, except for one with Rp. 16 million.

In **Majalengka**, both Mitra Binangkit 2 and Delima 2 are P4K groups under BRI Branch. Some Delima 2 respondents borrowed from the group, and head of the group. Current loan balances ranges from Rp. 0.3 to 1.0 million. Their loan purposes are for mostly for trading, with some for education.

Some women from two **Kediri mango** Kelompok Tani also joined P4K. The respondents from both Kelompok Tani answered they borrow from BRI. For Budi Daya respondents, they also answered they borrowed from the cooperative within the group, for agriculture inputs (non-mango purpose) and daily goods, with current loan balances of Rp. 0.05 to Rp. 0.2 million. Makmur Jaya respondents borrow from BRI for the mango production and trading purpose.

(6) Financial Relations within and outside Kelompok Tani

As explained in the previous section, Kelompok Tani use banks to finance production and other income generating activities, it tends to be either only a few members of the Kelompok Tani, or the members which are covered under P4K. Others rely on (i) savings and loan within the Kelompok Tani or the Cooperatives, (ii) government program rendered to the Kelompok Tani or the Cooperatives, (iii) loan from the leader (bank loan re-lending), and /or (iv) traders.

3.8.4 Gap

Currently banks started increasing MSME finance and re-lending to MFIs. But money does not flow enough into the agribusiness MSMEs, and there are many farmers who do not have access to formally registered MFIs, to which commercial banks re-lend.

In summary, the selected Kelompok Tani farmers have already had access to the finance <u>up to certain extent</u>, but not with the conditions they prefer. The kind of financial institutions they have access to differ, mainly due to the elements they cannot control is the community's geographical set up, and the profitability structure of the commodity. Some have access to banks, save and borrow their working capital and small investment capital around Rp.5 million. Some have access to cooperatives, save and borrow mainly the working capital around Rp.1 million without collateral, others use Kelompok Tani, to save and have loan around Rp.0.5 million without collateral, and to *warung*, and individuals (group leader, traders, feed suppliers). Other farmers do not have physical access to banks because they are located in the remote area, are currently served by P4K scheme.

All these situations arise from demand and supply gaps as follows:

(1) Lack of Physical Access

For Kelompok Tani in remote area, such as the ones in Majalengka and Kediri, the physical access to financial institutions is difficult. The link to BRI will be cut off when P4K loan cycle ends, because there are no other financial services available at convenient location.

(2) Financial Needs of the Rural Community

As for the members of the community where the selected Kelompok Tani are located, Poorest and Poor category of people either has no access to any financial services, or has access to only informal microfinance such as moneylender and traders. But they also have a willingness to save money.

(3) Finance Needs for Agribusiness

Kelompok Tani members, even they have access to loan from banks, cooperatives, Kelompok Tani, and other financial services, they feel the production capital is not

enough.

Duck farmers, who want more capital, have the intension of using it for increasing the number of ducks, and investing in hatchery machine, renting more land for keeping ducks, and creating more duck cages. Sweet potato production groups in Kuningan would also like to have more capital, but for purchasing agricultural inputs, and for controlling marketing and price by themselves. Majalengka sweet potato processing groups want more funding for modernization of their processing equipment and improvement of packaging. Kediri mango groups did not raise the issue of lack of capital that clearly compared to groups in other Sample Kabupaten. Their priority problems are more of technical side of mango production and price fluctuation.

(4) Not meeting the Conditions for Loan

For the farmers who do not borrow, the reasons are, firstly, the fear of not following the repayment cycle which financial institutions can set. Secondly they think they do not have collateral, whether in terms of the volume or in terms of the form of ownership documents (e.g. not in the form of certificate, but in the form of letter³). They also feel the collateral coverage ratio set by bank is too strict. Thirdly, they feel their business is not running well enough to pay the high interest. Others do not think the loan is necessary.

The average of agriculture loan amount at BRI Units visited is approximately Rp. 5 to 6 million, which coincides the maximum loan amount most of the target farmers get, except for those who own bigger land and who are traders get loan in tens of millions of rupiah. The collateral requirement exemption at BRI Units is up to Rp. 3 million, and at BPD it is Rp. 1. million. These amounts are almost the maximum which cooperatives can provide to farmer members. The P4K group is qualified for the loan amount up to Rp. 2 million with the 10% compulsory savings frozen at bank.

(5) Reliance on Traders' Finance

Farmers do not have enough financial resources other than commodity, tend to opt for traders finance to source agricultural inputs and to meet quick cash needs, using the commodity as informal collateral. In turn, some do not have the bargaining power and get the unfavorable conditions. On the other hand, it is also because of the lack of marketing capacity on farmers' side, which let them rely on traders to sell their commodities. This side of traders' finance has a positive connotation, the farmers cannot fail to sell by going through the traders. To get away from this problem, farmers should either (i) have financial resources by accumulating assets, (ii) increase bargaining power through collective action, or (iii) build marketing capacity.

(6) Limit of loan amount offered by KT / Cooperatives

The problem of cooperatives and Kelompok Tani as membership organizations, is that

³ Processing a land ownership letter to a formal certificate may cost Rp. 1 million and it takes time.

they hit the ceiling of loan amount easily, because their loan funds are mainly sourced from internal savings. The common loan amount within the Kelompok Tani mentioned was Rp. 0.5 million, and for example, the maximum loan amount Bebek Jaya members are allowed to borrow from Syariah KSP is set at Rp. 1 million, when duck farmers would like to have the capital of more than Rp. 10 million. If their capital was not boosted by borrowing from other financial institutions, or through government finance program, such as grant (meant to be revolved in the organization) and soft loan, it keeps facing this ceiling. To solve this problem, the membership organization should increase the number of members and/or the contribution from the members.

CHAPTER 4 BASIC IMPROVEMENT APPROACH

4.1 Basic Improvement Approach

4.1.1 Poverty and Target Group

The Study Area is poor area compared to the national average. The national average of poverty headcount ratio is 16.7%, while it is from the lowest of 17.2% in Mojokerto to the highest of 19.6% in Kediri in 2004. The official poverty line at each Kabupaten is ranging from Rp.113,000 to Rp.141,000 of expenditure per capita per month in the Study area, according to the statistics (Table 20: Poverty Index in Chapter 3). On the other hand, result of the poverty ranking at community level shows the farmers reveal different feeling of more poverty in their community, even their expenditure level is more than the official poverty line, as shown in Figure 4.1.1 and summarized in Figure 29 below:

Farmers		· ·		!		RT) suround			!
Group	10%	20%	30%	40%	50%	60%	70%	80%	90%
Sriganala Indah		274 ;	Very Poor + Po	oor (65%)	1	1		Fair + Rich	(35%)
5				i				i i	i
Bebek Jaya		Very Poo	r + Poor (53%)				Fair +	Rich (47%)	
5									
Tigan Mekar	Ve	ry Poor + Poor (40	0%)				Fair + Rich (60%)	
		(Anni							1
Andayarasa	Very Poor + I	Very Poor + Poor (28%) Fair + Rich (72%)							
<u> </u>		/////							1
Bina Karya	V	ery Poor + Poor (42%)				Fair + Rich (58	%)	
EBina Karya Sina Karya		/////							
Lingagasari 2	Very Poor	+ Poor (32%)			•	Fair + I	Rich (68%)	·	·
		////4		1		1			
ក្ត Mitra Binankit		ery Poor + Poor (42%)				Fair + Rich (58	%)	·
Mitra Binankit			:		1	1		1	1
g Delim 2	Very Poor + P	bor (27%)				Fair + Rich	(73%)		
2		///							
Lestari		ry Poor + Poor (40	0%)				Fair + Rich (60%)	
Sejahtera			-						1
은 Sejahtera 전 전 전 조 조 조 조 조 조 조 조 조 조 종 종 종 종 종 종 종	Very P	oor + Poor (35%)			•	Fair	+ Rich (65%)		·
			1		1	:		1	
Karya Tani		Very Poor + Poo	r (45%)				Fair + Rich (55%)	
-		(And							
Budidaya			·	Very Poor + Poor	(83%)	·	·		Fair + Rich (17%
		//////							
✓ Makmur Jaya			Very	Poor + Poor (77%	6)			E	air + Rich (23%)
		11110						-	

Source: Refer to Table 4.1.1.

Figure 29 Result of Poverty Ranking at Farmers' Community

Range and proportion of indicators set for poverty ranking in each community is shown in Figure 4.1.1, and border range between classes of the poor and fair is summarized below:

Income Border between Classes of Poor and Fair	No. of Communities and Income Range
Rp.125,000 to Rp.150,000 per capita per month	 2 communities of Karya Tani (Mojokerto: duck), Makmur Jaya (Kediri: Mango) 45% to 77% of community members are in the income level less than Rp.125,000 to Rp.150,000

 Table 57
 Border of Income Level in Poverty Ranking by Community

Income Border between Classes of Poor and Fair	No. of Communities and Income Range
Rp.250,000 to Rp.300,000 per capita per month	7 communities of Bebek Jaya (Cirebon: Duck), Bina Karya and Lingasari 2 (Kuningan: sweet potato), Mitra Binankit and Delima 2 (Majalengka: sweet potato), Tani Mulyo (Mojokerto: duck), Budi Daya (Kediri: Mango) 27% to 83% of the community members less than Rp.250,000 to Rp.300,000
Rp.5000,000 to Rp.750,000 per capita per month	4 communities of Sigranala Indah, Tigan Mekar (Cirebon: duck), Andayarasa (Kuningan: sweet potato), Lestra Sejatera (Mojokerto: duck) 35% to 72% of the community members more than Rp.500,000 to Rp.900,000

Source: Figure 4.1.1, result of Poverty Ranking by the JICA Study Team in September to October 2006.

The above table shows that sense and level of poverty differs by community. Under this situation farmers feel that they are still in nearly poverty situation and they are demanding support to activate income generation activities, not support for livelihood and welfare. Some of these farmers demonstrate their strong motivation and potential capacity to improve their agricultural processing as business, and savings and loan activity, because these are the minimum conditions for the income improvement. In this regard, the target Kelompok Tani are expected 1) to have the willingness to be self-reliant, 2) to recognize the importance of organizational management capacity, and 3) to consider the burden of women and gender balance.

4.1.2 Linkage of Agricultural Processing and Rural Microfinance

In order for farmers to increase income and to be self-reliant through agricultural processing and with finance, following aspects shall be considered:

Technical and marketing capacities in processing business are important among the aspects concerned for processing business at the farmers and Kelompok Tani levels. Appropriate technologies and equipment are already available from local research centers and universities, however, farmers rarely know about them and hardly obtain opportunities to utilize these technologies. Therefore, it is necessary for supporting agencies to facilitate the dissemination of such appropriate technologies to Kelompok Tani.

Marketing strategy is necessary to be formulated and updated by Kelompok Tani itself for product development and marketing activities. Products acceptable to consumers can be developed through preparation of marketing strategies based on information collected from markets and consumers, either directly or through collectors and middlemen. Market demand and consumers' preference are always changing, thus products and sales methods shall be adjusted and modified according to the market demand. In the long run, support for capacity development of the Kelompok Tani will enable them to prepare and execute their own marketing strategy.

Regarding microfinance, farmers require savings and loan services for their business activities, so do the rural community members. However, they lack in access to financial

services with the terms favorable and acceptable to them, due to the gap between supply and demand. Therefore, establishing microfinance institutions (MFIs) in the community is proposed to fill in this gap. In the process to establish MFIs, financial management capacity of Kelompok Tani shall be incorporated with asset building and capital formation for self-reliance.

Many other aspects are required for the promotion of agricultural processing and rural microfinance, and they are categorized as the "enabling environment", which include research and extension services, input and material supply, rural physical infrastructure, and gender mainstreaming. These aspects are inter-related and there need be proper linkage among them in order to contribute to farmers' income improvement. The image of linkage is shown in Figure 30



Figure 30 Schematic Image of Linkage

4.1.3 Transformation of Farmers' Organizations as Agribusiness Entity

In the general steps to form microfinance institution (MFI), the farmers will organize their own Kelompok Tani or women's groups, then transform the groups to MFI via Embryo MFI (informal MFI, but widely accepted) through strengthening and consolidating groups into larger size.

In the transformation process, business activities will be up-graded and "dependency mindset" will be decrease according to the steps in each stage.

Actually, many existing groups have been organized under the agricultural extension services and these groups will be selected and transformed through selection based on the criteria and their willingness. The transformation process is illustrated in the Figure 31:



 KT: Kelompok Tani, SHG: Self-Help Group, MFI: Microfinance Institution

 Figure 31
 Transformation Image of Farmers' Organization to MFI

4.1.4 Interaction between Farmers Agribusiness and Rural Community Development

Agriculture production and processing by farmers and Kelompok Tani utilize raw materials available locally, and products are distributed through collectors and middlemen to local and regional markets. This activity contributes to the economy of community and improves socio-economic condition of the community.



Figure 32 Linkage with Community

At the same time, different activities the community-based in development stimulate and expand agricultural production and processing directly and indirectly. The similar interaction is expected to happen between microfinance operation, community members of different occupation, and the economy of community. Thus the improvement financial plan proposed here is not only aiming at agribusiness and farmers, but including community members. Therefore, linkage with community development is important for promotion of agricultural processing and rural microfinance:

4.2 Improvement Direction

- 4.2.1 Agricultural Processing
 - (1) Duck in Kabupaten Cirebon and Mojokerto a
 - (a) Value Chain Analysis

Value chain of duck business in Kabupaten Cirebon and Mojokerto is shown in Figure 33. Based on this value chain illustrated, the improvement direction is explained below:



(b) Improvement Direction

Kabupaten Cirebon

Following direction should be taken into account for the improvement in production and processing aspect.

- 1) The existing triangle system is to be further strengthened and to be multiplied in other areas in order to cover whole Kabupaten.
- 2) Technical assistance is to be arranged from BPTP Bogor, IPB and other institutions through seminar and training to farmers regularly in order to improve their traditional attitude towards production, such as incubation technology, minimization of DOD mortality, increasing egg production yield, introduction of new variety of duck, utilization of duck's dung and so on. The environmental issue to keep duck field and surrounding areas clean would be emphasized to farmers.
- 3) New hatchery equipment (Semi-automatic type using electric heater and moist control device) should be demonstrated in order to improve the incubation ratio of DOD and farmer's working environment.
- 4) Various supports for business management, accounting, profit sharing and monitoring should be provided to KT for further development and stability of the business.
- 5) Capital for business expansion shall be provided in the form of soft loan not by grant. The loan should be repaid by the target Kelompok Tani as the repaid principal shall be the revolving fund to be loaned to the next Kelompok Tani.
- 6) New business opportunity such as young male duck meat market, feather utilization and etc. should be developed for farmers together with official efforts by Dinas.

Kabupaten Mojokerto

- 1) The triangle system; establishment of definitive nucleus suppliers for core commodities i.e. fertile egg, DOD and layer duck should be pursued.
- 2) Technical assistance/extension should be arranged from BPTP Malang, Brawijaya University and other institutions through seminar and training to farmers periodically as same as the case in Cirebon.
- 3) New hatchery equipment (semi-automatic type using electric heater and moist control device) should be demonstrated in order to improve the efficiency.
- 4) Various supports for business management, accounting, profit sharing and monitoring should be provided to KT for further development and stability of the business
- 5) Capital for business expansion shall be provided in the form of soft loan, not by grant. The loan should be repaid by the target Kelompok Tani as the repaid principal shall be the revolving fund to be loaned to the next Kelompok Tani.

- (2) Sweet Potato in Kabupaten Kuningan and Majalengka
 - (a) Value Chain Analysis

Value chain of sweet potato business in Kabupaten Kuningan and Majalengka is shown in Figure 34. Based on this illustration, the improvement direction is explained below:



(b) Improvement Direction

Kabupaten Kuningan

Following direction should be taken for the improvement in production and processing aspect.

- 1) Disease free sweet potato seed should be multiplied and supplied to farmers.
- 2) Quality seed distribution system needs to be established by Government sector.
- New food items by sweet potato substituting traditional food item such as *Keremes* need to be developed by research and extension institutes for KT activity as income generation source.
- 4) Those KT who have unique products such as *Sambal* sauce or sweet potato ice cream, etc., need their marketing ability. New trial such as segregation between KT as a producer and the 3rd party as a sales agent should be studied.
- 5) Development of new concept of value addition through primary processing should be materialized. Local sweet potato flour company and KT should enter into MOU for supplying dried sweet potato chips as a raw material of flour; final product. Solar dryer for sweet potato drying under clean condition should be demonstrated. The technical assistance from BPTP Bogor or IPB on this matter is required.
- 6) Various supports for business management, accounting, profit sharing and monitoring should be provided to KT for further development and stability of the business.
- 7) Capital for business expansion shall be provided in the form of soft loan, not by grant. The loan should be repaid by the target Kelompok Tani as the repaid principal shall be the revolving fund to be loaned to the next Kelompok Tani.

Kabupaten Majalengka

- 1) Disease free sweet potato seed should be multiplied and supplied to farmers, as same as in Kuningan.
- 2) New food items by sweet potato substituting traditional food item such as *Keremes* need to be developed, as same as in Kuningan.
- Various supports for business management, accounting, profit sharing and monitoring should be provided to KT for further development and stability of the business.
- 4) Capital for business expansion shall be provided in the form of soft loan, not by grant. The loan should be repaid by the target Kelompok Tani as the repaid principal shall be the revolving fund to be loaned to the next Kelompok Tani..
- (3) Mango in Kabupaten Kediri
 - (a) Value Chain Analysis

Value chain of mango business in Kabupaten Kediri is shown in Figure 35. Based on this illustration, the improvement direction of Mango processing is explained in this section.



(c) Improvement Direction

Following improvement direction for mango production and processing is proposed.

- 1) New technologies for mango processing should be tried first at selected KT with various supports.
- 2) KT to be supported for trial processing should be identified with the criteria of having solid organization, daily activity, savings and loan management, and especially capability on processing, marketing and business.
- 3) Mango dried chip production by KT should be arranged in conjunction with REI project. The selected KT would be able to obtain technical advice from REI and institutes such as BPTP Malang and Brawijaya University. The market compartmentalization between KT and REI can be arranged, for example, KT would deliver the product partially to REI for markets in large cities and export

market, and KT would deal with local market in the Kecamatan and Kabupaten by themselves.

- 4) Mango juice, puree and jelly production project should be started by the selected KT for trial basis. The basic technology is simple ones similar to those being used by KT Lohginawi in Kediri for pineapple. Technical supports should be arranged from University Brawijaya.
- 5) Since these are trial in nature, only a part of the capital (proposed as 20% of the total budget) shall be provided in the form of soft loan, and the rest by grant. The loan should be repaid by the target Kelompok Tani as the repaid principal shall be the revolving fund to be loaned to the next Kelompok Tani.
- 6) Once above two pilot projects will be verified as feasible and sustainable as KT's activity, expansion should be promoted to other KT, which will pass certain criteria set force by Dinas as capable Kelompok Tani marketing by plural number of KT may accelerate the market share in rural and surrounding urban markets.
- 7) The new approach for the marketing of rural products produced by KT should be studied. Several cases can be planned as follows;
 - a. To form a joint venture or partnership company with KT and private sector (3rd party). KT is responsible for the production of raw mango and processed products and the 3rd party is responsible to the marketing. The share of investment capital and profits should be determined before hand.
 - b. KT appoints sales agents demarcating their territory. The agent may have an obligation of minimum sales per a period.
 - c. KT appoints marketing team(s) who should be provided with a motorcycle for the mobility. The team should be selected from the member who has marketing capability with personal talent.
- 8) Various supports for business management, accounting, profit sharing and monitoring should be provided to KT.

4.2.2 Marketing

(1) Problem Analysis

Marketing-related problems are reviewed in Chapter 3 and analyzed as below.

- 1) Selection of the problems commonly to 5 kabupatens and 3 commodities.
- 2) Identify the core problem that has connections with other problems

Thus, a core problem was identified as "Lack of Business Mind" based on the problem analysis shown in Figure 36.



(2) Improvement Direction

In order to improve the situation represented by the core problem as above, the following direction is proposed assuming that target farmers have strong intension and take their own initiative to increase their income through agro-processing and their marketing activities..

1) Supporting system

Under the present condition as described in Chapter 3, most farmers are inactive in marketing operation, and they have little knowledge and experiences in marketing. Therefore, supporting system needs to be established, and possible options are:

- (i) Partnership with another business unit: Partnership is in the form of joint venture or agreement with third party or private company, but they are business-minded group. In this structure, Kelompok Tani is responsible for production and processing of commodity, and the partner for assisting in management and marketing. Joint operation with partners enables farmers to concentrate on production and processing, then, they are expected to absorb knowledge and skills for marketing, leading to development of business-mind.
- (ii) **Facilitator**: BDS provider would be attached to Kelompok Tani for certain period from the beginning of business model implementation to facilitate marketing activities.

2) Marketing activities

Marketing activities of sample commodities are basically common in the Study area, and, middlemen are active in conducting various types of operations, which are applicable to Kelompok Tani.



Marketing activities to be conducted by Kelompok Tani are as per Table 4.2.1, and such items are summarized as categorized activities, actual examples of activities and applicable type of business unit type for each activities.

Image of activities is illustrated in Figure 37. explaining a key concept of marketing activities. At the beginning, target product, areas and customers are to be identified. Also, marketing be strategy needs to adjusted established and according to the progress of marketing activities thereafter.

Marketing activities can be simplified into 3 categories; i) to find customers' requirement, ii) to develop and improve product to satisfy the customers' requirement, and iii) to create and develop customers (sales

promotion). Through activities in category iii), customers' needs would be found further which are to be reflected in the improvement and development of the product. This sort of cyclic operation would be conducted continuously and kept in mind always, because all factors in the market are variable, no constant.

(3) Kabupaten Cirebon and Mojokerto (Duck)

Market Features

Market features of Cirebon and Mojokerto for duck product are analyzed as follows:

τ.		
Items	Cirebon	Mojokerto
Population of duck	274,485 tails (2004)	206,949 tails (2005)
Partnership agreement among Kelompok Tanis	Partnership agreement among KTs enables to form basis for business expansion, and contribute to revitalization in duck business	No partnership agreement among KTs at the moment. Active KTs are limited.
Middlemens' dominance	No market-dominating middlemen's group	
Market potential	High market potentiality is expected, particularly eggs.	
Village collectors' activities and the background	Village collectors in duck business are very limited.	 Many collectors try to conduct new business with farmers such as: Commitment basis trading for DOD/ pullet, pullet/fresh eggs, etc. Utilize various food rejects as duck-feed to sell at low prices.
Background (presumption)	There is little room to act in between farmers and bandar, mainly due to features of duck product unlike fruit and vegetables (no seasonal peak of labor-intensive work in harvest).New business are not conducted by collectors, but covered by KT, when necessary. Because some duck KTs are strong and active, as represented and contributed by "triangle system".Above new business are done by collectors. KTs can managed this new business but they are not doing, because KTs are generally less active.	

 Table 58
 Market Features of Kabupaten Cirebon and Mojokerto

Direction for Improvement (type of business unit)

Taking above situation into account, following type of business unit is proposed for Cirebon and Mojokerto:

 Table 59
 Improvement Direction of Kabupaten Cirebon and Mojokerto

Cirebon	Mojokerto
Strengthen the existing KTs' partnership for business	Establish partnership system among Kelompok Tani
expansion.	in Mojokerto.
Replicate the partnership system to other KTs.	

Such common items are to be applied: 1) Provision of technical and financial support to KT, .2) Support for Kelompok Tani by BDS provider to facilitate them in technology and management, and 3) Conducting marketing activities indicated in Figure 37.

(4) Kabupaten Kuningan and Majalengka (Sweet Potato)

Market Features

Market features of Kuningan and Majalengka for Sweet Potato are analyzed in Table 61:

	Kuningan	Majalengka
Annual Production	90,000 to 93,000 ton (2004-2005).	13,000 to 20,000 ton in recent years
Middlemens' dominance of market	No market-dominating middlemen's group. More fair and open competition is observed among middlemen, than in Majalengka.	One particular middlemen's group dominates more than 60% of sweet potato market in Majalengka. This causes a great disadvantage to farmers in the group's dominant areas.
Processing Industry	Two processing factories for sweet potato in Kuningan.	No processing industry for sweet potato in Majalengka, but only home industry level.

 Table 60
 Market Features of Kabupaten Kuningan and Majalengka

	Kuningan	Majalengka
Market Potential	· · ·	Market potentiality of sweet potato (raw and processed) in Majalengka is limited at the moment.

Direction for Improvement (type of business unit)

Taking above situation into account, following type of business unit is proposed for Kuningan and Majalengka:

 Table 61
 Improvement Direction of Kabupaten Kuningan and Majalengka

Kuningan	Majalengka
Establish partnership between KT and local	Establish "Local Production (processing) and Local
processor (private company for processing and	Marketing" type business system in KT, in which
marketing)	attractive product and strong marketing capability
KT supply pre-processed or half-processed product	need to be developed to call customers in.
to the processor in compliance with the processor's	Depending on the progress of business activities,
requirement, advantageously utilizing low-grade	expand business in future to other products and
sweet potato.	wider areas.

Such common items are to be applied: 1) Provision of technical and financial support to KT, .2) Support for Kelompok Tani by BDS provider to facilitate them in technology and management, and 3) Conducting marketing activities indicated in Figure 37.

(5) Kabupaten Kediri

Market Features

Market features of Kediri for mango are characterized and analyzed as follows:

	Kediri	
Processing Industry	There is no mango processing industry in Kediri, but only home industry level.	
Transaction Pattern	75% of mango transactions is made before harvest, due to farmers' difficult position in harvest season (price's sharp decline, less availability of collectors due to low market prices, substantial losses by farmers' own handling to market)	
Middlemens' dominance	No market-dominating middlemen's group. Some partnership between KTs (Kediri) and private companies (other kabupatens) are observed for supply of raw materials, training and processing.	
Partnership between KTs & private companies		
Market Potential	Market availability of processed mango is limited at the moment, although various kinds of new products may have marketability. For market size expected for processed mango, market research needs to be done for local and export demand.	

 Table 62
 Market Features of Kabupaten Kediri

Direction for Improvement (type of business unit)

Taking above situation into account, following type of business unit is proposed for Kediri:

Table 63Improvement Direction of Kabupaten Kediri

Kediri (Option 1)	Kediri (Option 2)
Establish partnership between KT and private sector,	Establish "Local Production (Processing) and Local
as described above. KT is mainly responsible for	Marketing" type business system in KT, to develop
production and processing, and the private sector for	attractive product and strong marketing capability.
management and marketing.	Expand business to other products and wider areas,
	depending on the progress of business activities,.

Such common items are to be applied: 1) Provision of technical and financial support to KT, .2) Support for Kelompok Tani by BDS provider to facilitate them in technology and management, and 3) Conducting marketing activities indicated in Figure 37.

4.2.3 Microfinance

(1) Gap between Demand and Supply

The wider view of commercial bank financing situation surrounding farmers is as follows:

Currently commercial banks have abundant cash from the deposit, and they have been strengthening its efforts to expand their credit to micro, small and medium enterprises (MSMEs), directly, and indirectly by re-lending to legally registered microfinance institutions (MFIs) such as BPRs and cooperatives. At the same time, the mechanisms to increase loan from commercial banks and BPRs to MSME have been established. Bank Indonesia introduced Syariah banking, started conducting training of bank account officers in charge of MSME lending, and established the system of Banking Partner Financial Consultants (KKMBs), who are Business Development Service Providers (BDSPs) and bank account officers in charge of MSME lending in total bank lending is growing (51% in 2005). However, the share of agriculture sector in MSME lending is decreasing.

On the other hand, the efforts are made by the Ministry of Agriculture to create the environment for farmers to have easier access to bank loan. One of them is Food Security Credit (KKP), a subsidized credit for food crops, sugarcane, livestock, fishery, and food procurement, introduced in 2000. Another scheme, Agricultural Financing Service Scheme (SP3) has just been introduced in 2006, which is a guarantee service to mitigate the risk of commercial banks giving loan to farmers, by depositing cash collateral to five commercial banks. For both schemes, loan fund is derived from banks' internal cash and the loan appraisal is conducted according to the bank's criteria to weigh the agricultural risk. As a result, it ends in slower loan disbursement than expected.

In conclusion, the fund from commercial banks reach a part of farmers who obtain MSME lending, fulfilling the banks requirement of collateral, or farmers who are members of cooperatives which receive loan from commercial banks. Otherwise, farmers who do not have collaterals, and who have no link to cooperatives, who seem to be the majority, are out of reach from commercial bank loans.

In summary, the selected Kelompok Tani farmers have already had access to the finance up to certain extent, but not with the conditions they prefer. The kind of financial institutions they have access to differ. The elements they cannot control as of now is the community's geographical set up, and the profitability of the commodity. Some have access to banks, save and borrow their working capital and small investment capital around Rp.5 million. Some have access to cooperatives, save and borrow mainly the working capital around Rp.1 million without collateral, others use Kelompok Tani, to save and have loan around Rp.0.5 million without collateral, and to *warung*, and individuals (group leader, traders, feed suppliers). Other farmers do not have physical access to banks because they are located in the remote area, and they are currently served by P4K scheme.

All these situations arise from demand and supply gaps as follows:

(i) Lack of Physical Access

For Kelompok Tani in remote area, such as the ones in Majalengka and Kediri, the physical access to financial institutions is difficult. The link to BRI will be cut off when P4K loan cycle ends, because there are no other financial services available at convenient location.

(ii) Financial Needs of the Rural Community

As for the members of the community where the selected Kelompok Tani are located, Poorest and Poor category of people either has no access to any financial services, or has access to only informal microfinance such as moneylender and traders. They also have a willingness to save money, which is not realized under current situation.

(iii) Financial Needs of Agribusiness

Kelompok Tani members, even they have access to loan from banks, cooperatives, Kelompok Tani, and other financial services, they feel the production capital is not enough.

Duck farmers, who want more capital, have the intension of using it for increasing the number of ducks, and investing in hatchery machine, renting more land for keeping ducks, and creating more duck cages. Sweet potato production groups in Kuningan would also like to have more capital, for purchasing agricultural inputs, and for controlling marketing and price by themselves. Majalengka sweet potato processing groups want more funding for modernization of their processing equipment and improvement of packaging.

(iv) Not meeting the Conditions for Loan

For the farmers who do not borrow, the reasons are, firstly, the fear of not following the repayment cycle which financial institutions can set. Secondly they think they do not have collateral, whether in terms of the volume or in terms of the form of ownership documents (e.g. not in the form of certificate, but in the form of letter¹). They also feel the collateral coverage ratio set by bank is too strict. Thirdly, they feel their business is not running well enough to pay the high interest.

The average of agriculture loan amount at BRI Units visited is approximately Rp. 5 to 6 million, which coincides the maximum loan amount of the target farmers get, except for those who own bigger land and who are traders get loan in tens of millions of rupiah. The collateral requirement exemption at BRI Units is up to Rp. 3 million, and at BPD it is Rp. 1. million. These amounts are almost the maximum which cooperatives can provide to farmer members. The P4K group is qualified for the loan amount up to Rp. 2 million with the 10% compulsory savings frozen at bank.

(v) Reliance on Traders' Finance

Farmers who do not have enough financial resources other than commodity, tend to opt for traders finance to source agricultural inputs and to meet quick cash needs, using the commodity as informal collateral. In turn, some do not have the bargaining power and get the unfavorable conditions. On the other hand, it is also because of the lack of marketing capacity on farmers' side, which let them rely on traders to sell their commodities. This

¹ Processing a land ownership letter to a formal certificate may cost Rp. 1 million and it takes time.

side of traders' finance has a positive connotation, the farmers cannot fail to sell by going through the traders. To get away from this problem, farmers should either (i) have financial resources by accumulating assets, (ii) increase bargaining power through collective action, or (iii) build marketing capacity.

(vi) Limit of loan amount offered by KT / Cooperative

The problem of cooperatives and Kelompok Tani as membership organizations, is that they hit the ceiling of loan amount easily, because their loan funds are mainly sourced from internal savings. The common loan amount within the Kelompok Tani mentioned was Rp. 0.5 million, and for example, the maximum loan amount Bebek Jaya members are allowed to borrow from Syariah KSP is set at Rp. 1 million, when duck farmers would like to have the capital of more than Rp. 10 million. If their capital was not boosted by borrowing from other financial institutions, or through government finance program, such as grant (meant to be revolved in the organization) and soft loan, it keeps facing this ceiling. To solve this problem, the membership organization should increase the number of members and/or the contribution from the members.

(2) Improvement Direction for Gap Filling

It is better to link farmers to more formal financial institutions, but it was found that in most cases, it is not possible right away because of the gaps between financial demand of farmers and farmers' community, and the supply, as is stipulated in the previous section.

Since our focus is the farmers and rural communities, we propose the government and donor assistance programs to bridge these gaps by: (i) establishing a strong MFI around Kelompok Tani in the rural community to serve both farmers and community members, and, (ii) improving capacity of agribusiness itself, i.e. mainly to improve its profitability. The details of the two directions are as follows:

(i) Establishing a strong MFI in the community

This can be achieved in different ways. Followings are the three approaches of establishing a MFI, based on the savings and loan experience, characteristics of leadership, and the level of group cohesion in the target Kelompok Tani to improve the situation:

a) Establishing community MFI

This approach is for Kelompok Tani in which group activities are inactive, its leader dominates, and members have passive attitudes. This type of Kelompok Tani tends not to have active savings and loan activities.

In order to change the circumstances of the group, the intervention to strengthen group activity shall be made at the same time of agribusiness improvement. But for financial access improvement, it is recommended to establish an MFI in the community, not based on the said Kelompok Tani, but outside Kelompok Tani. This is to avoid the leadership and other power relation problems attached to the said Kelompok Tani, and to take advantage of other leaders in the community.

This approach applies to Sigaranala Indah (Kabupaten Cirebon), Linggasari 2

(Kabupaten Kuningan), and Mitra Binangkit 2 (Kabupaten Majalengka).

Process to establish and foster BMT can be referred as the intervention model.

b) Establishing own MFI

This approach is for the Kelompok Tani, in which regular savings and loan is taking place, and collective action is observed. The potential of group discipline, leadership, and financial management of the said group is also recognized.

Then it is recommended to establish MFI based on the existing group (Kelomplok Tani or Self Help Group).

There are two ways of achieving this process. The first way is to expand the group itself (in case of Lestari Sejahtera in Kabupaten Mojokerto), when the group has strong capacity and potential of capital accumulation.

The second way is to form a federation with other groups in the community (Gabungan), and transform it into MFI (P4K groups, Andaya Rasa in Kabupaten Kuningan, Delima 2 in Kabupaten Majalengka, Karya Tani and Tani Mulyo in Kabupaten Mojokerto, and Makmur Jaya in Kabupaten Kediri). In this way, the groups can combine their capital bases.

c) Strengthening existing function of cooperative (KSP/USP)

If Kelompok Tani already have a strong linkage with cooperatives, which are the nearest convenient financial institutions, the intervention shall be the one to strengthen this linkage, and the capacity of the cooperatives.

This applies to the case of Tigan Meker in Kabupaten Cirebon, which is a member of the cooperative Sumber Rejeki, and Bebek Jaya in Kabupaten Cirebon, which is a member of the Syariah cooperative KSP Al Qomaliah. Budi Daya in Kediri has a registered cooperative which has not been active, so it is recommended to activate it.

(ii) Agribusiness Improvement

To improve the profitability of agribusiness and capacity of running agribusiness, it requires the intervention of technical assistance plus finance. The improvement directions are explained in 4.2.1 Agricultural Processing and 4.2.2 Marketing.

The three options under (i) are the financial improvement intervention parallel or subsequent to the agribusiness improvement.

In case of the promising venture such as KT: Bina Karya in Kabupaten Kuningan, it is recommended to transform it into a business entity in the form of a company. Then it is expected to have an access to commercial banks for finance.

(iii) Asset Building

Asset building shall be incorporated in all the improvement options stated above.

Farmers, Kelompok Tani, cooperatives, and MFIs are supposed to build assets for livelihood

stability and organizational sustainability.

(iv) Goal

The approaches of (i) to (iii) shall lead to the Goal of the farmer and their community owning and running a financially viable MFI and/or individuals become financially profitable enough and having enough assets, and if necessary, have access to financial services of their preference as an individual or as an institution.

The problem analysis of six gaps and improvement directions described above are shown in Figure 38 in the next page.

