

ANNEX II  
AGRICULTURE

**The Feasibility Study  
on  
Integrated Agricultural and Rural Development  
in  
Highland Area in the Republic of Indonesia**

**ANNEX II AGRICULTURE**

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## CHAPTER 1 VEGETABLE PRODUCTION IN THE HIGHLAND AREA

### 1.1 Statistics of Vegetable Production

Many kinds of vegetables are planted in the West Java province having high advantage of large consumer market of Jakarta and Bandung cities and suitable climate conditions of the highland for vegetable cultivation. Statistics on vegetable production are available in the annual report of Provincial Agricultural Service (PRAS) of West Java. The statistics present information on 18 kinds of vegetables. Statistics of vegetable production are presented in Tables II-1 to Table II-8 for Indonesia, West Java Province and five districts related to the Study area.

### 1.2 Vegetable Production and Major Vegetables in the Highland

Vegetable production in five districts relevant to the Study area is gradually increasing on quantity, planted area and share in the provincial total. The production in five districts occupied ranging from 65% to 70% of the total of West Java province in recent 3 years. As shown in the table below, temperate vegetables such as potato, cabbage, etc. are dominant in the five districts. These temperate vegetables are sold to consumers in the market because of more advantageous vegetables than tropical vegetables in the lowland. In the five districts, vegetable productions of Sumedang and Kuningan districts have occupied only less than 2 %, however, Kuningan district produces a large amount of welsh onion and red onion.

**Share of Vegetable Production in the Five Districts to the Total in West Java Province**

More than 75 %	Potato, Cabbage, Carrot, Kidney bean (kacang merah), Tomato, Chayote, French bean (kacang buncis), Garlic, Chinese radish
50 - 75 %	Welsh onion (bawang daun), Chili, Chinese cabbage(petsai)/Mustard green (/sawi),
25 – 50 %	Red onion (bawang merah), Eggplant
Less than 25 %	Yardlong bean (kacang panjang), Amaranth (bayam), Swamp cabbage (kacang kung), Cucumber

Source: Annual Report of PRAS West Java.

Ratios of planted area (harvested area in the statistics) of vegetable in the five districts are shown in the table below. The table presents that priority vegetables and botanical groups in the highland area are tomato, potato and chili (solanaceous crops), cabbage, Chinese cabbage and mustard green (cole herb crops), red onion and welsh onion (allium crops), and carrot. The chili, which is a competitive vegetable with lowland area, is increasing in production and planted area in the high land. Garlic and chinese radish may have a potential for production increase, because of increasing consumers' demand and introduction

of new cultivation technology. Eggplant and cucumber, which are major vegetables in the lowland, may be expanded into the highland area by introduction of suitable varieties for natural conditions of highland. Production of sweet corn, which has not been presented in the statistics, is recently increasing by expansion of consumption.

**Ratio of Planted Area of Major Vegetables in the Five Districts**

(%)

Vegetables	Area ratio	Vegetables	Area ratio	Vegetables	Area ratio
<b>Tomato</b>	<b>7.0</b>	Amaranth	0.8	<b>Red onion</b>	<b>6.9</b>
<b>Chili</b>	<b>9.9</b>	Cucumber	3.1	<b>Welsh onion</b>	<b>8.5</b>
Eggplant	2.2	Chayote	1.3	Garlic	0.7
<b>Potato</b>	<b>13.6</b>	<b>French bean</b>	<b>4.2</b>	<b>Carrot</b>	<b>4.4</b>
<b>Cabbage</b>	<b>13.2</b>	<b>Red kidney bean</b>	<b>11.2</b>	Chinese radish	0.6
<b>Petsai/Sawi *</b>	<b>6.7</b>	Yardlong bean	5.0	Swamp cabbage	0.8

Note: **Bolds** are major vegetables in the highland  
 Petsai/Sawi: Chinese cabbage and mustard green

Source: Annual report of PRAS West Java,

## **CHAPTER 2 STRATEGY OF AGRICULTURAL DEVELOPMENT**

### **2.1 Basic Concept of Agricultural/Horticultural Development**

Attainment of the project purpose set out in PDM, i.e., “To increase farmers income through stabilization of vegetable production” can be made by i) expansion of planted area of profitable vegetables; ii) stable production of vegetables; iii) producing of competitive vegetables in the market with high quality; and iv) vegetable production to meet the needs of consumers and market channels.

### **2.2 General Strategy and Approach**

General strategies and approaches to horticulture development in the model areas are:

- a) To increase production of temperate vegetables using favorable natural conditions of the tropical highland for large consumers markets of Jakarta and Bandung,
- b) To improve quality of vegetable products to become competitive in the market,
- c) To produce vegetables constantly/steadily throughout the year in order to reduce influence from market price decline,
- d) To introduce sustainable farming system for environment/soil conservation and safety of products to consumers health,
- e) To extend improved farming technology through farmers group,
- f) To activate supply of inputs (seeds, fertilizer and agro-chemicals) and marketing of products through farmers organization in collaboration with private sector, and
- g) To create employment opportunities through intensive vegetable production.

### **2.3 Strategies and Approaches of Model Areas**

Specific strategies/approaches of each model area to agricultural/horticultural development are shown below.

#### **2.3.1 Mekarjaya Model Area**

- a) To increase vegetable production by crop diversification from palawija and paddy to vegetables,



- b) To increase cropping intensity of vegetables by maximum triple cropping in a year using improved irrigation facilities,
- c) To expand improved technology of vegetable cultivation, and
- d) To prevent soil erosion.

#### 2.3.2 Langensari Model Area

- a) To increase cropping intensity of vegetables by maximum triple cropping in a year using improved irrigation facilities, and
- b) To introduce reduced input farming and IPM technology.

#### 2.3.3 Tugumukti Model Area

- a) To increase cropping intensity of vegetables by maximum triple cropping in a year using improved irrigation facilities, and
- b) To introduce reduced input farming and IPM technology.

#### 2.3.4 Gekbrong Model Area

- a) To increase vegetable production by crop diversification from palawija to vegetables,
- b) To increase cropping intensity of vegetables by maximum triple cropping in a year using improved irrigation facilities,
- c) To expand improved technology of vegetable cultivation, and
- d) To prevent soil erosion.

#### 2.3.5 Cisurupan Model Area

- a) To increase cropping intensity of vegetables by maximum triple cropping in a year using improved irrigation facilities,
- b) To introduce reduced input farming and IPM technology, and
- c) To create competitive special vegetable product.

#### 2.3.6 Tanjungkarya Model Area

- a) To establish crop rotation system in paddy field: paddy rice in the wet season and vegetables in the dry season, and
- b) To increase cropping intensity of vegetables by maximum triple cropping in a year in dry-crop land, and by maximum double cropping of vegetables after paddy rice in paddy field in a year using improved irrigation facilities.

### 2.3.7 Mekarmukti Model Area

- a) To introduce vegetable cultivation technology in the dry season using improved irrigation facilities,
- b) To establish crop rotation system in paddy field: paddy in the wet season and vegetables in the dry season, and
- c) To increase paddy rice production using improved irrigation facilities.

### 2.3.8 Cisantana Model Area

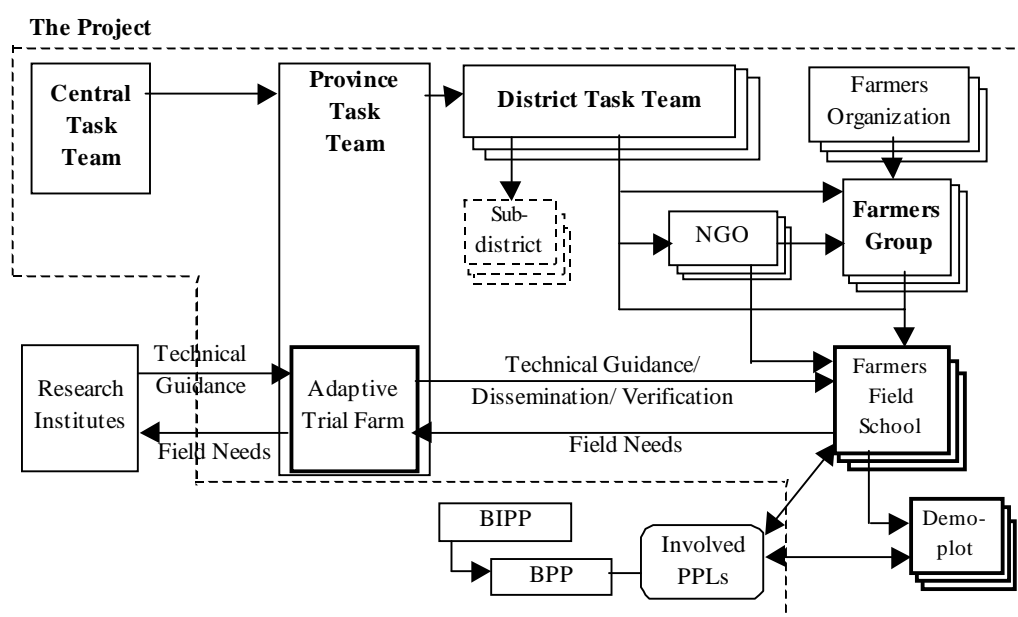
- a) To increase cropping intensity of vegetables by maximum double cropping in a year using improved irrigation facilities and maximized use of limited water source,
- b) To improve cultivation technology on new vegetables, and
- c) To establish proper cropping pattern involved new vegetables.

## CHAPTER 3 PRELIMINARY IMPROVEMENT PLAN OF VEGETABLE FARMING TECHNOLOGY

### 3.1 Strategy and Approach to Vegetable Farming Technology Improvement

Strategies and approaches to improvement of vegetable farming technology are:

- a) To disseminate improved farming technology through Farmers Field School (FFS) ,
- b) To train farmers by verification and demonstration of improved farming technology at Demonstration Plots (Demo-plots) in farmers' fields,
- c) To provide FFS for dissemination of improved farming system and voluntary activities of farmers groups,
- d) To establish Adaptive Trial Farm (ATF) attached to existing Margahayu BBU at Lembang, which shall be a technical core of vegetable cultivation in the Project, in order i) to experiment newly-introduced vegetables and varieties, ii) to collect information/data of vegetable farming from research institutes and private sector, and to provide them to the model areas, iii) to provide technical guidance for FFS and Demo-Plot, and iv) to train and demonstrate improved farming technology of vegetables to the Task Team and leader farmers, and
- e) To train PPL on vegetable farming through involved FFS and Demo-plot activities.



**Framework of Improvement of Vegetable Farming Technology**

### **3.2 Guidance of Improved Vegetable Farming Technology**

Technical guidance on improved technology of vegetable farming will be provided through farmers groups in the field level under the control of the project task team. Farmers field school will be an effective tool in order to demonstrate, to verify and to disseminate improved technology to farmers. The farmers field school will be held at demonstration plot and other facilities. The demonstration plots will be set up in a farmer's fields. The farmers field school and demonstration plot are carried out by the district task team and leader farmers in coordination with NGO staff.

#### **3.2.1 Farmers Field School**

##### **(1) Purpose**

The Field Farmers School (FFS) will be operated for farmers groups by means of guidance/ workshop/ discussion/ actual experience with regard to i) dissemination of improved vegetable farming, ii) improvement of marketing of vegetable products (joint collection and joint handling), iii) joint purchase of inputs (seeds, fertilizer, pesticides, tools etc.) through farmers organization, and iv) application of group crop credit. Simultaneously, the FFS will encourage voluntary activities of farmers group related with vegetable production in rural community.

##### **(2) Activities**

- a) Dissemination of improved vegetable farming technology including:
- Crop cultivation,
  - Pest/disease control and Integrated Pest Management (IPM),
  - Fertilizer application,
  - Cropping planning (cropping pattern),
  - Introduction of new varieties and new crops,
  - On-farm irrigation water management,
  - On-farm quality management of vegetable products including chemical reduced-cultivation,
  - Usage of by-products,
  - Compost preparation,
  - Farm mechanization,
  - Countermeasures of on-farm soil erosion,
  - Environmental conservation of watershed and farm lands,
  - Farmers tour to progressive vegetable producing area,
  - Farmers tour to adaptive trail farm/ related research institutes,

- Invitation of vegetable farming specialist/adviser, etc.
- b) Marketing improvement and joint collection/handling of vegetable products:
  - Market price information including price tendency/forecast,
  - Operation and management of collection center,
  - Market-oriented cropping pattern,
  - Quality control of post-harvest, keeping freshness, loss reduction,
  - Washing/sorting,
  - Grading,
  - Packing including packing materials,
  - Usage of by –products,
  - Short-term storing preparation and processing in village,
  - Discussion with private dealers on market needs,
  - Farmers tour to farmers organizations in progressive marketing area,
  - Farmers tour to consumers market/ supermarket, etc.
- c) Joint purchase of inputs and farm tools:
  - Credit application by group,
  - Group purchase and contract with private dealers,
  - Compost supply by coordination with livestock sector/areas,
- (3) Schedule and venue of field farmers school
  - Regularly once 2 weeks in principle,
  - Holding by farmers groups of 20 to 25 members in principle,
  - Holding at demo-plot, vegetable collection facility, village facilities, etc.
  - Holding under the guidance by district task team with participation of NGO staff for coordination
- (4) Required facilities and Personnel
  - NGO: one NGO staff to 60 farmers or 30 ha of cultivated land, or more than two staff to a model area
  - Office space in the collection/handling facility to be installed by the Project, with chairs, desks, cabinet, etc.

### Number of Farmers Groups and Required NGO Staff

	Estimated No. of farmers	Cultivated area in the model area (ha)	Estimated farmers groups to be established	No. of NGO staff required
Mekarjaya	320	100	14	6
Langensari	150	72	7	3
Tugumukti	40	50	2	2
Gekbrong	40	50	2	2
Cisurupan	110	40	5	2
Tanjungkarya	140	80	6	3
Mekarmukti	230	80*	10	4
Cisantana	330	120	15	6
Total	1,360	592	61	28

Note \*: Actual irrigable area

### 3.2.2 Demonstration Plot

#### (1) Purpose

The demo-plot will be provided to each farmers group in order to demonstrate and verify improved farming technology of vegetables, IPM and countermeasures of soil erosion. Also, it is a venue of FFS.

#### (2) Location and Size of Demo-plot

Demo-plot will be selected principally with one plot to a farmers group in cultivated farmland operated by farmers. The location shall be accessible easily, selected in the farmers group, and shifted every year principally.

Size of Demo-plot will be 400 – 600 m<sup>2</sup> (30 – 40 bata) per plot.

#### (3) Management of Demo-plots

Demo-plot will be operated by farmers themselves according to the instruction/manual of the task team. Required inputs, seeds, chemical fertilizers, pesticides and specific materials will be supplied from the Project free of charge. The farmer owning Demo-plot shall pay 50 % of supplied input cost to the farmers group after the harvest of group activities.

#### (4) Required Operation Cost

Input cost: Rp. 12.0 million/ha/crop, 3 crops/year, 61 Demo-plots, 0.04 m<sup>2</sup> – 0.05 m<sup>2</sup>/plot

Related cost: Transportation of inputs, Signboards, etc.

### 3.2.3 Adaptive Trail Farm

The Adaptive Trial Farm will be established in the existing BBU Marhagayu at Lembang as a technical center of vegetable cultivation in the Project. The farm will function as shown below:

- Adaptability trial of new vegetables/varieties in the highland,
- Trail and demonstration of improved farming technology including IPM,
- Training of task team on vegetable farming,
- Feed back channel to research institutes from field problems and needs,
- Collection of data/information of vegetable production,
- Dissemination of data/information on improved vegetable farming to farmers,
- Preparation of simple booklets on vegetable farming guidance for farmers,
- Technical support of demonstration plot management,
- Trial and demonstration on water-saving irrigation method,
- Stock seed distribution and guidance/control of extension of seed multiplication

BBU Marhagayu is located adjoining with RIV in the suburb of Lembang at 1,250 m in elevation. It has 7.43 ha of lot area, experimental farm, green house, screen house, meeting room, storage, and laboratory for tissue culture of orchid and multiplication of edible mushroom fungi. There exist gravity spring water from 2 km of distance to water source and shallow well in the lot area. Total 23 technical staff and field workers are engaging for seed/seedling production of flower and dissemination of vegetable/flower cultivation technology.

For the adaptive trial farm, the following facilities and equipment will be required:

- Land consolidation and installation of irrigation facilities for adaptive trial of improved farming technology and new vegetables/varieties,
- Installation of water-saving irrigation facilities,
- Farm operation machinery and tools,
- Rehabilitation of meeting room, storage and laboratory,
- Building for training/workshop room, administration room and storage farm machinery/tools,
- Laboratory equipment of experiment/test for seed and product quality, and
- Training equipment.

## CHAPTER 4 PRELIMINARY AGRICULTURAL DEVELOPMENT PLAN FOR 8 MODEL AREAS

### 4.1 General

Development plan of agriculture/horticulture at the first field survey stage was prepared preliminarily for selection of the priority model areas under conditions of irrigation to maximize the natural potentials according to the project strategies and approaches mentioned above.

### 4.2 Cropping Pattern and Production

Each model area will be planted with selected temperate vegetables, which are suitable in the highland. For Mekarmukti area located at low attitude mainly lowland vegetables such as cucumber, eggplant, etc will be introduced. The proposed cropping patterns and cropping intensities in the model areas are summarized below.

**Proposed Cropping Pattern and Planted Area in the Model Areas**

	Cultivated area (ha)	Cropping pattern			Cropped area (ha)	Cropping intensity (%)
		Wet season	Dry season I	Dry season II		
Mekarjaya	59 41 Total 100	Vegetable Vegetable	Vegetable Vegetable	Vegetable -	168 78 Total 246	285 190 Total 246
Langensari	72	Vegetable	Vegetable	Vegetable	205	285
Tugumukti	50	Vegetable	Vegetable	Vegetable	143	285
Gekbrong	50	Vegetable	Vegetable	Vegetable	143	285
Cisurupan	40	Vegetable	Vegetable	Vegetable	114	285
Tanjung-karya	50 30 Total 80	Vegetable Paddy	Vegetable Vegetable	Vegetable Vegetable	143 87 Total 230	285 290 Total 287
Mekar-mukti	40 40 Total 80 *	Paddy Rainfed paddy	Vegetable Vegetable	- -	80 80 Total 172	200 200 200
Cisantana	120	Vegetable	Vegetable	-	240	200

Note \*: actual irrigable area

Regarding unit yields of vegetables at the full-developed stage, it is assumed that anticipate unit yields are nearly equal to present yields of the progressed model areas, because the project will put more stress on quality improvement of products than increase of yields. Proposed major crops and prospective production are shown in the table below.



### Prospective Vegetable Production

	Proposed major vegetables	Cropped area (ha)		Vegetable production (ton)	
		Vegetable	Paddy	Present	Prospect
Mekarjaya	Tomato, Potato, Beans, carrot	246	-	1,040	4,180
Langensari	Tomato, Cabbage, Petsai, Chili	205	-	2,940	3,510
Tugumukti	Tomato, Cabbage, Beans Chili	143	-	1,650	2,790
Gekbrong	Tomato, Carrot, Cabbage, Petsai	143	-	1,170	2,690
Cisurupan	Cabbage, chili, Tomato, Beans	114	-	1,310	1,910
Tanjungkarya	Cabbage, Tomato, Beans, Petsai	200	30	1,920	3,520
Mekarmukti	Cucumber, Eggplant, Chili, Tomato	80	80	10	970
Cisantana	Welsh onion, Potato, Carrot, Beans	240	-	3,540	4,210

Note: Petsai: Chinese cabbage including lettuce and mustard green

### 4.3 Farming Practices

Labor requirements for the proposed cropping system are roughly estimated on the basis of labor requirements of intensive farming at present. In the proposed farming system, labor requirements will increase with planted areas, on the other hand, irrigation works will decrease. Labor requirements and labor intensity are shown below comparing with present condition.

#### Labor Requirement and Labor Intensity of Present Conditions and Proposed Plan

	Labor requirement (1000 man-day/year)		Labor intensity (man-day/ha/year)	
	Present	Proposed	Present	Proposed
Mekarjaya	78	132	780	1,320
Langensari	99	109	1,380	1,520
Tugumukti	54	79	1,080	1,590
Gekbrong	45	76	890	1,520
Cisurupan	44	63	1,100	1,570
Tanjungkarya	85	125	1,060	1,570
Mekarmukti	36	72	450	900
Cisantana	110	125	920	1,040

In the proposed plan, maximum required labor intensity increases to 1,600 man-days/ha/year. Based on the average family size of 4.4 persons/family, and average agricultural labor force ratio to total population of 40 % in the model areas, available agricultural labor force is estimated to be 1.8 person/family. Therefore it is estimated that average workable labor force is about 530 man-day/family/year. The results of rough estimation show that proposed plan will create employment opportunities in the on-farm works.

Required chemical fertilizers and agro-chemicals will be supplied through private channel and KUD's kios using crop credit, KUT, by joint purchase of farmers organization. The distribution capacity of the market will be sufficient.

In isolated area, Mekarjaya, Cisurupan, Tanjungkarya, Mekarmukti and Cisantana, vegetable seeds of good varieties will be distributed by joint purchase of farmers

organizations.

Shortage of compost will be a serious problem. The countermeasure will be proposed as follows:

- Livestock raising: Investment of profit/surplus to livestock gradually so much as forage supply potential
- Compost preparation: Using by-products of vegetables/food crops and fermentation starter of living sewage water/livestock manure on pavement lot
- Cooperation with livestock raising areas/livestock farmers through farmers group purchase/transport by contract with livestock area or livestock farmers

#### 4.4 Production Value and Project Benefit

According to the conditions mentioned above, the production value is estimated at about Rp 15.9 billions in total of eight model areas. The prospective production values of model areas will increase ranging from 121% to 339% of the present conditions. Prospective production values per ha are estimated at Rp.23 millions to Rp.58 millions at the full development stage.

**Prospective Production Value of Model Areas**

	Production value (Rp million)			Increase rate (%)	Production value per ha (Rp 1000)
	Present	Prospective	Incremental		Prospective
Mekarjaya	1,776	5,318	3,542	299	53,180
Langensari	3,158	3,836	677	121	53,270
Tugumukti	1,725	2,876	1,152	167	57,520
Gekbrong	1,311	2,882	1,571	220	57,640
Cisurupan	1,576	2,324	748	147	58,100
Tanjungkarya	2,286	4,147	1,861	181	51,840
Mekarmukti	549	1,852	1,303	337	23,150
Cisantana	3,476	4,783	1,307	138	39,860
Total	15,858	28,018	12,159	177	47,330

**Net Profit and Project Benefit**

	Net Profit (Rp million)		Benefit (Rp million)	Increase rate (%)	Benefit per ha (Rp 1000/ha)
	Present	Proposed			
Mekarjaya	526	2,324	1,798	442	23,240
Langensari	953	1,499	546	157	20,820
Tugumukti	554	1,186	632	214	23,720
Gekbrong	458	1,270	812	277	25,410
Cisurupan	544	849	306	156	21,230
Tanjungkarya	654	1,369	715	209	17,110
Mekarmukti	130	590	461	455	7,380
Cisantana	1,402	2,196	794	157	18,300
Total	5,221	11,284	6,063	216	19,060

Net profit of crop production will increase ranging from 157% to 455% in the model areas. Estimated project benefits per ha under the above mentioned

conditions, range from Rp. 7.4 millions to Rp. 25.4 millions.

#### 4.5 Farm Household Economy

Income increase of farm household is roughly estimated that net profit per ha from crop cultivation will range from Rp. 7.4 millions of Mekarmukti model area to 25.4 millions of Gekbrong model area at the full development stage. These profit amounts is equal to 157 % - 455 % of present conditions. The prospective profits of typical farm size in the model areas range from Rp. 3.0 millions to 20.3 millions as shown in the table below.

**Net Profit and Profit Increase of per ha and Typical Farm Size**

	Profit per ha (Rp 1000)		Profit of typical farm size * (Rp 1000)			Increase rate (%)
	Present	Prospective	Farm size (ha)	Present	Prospective	
Mekarjaya	5,260	23,240	0.2	1,050	4,650	442
Langensari	13,240	20,820	0.3	3,970	6,250	157
Tugumukti	11,080	23,720	0.6	6,650	14,230	214
Gekbrong	9,170	25,410	0.8	7,330	20,330	277
Cisurupan	13,590	21,230	0.3	4,080	6,370	156
Tanjungkarya	8,180	17,110	0.5	4,090	8,550	209
Mekarmukti	1,620	7,380	0.4	650	2,950	455
Cisantana	11,680	18,300	0.3	3,500	5,490	157

Note: Assumed that whole operated farm is located in the model area

## CHAPTER 5 HORTICULTURAL PRODUCTION PLAN OF FOUR PRIORITY MODEL AREAS

### 5.1 Improvement of Farming Technology

The general technology for vegetable cultivation to be improved in the highland area is shown in Table II-9. Priority farming technologies to be introduced into each model area are shown below:

- Crop diversification to vegetables from paddy and palawija crops
- Rotation cropping of paddy rice and vegetables,
- Improving of quality of products,
- Introduction of cropping schedule giving priority to marketability and avoiding of growth damage due to continuous cropping,
- Erosion control,
- Compost production technology by utilizing rice straws shown in Table II-10, and
- Technology to improve the quality of the products, to control production cost by introducing of ecological farming technology including IPM, pay attention to environmental conservation, and safe products for consumers' health.

### 5.2 Selection of Crops and Cropping Pattern

The cropping schedule is determined as “general cropping schedule of the area” through discussions in the farmers' group, taking into consideration avoidance of continuous cropping injury and official market information. Proposed crops will be selected mainly from temperate vegetables, which are suitable and advantageous for the cultivation in the highland area and marketable, taking into account the levels of farmers' farming technique, marketability, and particular condition of each location. The following crops are proposed:

Solanum sp.	(tomato, chili, bell pepper, potato),
Cole sp.	(cabbage, chinese cabbage, cauliflower, broccoli),
Legume sp.	(french bean, long bean, green pea),
Allium sp.	(welsh onion, red onion, garlic, onion),
Oenanthe sp.	(carrot, celery, parsley),
Cucumis sp.	(cucumber, melon),
Gramineae sp.	(sweet corn, baby corn), and
Lectuca sp.	(lettuce).

### 5.3 Anticipated Yields and Production

Anticipated unit yields of each model area are set at same level of advanced farmers in the area at present, and the project put priority on quality improvement of products rather than yields increase.

Crop budgets of model areas are shown in Tables II-11 to II-22 comparing with present condition and proposed plan. Cropped area and crop production are shown in Tables II-23 to II-34.

The unit yields, cropped areas and crop productions of the priority model areas are summarized as below.

**Unit Yields of Present and Proposed Conditions**

(Unit: ton/ha)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Tomato	11	18	18	20	15	20	20	22
Chili	4	6	6	7	8	9	6.5	8
Potato	12	17	18	20	12	17	16	21
Cabbage	18	21	22	24	20	24	23	25
Chin. Cabbage	15	18	17	18	17	18	18	20
Bean vegetables	6	10	7	10	7	10	8	10
Red onion	6	7	7	8	-	-	-	-
Welsh onion	8	12	-	-	13	14	12	15
Carrot	10	15	17	18	19	22	20	22
Sweet corn	7	8	7	9	8	10	8	10
Paddy	3.5	-	4.0	4.5	-	-	-	-
Maize	1.4	-	-	-	2.2	-	-	-
Sweet potato	7	-	-	-	-	-	-	-

Note: Refer Tables II-11 – II-22

**Cropped Area and Cropping Intensity**

(Unit: ha)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Tomato	8	27	17	35	26	32	26	30
Chili	10	17	8	15	18	13	24	25
Potato	7	27	0	3	4	10	15	18
Cabbage	5	25	24	35	3	25	34	35
Chin. Cabbage	3	15	5	15	5	20	25	25
Bean vegetables	11	37	14	30	2	11	5	20
Red onion	2	20	2	5	0	0	0	0
Welsh onion	2	13	0	0	2	4	2	4
Carrot	4	24	2	6	4	15	0	4
Sweet corn	2	7	5	6	3	5	2	4
Paddy	66	-	93	54	-	-	-	-
Maize	13	-	-	-	25	-	-	-
Sweet potato	16	-	-	-	-	-	-	-
<b>Total</b>	<b>149</b>	<b>212</b>	<b>170</b>	<b>204</b>	<b>92</b>	<b>135</b>	<b>133</b>	<b>165</b>
Net Irrigable Area	83	83	77	77	50	50	58	58
Cropping Intensity (%)	180	255	220	265	185	270	230	285

Note: Refer Tables II-22 – II-25

### Crop Production of Priority Model Areas

(Unit: ton)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Tomato	88	486	306	700	390	640	520	660
Chili	40	102	48	105	144	117	156	200
Potato	84	459	0	60	48	170	240	378
Cabbage	90	525	528	840	60	600	782	875
Chin. cabbage	45	270	85	270	85	360	450	500
Bean vegetables	66	370	98	300	14	110	40	200
Red onion	12	140	14	40	0	0	0	0
Welsh onion	16	156	0	0	26	56	24	60
Carrot	40	360	34	108	76	330	0	88
Sweet corn	14	56	35	54	24	50	16	40
Total of Vegetables	495	2,924	1,148	2,477	867	2,433	2,228	3,001
Paddy	231	-	372	243	-	-	-	-
Maize	18	-	-	-	55	-	-	-
Sweet potato	112	-	-	-	-	-	-	-

Note: Refer Table II-23 – II-26

#### 5.4 Production Cost and Profit

Based on the crop budgets and cropped areas, production values, production costs and net profits are estimated as shown in Table II-27 to II-30. The production cost consists of direct cost (inputs, hired labor and tool and equipment) and indirect cost (tax, interest, water charge and land fee).

The following table shows a summary of the production value, production cost and incremental benefit.

#### Production Value, Production Cost and Profit of Priority Model Areas

(Unit: Rp. million)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Production Value	1,188	4,211	1,844	3,348	1,675	2,957	2,863	4,006
Direct produc. cost								
Input	466	1,441	567	1,047	572	968	1,145	1,303
Hired labor	235	424	307	413	129	203	333	406
Others	41	105	52	84	39	64	83	96
Total	742	1,970	926	1,544	739	1,235	1,560	1,805
Indirect cost	127	264	149	218	108	173	190	224
Total production Cost	869	2,234	1,074	1,762	848	1,408	1,750	2,029
Profit	320	1,977	770	1,586	828	1,549	1,113	1,976
Incremental Benefit		1,657		816		721		864

Note: Refer Tables II-27 – II- 30

## 5.5 Farmers Economy

Farmers' economy of average and typical farming sizes is shown below.

### Gross Income and Net Profit of Average and Average and Typical Farming Sizes

(Unit: Rp. 1000)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
<b>Average farm size</b>	0.21		0.28		0.42		0.22	
Gross income	3,006	10,653	6,706	12,174	14,071	24,837	10,858	15,193
Production Cost	2,198	5,651	3,906	6,409	7,120	11,829	6,638	7,698
Net income	808	5,002	2,790	5,766	6,951	13,008	4,220	7,496
Incremental benefit	4,194		2,966		6,057		3,276	
<b>Typical farm size</b>	0.12		0.25		0.37		0.16	
Gross income	1,718	6,087	5,987	10,870	12,396	21,880	7,897	11,050
Production Cost	1,256	3,229	3,488	5,722	6,272	10,420	4,828	5,598
Net income	462	2,858	2,500	5,148	6,124	11,460	3,069	5,451
Incremental benefit	2,396		2,648		5,336		2,382	

Note: Typical-farming size means median size in operating size distribution.

## 5.6 Input Requirement

According to the increase of cropping intensity, improvement of farming technology and crop diversification, of input requirements will increase. Required input amounts are estimated in the following table.

### Input Requirement

(Unit: Rp. million)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Total of inputs	466	1,441	567	1,047	572	968	1,145	1,303

Note: Refer Tables 27 - 30

## 5.7 Labor Requirement

Labor requirements for the proposed plan are shown below. The labor requirements will increase to 20% in Langensari area and 80% in Mekarjaya area comparing from the present conditions. The incremental labor requirements will contribute to creation of employment opportunity in the rural area.

### Labor Requirement for Present and Proposed Conditions

(Unit: 1000 person-day)

	Mekarjaya		Tanjungkarya		Gekbrong		Langensari	
	Present	Proposed	Present	Proposed	Present	Proposed	Present	Proposed
Total requirement	62.3	112.4	76.2	102.5	47.2	74.4	75.3	91.8
Family labor	40.5	73.1	49.5	66.6	30.7	48.4	48.9	59.7
Hired labor	21.8	39.3	26.7	35.9	16.5	26.0	26.4	32.1

## CHAPTER 6 FARM ECONOMIC SURVEY

### 6.1 Survey Objectives and Methodology

Following the farm household interview survey carried out in the phase-1 stage, the farm economic survey of the beneficiaries was carried out in the phase-2 stage focusing on household income and expense in order to clarify financial conditions of target farmers of eight model areas. Survey team was organized 8 NGO staff trained by the Study team.

Sample size was 222 in total of 8 model areas as shown below. The sampling size is estimated at nearly 10% of all beneficiaries. The household sampling for interview survey was randomly selected from beneficiaries' list prepared by the village office for the priority model areas and from residents' list of relevant sub-village for the other model areas.

- Mekarjaya	25	- Langensari	33
- Tugumukuthi	20	- Gekbrong	19
- Cisurupan	21	- Tanjungkarya	24
- Mekarmukuthi	40	- Cisantana	40
		Total	222

### 6.2 Survey Results

The survey results is shown in Table II-35 and summarized as below:

**Farm Household Economy by Interview Survey**

(Unit: Rp. 1000)

	Cash income from agriculture	Production cost of agriculture	Net income from agriculture	Non-agricultural cash income	Total of net income	Living expenditure
Mekarjaya	5,250	2,020	3,230	1,220	4,450	5,240
Langensari	15,890	8,060	7,830	1,770	9,600	10,390
Tugumukuthi	9,480	4,700	4,780	1,150	5,930	7,330
Gekbrong	9,070	3,990	5,090	390	5,480	5,660
Cisurupan	14,550	9,940	4,610	1,020	5,630	5,670
Tanjungkarya	11,390	5,220	6,170	1,260	7,430	8,170
Mekarmukuthi	4,170	1,590	2,580	980	3,560	4,150
Cisantana	9,470	4,570	4,900	1,450	6,350	6,640

Note: Refer Table II-35



## CHAPTER 7 BENEFICIARIES OF FOUR PRIORITY MODEL AREAS

### 7.1 Beneficiaries of Model Areas

Relevant villages with the priority model areas prepared the beneficiaries' list of the model areas. The beneficiaries' lists are presented in Table II-36 – II-39. According the beneficiaries lists, total beneficiaries are 1,060 farmers in total of four priority model areas. Average and typical operating farm sizes are shown in the table below.

**Average and Typical Operating Farm Size of Priority Model Areas**

	Net irrigable area (ha)	No. of beneficiaries	Average operating farm size (ha)	Typical operating farm size (ha)
Mekarjaya	83	400	0.21	0.12
Tanjungkarya	77	280	0.28	0.25
Gekbrong	50	120	0.42	0.37
Langensari	58	260	0.22	0.16

Note: Refer Tables II-35 – II-39

Tables

**Table II-1 Vegetable Production of Indonesia**

		<b>Indonesia</b>										Average	Ratio in
Year		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	(1991-98)	the area
Red onion or Shallot (Bawang merah)	ha	60,399	70,081	70,989	68,913	75,123	84,630	77,210	96,292	88,540	76,498	79,774	8.9%
	ton	399,488	495,183	509,013	528,311	561,267	636,864	592,551	765,567	605,736	599,304	599,827	8.3%
	ton/ha	6.61	7.07	7.17	7.67	7.47	7.53	7.67	7.95	6.84	7.83	7.52	
Welsh onion or Scallion (Bawang daun)	ha	29,113	29,281	28,349	31,059	34,903	34,081	34,740	40,279	38,828	36,563	34,850	3.9%
	ton	243,891	237,792	219,024	250,005	243,319	272,182	299,922	351,899	294,426	287,506	277,285	3.8%
	ton/ha	8.38	8.12	7.73	8.05	6.97	7.99	8.63	8.74	7.58	7.86	7.96	
Potato (Kentang)	ha	39,229	44,930	39,620	48,852	51,122	56,057	62,388	69,946	50,190	65,047	55,403	6.2%
	ton	559,369	628,727	525,839	702,284	809,457	877,146	1,035,257	1,109,560	813,368	998,032	858,868	11.9%
	ton/ha	14.26	13.99	13.27	14.38	15.83	15.65	16.59	15.86	16.21	15.34	15.50	
Chinese cabbage & Mustard green (Petai/Sawi)	ha	30,963	38,333	35,868	37,739	41,042	45,252	54,035	53,918	48,105	52,125	46,011	5.2%
	ton	282,195	375,826	322,164	370,670	430,068	455,570	530,269	592,930	441,861	462,384	450,740	6.2%
	ton/ha	9.11	9.80	8.98	9.82	10.48	10.07	9.81	11.00	9.19	8.87	9.80	
Cabbage (Kubis)	ha	47,859	52,237	52,675	55,316	60,262	67,350	65,821	69,815	64,990	69,150	63,172	7.1%
	ton	926,110	1,071,756	974,553	1,213,365	1,266,035	1,417,977	1,625,228	1,580,408	1,338,507	1,459,232	1,359,413	18.8%
	ton/ha	19.35	20.52	18.50	21.94	21.01	21.05	24.69	22.64	20.60	21.10	21.52	
Carrot (Wortel)	ha	14,206	14,568	13,398	16,573	15,228	17,126	18,311	19,502	17,428	20,945	17,314	1.9%
	ton	192,559	172,200	172,727	233,470	192,482	234,178	247,179	269,837	227,322	332,846	238,755	3.3%
	ton/ha	13.55	11.82	12.89	14.09	12.64	13.67	13.50	13.84	13.04	15.89	13.79	
Red kidney bean or Cow pea (Kacang merah)	ha	63,734	59,236	49,631	31,791	55,162	55,744	55,582	62,329	59,061	42,026	51,416	5.8%
	ton	69,789	87,132	70,443	92,487	86,903	92,041	85,469	99,391	92,013	104,148	90,362	1.2%
	ton/ha	1.10	1.47	1.42	2.91	1.58	1.65	1.54	1.59	1.56	2.48	1.76	
Yardlong bean or Asparagus bean (Kacang panjang)	ha	213,193	98,176	100,768	102,962	96,827	106,909	108,873	104,806	98,162	98,519	102,228	11.5%
	ton	307,170	339,774	393,135	430,087	386,554	453,351	583,662	495,571	368,352	447,596	444,789	6.1%
	ton/ha	1.44	3.46	3.90	4.18	3.99	4.24	5.36	4.73	3.75	4.54	4.35	
Tomato (Tomat)	ha	75,301	40,306	43,436	44,620	48,645	50,640	49,283	49,575	44,068	46,845	47,139	5.3%
	ton	238,202	303,039	334,328	401,307	361,953	476,124	611,784	591,597	460,542	547,257	473,112	6.5%
	ton/ha	3.16	7.52	7.70	8.99	7.44	9.40	12.41	11.93	10.45	11.68	10.04	
Chili (Cabe or Lombok)	ha	438,398	162,283	168,061	162,519	157,499	177,639	182,263	169,764	161,602	164,944	168,036	18.8%
	ton	489,503	569,604	627,169	703,799	772,715	724,445	1,102,342	1,043,792	801,832	848,524	828,077	11.4%
	ton/ha	1.12	3.51	3.73	4.33	4.91	4.08	6.05	6.15	4.96	5.14	4.93	
Amaranth or Spinach (Bayam)	ha	57,348	31,683	31,981	34,677	30,796	34,336	40,819	38,182	35,068	38,344	35,525	4.0%
	ton	99,674	116,399	113,939	126,477	92,601	101,783	146,131	120,182	73,790	98,410	109,164	1.5%
	ton/ha	1.74	3.67	3.56	3.65	3.01	2.96	3.58	3.15	2.10	2.57	3.07	
Chayote (Labu siam)	ha	47,677	9,051	10,483	8,053	8,386	9,773	10,226	8,108	8,578	6,254	8,733	1.0%
	ton	117,273	128,267	117,890	197,864	142,021	145,999	150,969	44,689	41,007	84,873	115,664	1.6%
	ton/ha	2.46	14.17	11.25	24.57	16.94	14.94	14.76	5.51	4.78	13.57	13.25	
French bean or Snap bean (Kacang buncis)	ha	54,237	28,320	29,823	28,106	28,552	35,054	38,815	36,404	33,444	34,083	33,035	3.7%
	ton	149,863	165,142	163,193	171,012	191,991	213,631	309,008	305,932	295,312	311,994	245,259	3.4%
	ton/ha	2.76	5.83	5.47	6.08	6.72	6.09	7.96	8.40	8.83	9.15	7.42	
Garlic (Bawang putih)	ha	18,915	18,483	21,128	22,239	20,011	20,809	21,897	20,551	18,567	18,238	20,430	2.3%
	ton	107,407	108,864	133,874	137,864	127,974	134,940	152,421	145,836	102,283	83,664	127,357	1.8%
	ton/ha	5.68	5.89	6.34	6.20	6.40	6.48	6.96	7.10	5.51	4.59	6.23	
Chinese radish (Lobak)	ha	3,429	3,753	4,063	5,827	5,114	5,206	5,447	5,346	5,057	1,811	4,734	0.5%
	ton	27,958	30,891	33,812	51,789	54,563	57,871	53,101	56,204	49,547	12,651	46,192	0.6%
	ton/ha	8.15	8.23	8.32	8.89	10.67	11.12	9.75	10.51	9.80	6.99	9.76	
Eggplant (Terong)	ha	106,508	41,680	46,791	44,815	37,732	47,634	43,532	42,616	40,509	43,533	43,395	4.9%
	ton	195,148	266,695	268,987	272,722	246,909	260,861	303,167	364,899	279,625	311,765	288,617	4.0%
	ton/ha	1.83	6.40	5.75	6.09	6.54	5.48	6.96	8.56	6.90	7.16	6.65	
Swamp cabbage (Kangkung)	ha	68,779	20,578	22,969	20,551	21,729	27,498	27,527	26,591	25,018	28,602	25,061	2.8%
	ton	138,062	157,641	16,932	218,011	201,392	195,959	252,089	248,713	188,594	201,147	190,355	2.6%
	ton/ha	2.01	7.66	0.74	10.61	9.27	7.13	9.16	9.35	7.54	7.03	7.60	
Cucumber (Ketimun)	ha	103,646	52,243	55,792	55,044	53,543	56,834	56,910	56,052	52,849	54,901	55,241	6.2%
	ton	324,368	384,632	414,238	481,274	418,271	456,025	540,789	614,381	489,595	506,889	490,183	6.8%
	ton/ha	3.13	7.36	7.42	8.74	7.81	8.02	9.50	10.96	9.26	9.23	8.87	
Others	ha	14,275	12,658	13,612.00	4,938.00	0	6,320.00	0	0	7,755.00	19,342.00	6,496	0.7%
	ton	67,067	63,081	56,537.00	49,912.00	0	105,532	0	0	153,215	180,944	68,268	0.9%
	ton/ha	4.70	4.98	4.15	10.11		16.70			19.76	9.35	10.51	
Total	ha	1,487,209	827,880	839,437	824,594	841,676	938,892	953,679	970,076	897,819	917,770	891,497	100.0%
	ton	4,935,096	5,702,645	5,467,797	6,632,710	6,586,475	7,312,479	8,621,338	8,801,388	7,116,927	7,879,166	7,234,018	100.0%
	ton/ha	3.3	6.9	6.5	8.0	7.8	7.8	9.0	9.1	7.9	8.6	8.1	

Source: Direktorat Bina Program TPH

**Table II-2 Vegetable Production of West Jawa Province**

West Jawa Province												
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% of Natinal	Ratio in the area
Red onion or Shallot (Bawang merah)	ha	12,582	13,796	13,297	13,608	14,055	14,460	9,961	10,563	12,790	16%	6.3%
	ton	95,150	112,827	101,759	93,194	86,457	105,558	83,180	80,942	94,883	16%	4.4%
	ton/ha	7.56	8.18	7.65	6.85	6.15	7.30	8.35	7.66	7.42	99%	
Welsh onion or Scallion (Bawang daun)	ha	10,811	12,264	12,820	11,353	12,575	14,297	12,617	18,362	13,137	38%	6.4%
	ton	120,942	157,675	138,279	141,503	154,848	181,407	153,777	185,079	154,189	56%	7.1%
	ton/ha	11.19	12.86	10.79	12.46	12.31	12.69	12.19	10.08	11.74	148%	
Potato (Kentang)	ha	8,316	11,270	12,345	13,097	19,113	17,399	11,418	20,994	14,244	26%	7.0%
	ton	142,162	197,165	205,189	215,549	308,157	321,650	208,297	387,790	248,245	29%	11.5%
	ton/ha	17.09	17.49	16.62	16.46	16.12	18.49	18.24	18.47	17.43	112%	
Chinese cabbage & Mustard green (Petsai/Sawi)	ha	9,984	12,165	13,406	12,380	13,336	14,493	13,391	14,115	12,909	28%	6.3%
	ton	116,849	154,799	159,712	148,435	186,758	193,852	178,790	200,420	167,452	37%	7.7%
	ton/ha	11.70	12.72	11.91	11.99	14.00	13.38	13.35	14.20	12.97	132%	
Cabbage (Kubis)	ha	11,334	12,874	14,319	15,356	19,955	16,531	13,604	18,227	15,275	24%	7.5%
	ton	258,555	307,660	337,971	410,445	460,614	411,525	319,666	342,734	356,146	26%	16.4%
	ton/ha	22.81	23.90	23.60	26.73	23.08	24.89	23.50	18.80	23.32	108%	
Carrot (Wortel)	ha	5,339	6,795	4,231	4,055	4,672	4,889	4,385	4,970	4,917	28%	2.4%
	ton	98,550	124,071	66,469	83,756	85,912	97,538	94,042	42,452	86,599	36%	4.0%
	ton/ha	18.46	18.26	15.71	20.65	18.39	19.95	21.45	8.54	17.61	128%	
Red kidney bean or Cow pea (Kacang merah)	ha	13,557	19,440	14,062	14,164	11,655	8,506	9,019	12,180	12,823	25%	6.3%
	ton	32,856	57,201	41,413	38,768	45,038	35,108	37,493	88,139	47,002	52%	2.2%
	ton/ha	2.42	2.94	2.95	2.74	3.86	4.13	4.16	7.24	3.67	209%	
Yardlong bean or Asparagus bean (Kacang panjang)	ha	49,525	31,656	29,144	30,072	31,790	28,522	25,463	26,096	31,534	31%	15.4%
	ton	145,621	155,965	170,596	202,348	317,232	186,765	183,144	214,027	196,962	44%	9.1%
	ton/ha	2.94	4.93	5.85	6.73	9.98	6.55	7.19	8.20	6.25	144%	
Tomato (Tomat)	ha	9,788	10,302	11,592	11,726	10,826	11,399	9,642	10,538	10,727	23%	5.3%
	ton	103,535	109,648	156,575	162,995	108,929	184,407	155,234	159,701	142,628	30%	6.6%
	ton/ha	10.58	10.64	13.51	13.90	10.06	16.18	16.10	15.15	13.30	132%	
Chili (Cabe or Lombok)	ha	23,815	27,383	27,465	26,728	26,860	22,583	20,631	19,185	24,331	14%	11.9%
	ton	129,316	131,421	172,635	179,682	211,548	212,939	241,195	150,080	178,602	22%	8.2%
	ton/ha	5.43	4.80	6.29	6.72	7.88	9.43	11.69	7.82	7.34	149%	
Amaranth or Spinach (Bayam)	ha	4,723	5,928	5,752	5,325	6,134	5,552	5,396	5,908	5,590	16%	2.7%
	ton	22,465	24,118	23,655	24,392	24,045	23,649	25,037	32,978	25,042	23%	1.2%
	ton/ha	4.76	4.07	4.11	4.58	3.92	4.26	4.64	5.58	4.48	146%	
Chayote (Labu siam)	ha	1,351	2,444	2,603	2,061	1,790	1,084	1,784	1,841	1,870	21%	0.9%
	ton	18,179	32,450	44,726	67,970	33,231	34,216	36,852	25,821	36,681	32%	1.7%
	ton/ha	13.46	13.28	17.18	32.98	18.56	31.56	20.66	14.03	19.62	148%	
French bean or Snap bean (Kacang buncis)	ha	5,255	7,224	6,687	6,032	7,296	7,690	7,881	8,719	7,098	21%	3.5%
	ton	34,026	31,938	62,362	50,411	45,502	73,055	87,961	113,308	62,320	25%	2.9%
	ton/ha	6.47	4.42	9.33	8.36	6.24	9.50	11.16	13.00	8.78	118%	
Garlic (Bawang putih)	ha	926	1,522	1,096	758	977	572	456	309	827	4%	0.4%
	ton	6,265	8,423	8,468	7,235	6,217	4,932	3,221	3,143	5,988	5%	0.3%
	ton/ha	6.77	5.53	7.73	9.54	6.36	8.62	7.06	10.17	7.24	116%	
Chinese radish (Lobak)	ha	1,574	1,871	1,445	1,280	516	233	187	319	928	20%	0.5%
	ton	13,837	18,736	13,115	12,229	4,444	3,234	3,775	5,696	9,383	20%	0.4%
	ton/ha	8.79	10.01	9.08	9.55	8.61	13.88	20.19	17.86	10.11	104%	
Eggplant (Terong)	ha	9,359	10,206	9,922	9,004	8,574	8,121	7,666	7,774	8,828	20%	4.3%
	ton	67,802	77,998	89,438	79,152	84,438	80,575	82,900	74,755	79,632	28%	3.7%
	ton/ha	7.24	7.64	9.01	8.79	9.85	9.92	10.81	9.62	9.02	136%	
Swamp cabbage (Kangkung)	ha	4,037	5,876	5,882	6,092	6,711	5,832	7,125	5,498	5,882	23%	2.9%
	ton	38,433	30,505	46,049	54,145	85,045	67,202	68,253	52,462	55,262	29%	2.6%
	ton/ha	9.52	5.19	7.83	8.89	12.67	11.52	9.58	9.54	9.40	124%	
Cucumber (Ketinum)	ha	19,156	21,284	22,810	21,032	21,940	19,940	18,503	19,702	20,546	37%	10.1%
	ton	175,045	210,911	225,077	222,228	238,503	220,333	220,334	233,576	218,251	45%	10.1%
	ton/ha	9.14	9.91	9.87	10.57	10.87	11.05	11.91	11.86	10.62	120%	
Total	ha	201,432	214,300	208,878	204,123	218,775	202,103	179,129	205,300	204,255	22%	100.0%
	ton	1,619,588	1,943,511	2,063,488	2,194,437	2,486,918	2,437,945	2,183,151	2,393,103	2,165,268	27%	100.0%
	ton/ha	8.0	9.1	9.9	10.8	11.4	12.1	12.2	11.7	10.6	123%	
% to National	Area	24%	26%	25%	22%	23%	21%	20%	22%	23%		
	Production	30%	29%	31%	30%	29%	28%	31%	30%	30%		
	Yield	123%	113%	126%	138%	126%	133%	154%	136%	131%		

Source: Annual Report, Provincial Agricultural Service of West Jawa

**Table II-3 Vegetable Production of 5 Districts Relevant with the Study Area**

**Total of 5 Districts (Bandung, Cianjur, Garut, Sumedang and Kuningan)**

Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% to Province	Ratio in the area
Red onion or Shallot (Bawang merah)	ha	5,377	6,536	7,365	7,253	8,035	7,774	4,432	5,531	6,538	51.1%	6.9%
	ton	37,517	52,204	59,981	47,778	41,681	56,998	31,400	42,852	46,301	48.8%	3.4%
Welsh onion or Scallion (Bawang daun)	ha	6,343	7,446	7,736	7,436	8,260	9,985	8,471	9,070	8,093	61.6%	8.5%
	ton	85,829	111,707	91,231	65,131	115,386	142,388	120,333	133,354	108,170	70.2%	8.0%
Potato (Kentang)	ha	7,350	9,874	10,612	11,867	17,461	16,119	10,518	19,798	12,950	90.9%	13.6%
	ton	121,657	176,305	180,270	226,280	283,264	302,067	191,643	365,949	230,929	93.0%	17.0%
Chinese cabbage & Mustard green (Petai/Sawi)	ha	5,128	6,243	7,101	6,343	6,333	7,015	6,208	6,807	6,397	49.6%	6.7%
	ton	73,245	94,224	100,993	92,489	101,488	115,486	112,482	125,993	102,050	60.9%	7.5%
Cabbage (Kubis)	ha	8,344	9,161	11,141	12,796	16,167	15,007	11,738	16,109	12,558	82.2%	13.2%
	ton	154,218	208,744	259,289	333,140	412,727	374,892	277,147	301,044	290,150	81.5%	21.4%
Carrot (Wortel)	ha	4,587	5,778	2,893	3,425	4,117	4,392	3,693	4,334	4,152	84.4%	4.4%
	ton	109,658	110,298	47,760	74,937	77,946	91,363	87,625	85,250	85,605	98.9%	6.3%
Red kidney bean or Cow pea (Kacang merah)	ha	1,82	3.02	2.92	1.94	4.16	4.26	4.25	7.38	3.66	100%	
	ton	18,557	48,501	32,623	21,795	40,006	32,309	35,906	84,657	39,294	83.6%	2.9%
Yardlong bean or Asparagus bean (Kacang panjang)	ha	5,857	4,164	4,468	4,861	4,785	4,450	4,477	4,907	4,746	15.1%	5.0%
	ton	40,721	26,885	30,637	41,517	66,141	53,082	45,403	62,097	45,810	23.3%	3.4%
Tomato (Tomat)	ha	6,007	5,516	7,135	7,766	6,581	7,438	6,159	6,987	6,699	62.4%	7.0%
	ton	81,215	83,220	115,707	138,778	83,479	158,239	126,836	129,544	114,627	80.4%	8.4%
Chili (Cabe or Lombok)	ha	7,785	9,054	10,709	10,354	10,547	10,178	8,797	7,858	9,410	38.7%	9.9%
	ton	46,992	47,727	87,201	117,250	139,623	187,436	183,782	62,876	109,111	61.1%	8.0%
Amaranth or Spinach (Bayam)	ha	743	1,860	638	439	731	650	466	724	781	14.0%	0.8%
	ton	1,748	3,289	3,429	2,469	5,803	5,133	3,025	4,489	3,673	14.7%	0.3%
Chayote (Labu siam)	ha	1,279	1,674	1,400	1,104	1,017	926	652	1,665	1,215	65.0%	1.3%
	ton	29,368	27,429	34,901	36,090	26,616	33,778	16,929	23,807	28,615	78.0%	2.1%
French bean or Snap bean (Kacang buncis)	ha	2,647	3,725	3,588	3,439	4,327	4,612	4,749	5,073	4,020	56.6%	4.2%
	ton	21,775	32,294	38,485	40,413	42,124	56,547	71,093	88,796	48,941	78.5%	3.6%
Garlic (Bawang putih)	ha	813	991	1,048	751	963	570	186	294	702	84.9%	0.7%
	ton	5,787	6,719	7,951	6,479	4,086	4,931	1,666	3,099	5,090	85.0%	0.4%
Chinese radish (Lobak)	ha	884	1,197	897	699	351	153	165	227	572	61.6%	0.6%
	ton	10,135	15,304	10,635	10,171	2,895	3,017	3,357	4,743	7,532	80.3%	0.6%
Eggplant (Terong)	ha	2,380	2,286	2,492	2,164	1,992	1,893	1,555	1,699	2,058	23.3%	2.2%
	ton	20,325	27,235	32,768	29,133	37,824	30,852	29,612	27,857	29,451	37.0%	2.2%
Swamp cabbage (Kangkung)	ha	817	917	829	905	932	848	546	661	807	13.7%	0.8%
	ton	9,417	3,774	10,843	13,833	12,077	9,158	4,425	7,615	8,893	16.1%	0.7%
Cucumber (Ketimun)	ha	2,325	3,347	3,214	3,621	2,944	2,718	3,077	2,679	2,991	14.6%	3.1%
	ton	26,335	47,543	57,830	48,570	70,124	52,546	69,679	52,456	53,135	24.3%	3.9%
Total	ha	78,883	95,814	94,441	96,481	105,166	102,313	84,334	105,896	95,416	46.7%	100.0%
	ton	894,499	1,123,402	1,202,534	1,346,253	1,563,290	1,710,222	1,412,343	1,606,478	1,357,378	62.7%	100.0%
% to Province	Area	39.2%	44.7%	45.2%	47.3%	48.1%	50.6%	47.1%	51.6%	46.7%		
	Production	55.2%	57.8%	58.3%	61.3%	62.9%	70.2%	64.7%	67.1%	62.7%		
Yield	Area	141%	129%	129%	130%	131%	139%	137%	130%	134%		
	Production											

Source: Annual Report, Provincial Agricultural Service of West Jawa

**Table II-4 Vegetable Production of Bandung District**

<b>Bandung District</b>												
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% to Province	Ratio in the area
Red onion or Shallot (Bawang merah)	ha	2,954	3,675	4,007	3,934	5,196	4,568	1,866	3,201	3,675	28.7%	20.8%
	ton	22,221	26,135	31,712	23,406	22,383	35,681	11,387	26,277	24,900	26.2%	7.6%
Welsh onion or Scallion (Bawang daun)	ha	1,280	1,429	2,119	2,077	1,998	2,782	2,259	1,925	1,984	15.1%	11.2%
	ton	9,440	17,450	21,386	2,910	17,210	24,421	18,964	22,309	16,761	10.9%	5.1%
Potato (Kentang)	ha	3,377	4,060	4,664	6,509	12,043	10,758	5,718	15,218	7,793	54.7%	44.0%
	ton	58,994	77,872	134,384	151,521	198,786	201,209	104,332	282,177	151,159	60.9%	46.0%
Chinese cabbage & Mustard green (Petsai/Sawi)	ha	2,020	2,266	2,682	2,201	2,211	2,793	2,162	2,771	2,388	18.5%	13.5%
	ton	30,567	39,902	39,630	35,919	36,596	47,389	34,773	59,078	40,482	24.2%	12.3%
Cabbage (Kubis)	ha	4,404	3,874	4,905	6,543	10,160	8,580	5,495	11,304	6,908	45.2%	39.0%
	ton	81,512	95,413	117,460	171,434	256,825	202,280	114,409	204,988	155,540	43.7%	47.3%
Carrot (Wortel)	ha	657	1,081	935	1,384	1,504	1,650	1,071	266	1,069	21.7%	6.0%
	ton	7,240	15,833	14,337	25,842	26,174	22,107	14,738	4,049	16,290	18.8%	5.0%
Red kidney bean or Cow pea (Kacang merah)	ha	3,842	6,739	5,052	4,235	2,699	2,015	4,105	4,294	4,123	32.2%	23.3%
	ton	3,961	15,598	16,207	8,456	11,092	7,563	14,255	26,721	12,982	27.6%	4.0%
Yardlong bean or Asparagus bean (Kacang panjang)	ha	1,311	1,184	1,508	1,915	1,363	1,268	1,220	1,548	1,415	4.5%	8.0%
	ton	3,230	6,101	7,685	10,008	6,704	7,063	6,508	11,310	7,326	3.7%	2.2%
Tomato (Tomat)	ha	3,378	2,485	3,573	4,219	2,838	3,634	3,008	3,296	3,304	30.8%	18.7%
	ton	49,035	38,880	56,193	81,131	42,590	65,394	60,717	59,580	56,690	39.7%	17.3%
Chili (Cabe or Lombok)	ha	2,736	2,924	2,997	3,017	3,219	2,282	2,545	2,231	2,744	11.3%	15.5%
	ton	11,193	9,082	13,785	19,138	16,111	13,647	16,192	16,944	14,512	8.1%	4.4%
Amaranth or Spinach (Bayam)	ha	555	466	358	218	274	229	173	217	311	5.6%	1.8%
	ton	602	770	1,093	690	553	604	464	956	716	2.9%	0.2%
Chayote (Labu siam)	ha	329	521	436	316	194	390	261	1,058	438	23.4%	2.5%
	ton	9,196	8,980	10,485	13,972	7,741	12,771	9,748	14,780	10,959	29.9%	3.3%
French bean or Snap bean (Kacang buncis)	ha	1,142	1,398	1,156	1,285	1,589	1,946	2,079	2,192	1,598	22.5%	9.0%
	ton	7,891	10,069	12,436	11,344	10,371	17,956	19,790	31,395	15,157	24.3%	4.6%
Garlic (Bawang putih)	ha	506	627	742	579	754	364	186	181	492	59.5%	2.8%
	ton	4,086	4,219	5,764	5,669	3,777	3,196	1,666	2,151	3,816	63.7%	1.2%
Chinese radish (Lobak)	ha	436	511	608	493	214	0	0	0	283	30.5%	1.6%
	ton	4,677	5,955	7,217	6,671	353	0	0	0	3,109	33.1%	0.9%
Eggplant (Terong)	ha	1,016	871	867	768	479	556	457	385	675	7.6%	3.8%
	ton	6,693	4,553	7,080	4,624	3,561	4,872	3,696	3,038	4,765	6.0%	26.9%
Swamp cabbage (Kangkung)	ha	265	253	222	261	156	237	309	220	240	4.1%	1.4%
	ton	2,138	805	869	1,271	2,008	1,924	2,192	2,218	1,678	3.0%	0.5%
Cucumber (Ketinum)	ha	750	766	1,212	1,533	680	749	927	654	909	4.4%	5.1%
	ton	5,575	13,558	17,690	18,674	10,395	10,734	17,787	13,411	13,478	6.2%	4.1%
Total	ha	30,958	35,130	38,043	41,487	47,571	44,801	33,841	50,961	40,349	19.8%	227.8%
	ton	318,251	391,175	515,413	592,680	673,230	678,811	451,618	781,382	550,320	25.4%	167.5%
% to Province	Area	15.4%	16.4%	18.2%	20.3%	21.7%	22.2%	18.9%	24.8%	19.8%		
	Production	19.7%	20.1%	25.0%	27.0%	27.1%	27.8%	20.7%	32.7%	25.4%		
Yield	Area	128%	123%	137%	133%	124%	126%	109%	132%	129%		
	Production											

Source: Annual Report, Provincial Agricultural Service of West Jawa

Table II-5 Vegetable Production of Cianjur District

		Cianjur District										
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% to Province	Ratio in the area
Red onion or Shallot (Bawang merah)	ha ton ton/ha	133 1,290 9.70	275 2,207 8.03	126 1,117 8.87	59 582 9.86	36 226 6.28	59 661 11.20	31 304 9.81	35 437 12.49	94 853 9.05	0.7% 0.9% 122%	0.5% 0.3%
Welsh onion or Scallion (Bawang daun)	ha ton ton/ha	3,456 64,035 18.53	3,767 70,083 18.60	2,200 37,014 16.82	1,959 31,685 16.17	2,396 55,110 23.00	2,538 58,332 22.98	2,627 63,390 24.13	2,504 61,883 24.71	2,681 55,192 20.59	20.4% 35.8% 175%	15.1% 16.8%
Potato (Kentang)	ha ton ton/ha	850 13,031 15.33	949 14,884 15.68	427 6,464 15.14	369 5,581 15.12	261 5,162 19.78	153 3,648 23.84	99 2,486 25.11	127 2,019 15.90	404 6,659 16.47	2.8% 2.7% 94%	2.3% 2.0%
Chinese cabbage & Mustard green (Petsai/Sawi)	ha ton ton/ha	1,575 24,188 15.36	2,444 38,969 15.94	2,411 38,656 16.03	1,993 36,789 18.46	2,165 44,665 20.63	2,081 44,401 21.34	2,217 49,356 22.26	1,730 39,462 22.81	2,077 39,561 19.05	16.1% 23.6% 147%	11.7% 12.0%
Cabbage (Kubis)	ha ton ton/ha	1,038 19,105 18.41	1,221 22,747 18.63	1,152 22,680 19.69	1,009 26,918 26.68	1,209 34,750 28.74	1,285 37,818 29.43	1,398 41,707 29.83	1,107 13,691 12.37	1,177 27,427 23.30	7.7% 7.7% 100%	6.6% 8.3%
Carrot (Wortel)	ha ton ton/ha	3,734 99,443 26.63	4,219 86,233 20.44	1,671 29,302 17.54	1,769 45,370 25.65	2,247 46,209 20.56	2,340 62,242 26.60	2,196 65,243 29.71	3,489 70,991 20.35	2,708 63,129 23.31	55.1% 72.9% 132%	15.3% 19.2%
Red kidney bean or Cow pea (Kacang merah)	ha ton ton/ha	619 1,620 2.62	1,041 7,271 6.98	925 4,860 5.25	777 1,567 2.02	472 6,565 13.91	420 5,843 13.91	400 5,305 13.26	838 12,733 15.19	687 5,721 8.33	5.4% 12.2% 227%	3.9% 1.7%
Yardlong bean or Asparagus bean (Kacang panjang)	ha ton ton/ha	961 5,068 5.27	936 7,365 7.87	835 8,032 9.62	1,151 14,625 12.71	1,201 17,793 14.82	1,375 19,232 13.99	1,298 20,165 15.54	1,299 20,829 16.03	1,132 14,139 12.49	3.6% 7.2% 200%	6.4% 4.3%
Tomato (Tomat)	ha ton ton/ha	1,114 17,215 15.45	1,499 21,701 14.48	1,371 24,105 17.58	1,086 31,973 29.44	1,248 29,851 23.92	1,293 26,919 20.82	1,150 19,690 17.12	1,152 22,824 19.81	1,239 24,285 19.60	11.6% 17.0% 147%	7.0% 7.4%
Chili (Cabe or Lombok)	ha ton ton/ha	1,524 22,822 14.98	2,089 18,588 8.90	2,311 29,771 12.88	2,039 43,146 21.16	2,284 31,565 13.82	2,058 31,961 15.53	1,792 34,679 19.35	1,677 14,332 8.55	1,972 28,358 14.38	8.1% 15.9% 196%	11.1% 8.6%
Amaranth or Spinach (Bayam)	ha ton ton/ha	103 742 7.20	1,160 1,229 1.06	77 748 9.71	117 1,303 11.14	197 2,072 10.52	190 1,455 7.66	126 959 7.61	111 762 6.86	260 1,159 4.45	4.7% 4.6% 99%	1.5% 0.4%
Chayote (Labu siam)	ha ton ton/ha	788 17,120 21.73	767 11,639 15.17	538 12,161 22.60	499 18,152 36.38	524 10,160 19.39	216 8,438 39.06	146 0 16.62	363 6,032 21.79	480 10,463 21.79	25.7% 28.5% 111%	2.7% 3.2%
French bean or Snap bean (Kacang buncis)	ha ton ton/ha	608 11,141 18.32	859 13,135 15.29	835 14,271 17.09	791 17,125 21.65	893 18,369 20.57	1,192 20,303 17.03	1,349 27,923 20.70	1,277 29,672 23.24	976 18,992 19.47	13.7% 30.5% 222%	5.5% 5.8%
Garlic (Bawang putih)	ha ton ton/ha	53 376 7.09	63 520 8.25	10 64 6.40	7 59 8.43	0 0 0	0 0 0	0 0 0	0 0 0	17 127 7.66	2.0% 2.1% 106%	0.1% 0.0%
Chinese radish (Lobak)	ha ton ton/ha	369 5,036 13.65	562 8,430 15.00	114 1,728 15.16	132 2,228 16.88	114 2,124 18.63	153 3,017 19.72	165 3,357 20.35	224 4,714 21.04	229 3,829 16.71	24.7% 40.8% 165%	1.3% 1.2%
Eggplant (Terong)	ha ton ton/ha	482 8,702 18.05	449 6,994 15.58	534 10,305 19.30	532 13,040 24.51	507 12,071 23.81	533 10,059 18.87	426 10,123 23.76	580 14,225 24.53	505 10,690 21.15	5.7% 13.4% 235%	2.9% 3.3%
Swamp cabbage (Kangkung)	ha ton ton/ha	233 4,239 18.19	182 1,477 8.12	176 2,468 14.02	300 5,847 19.49	431 6,116 14.19	304 3,041 10.00	150 1,394 9.29	151 1,378 9.13	241 3,245 13.47	4.1% 5.9% 143%	1.4% 1.0%
Cucumber (Ketinum)	ha ton ton/ha	603 8,533 14.15	860 11,569 13.45	728 10,792 14.82	955 16,284 17.05	829 15,838 19.10	948 17,073 18.01	945 20,166 21.34	786 17,859 22.72	832 14,764 17.75	4.0% 6.8% 167%	4.7% 4.5%
Total	ha ton ton/ha	18,243 323,706 17.7	23,342 345,041 14.8	16,441 254,538 15.5	15,544 312,274 20.1	17,014 338,646 19.9	17,138 354,443 20.7	16,515 366,247 22.2	17,450 333,843 19.1	17,711 328,592 18.6	8.7% 15.2% 175%	100.0% 100.0%
% to Province	Area Production Yield	9.1% 20.0% 221%	10.9% 17.8% 163%	7.9% 12.3% 157%	7.6% 14.2% 187%	7.8% 13.6% 175%	8.5% 14.5% 171%	9.2% 16.8% 182%	8.5% 14.0% 164%	8.7% 15.2% 175%		

Source: Annual Report, Provincial Agricultural Service of West Jawa

**Table II-6 Vegetable Production of Garut District**

		Garut District											
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% to Province	Ratio in the area	
Red onion or Shallot (Bawang merah)	ha ton ton/ha	640 2,761 4.31	818 6,917 8.46	978 7,974 8.15	1,050 6,356 6.05	945 6,671 7.06	1,353 10,558 7.80	1,197 10,884 9.09	1,135 9,884 8.71	1,015 7,751 7.64	7.9% 8.2% 103%	3.5% 1.9%	
Welsh onion or Scallion (Bawang daun)	ha ton ton/ha	1,158 9,348 8.07	1,624 19,539 12.03	2,084 15,945 7.65	1,836 16,631 9.06	2,365 23,006 9.73	2,899 31,983 11.03	2,227 23,511 10.56	2,486 25,823 10.39	2,085 20,723 9.94	15.9% 13.4% 85%	7.2% 5.1%	
Potato (Kentang)	ha ton ton/ha	2,792 47,123 16.88	4,452 78,411 17.61	4,628 26,954 5.82	4,621 65,791 14.24	4,622 75,075 16.24	4,826 93,279 19.33	4,359 80,572 18.48	4,162 77,744 18.68	4,308 68,119 15.81	30.2% 27.4% 91%	14.9% 16.7%	
Chinese cabbage & Mustard green (Petsai/Sawi)	ha ton ton/ha	1,273 10,510 8.26	1,365 14,144 10.36	1,609 18,546 11.53	1,706 15,055 8.82	1,466 15,471 10.55	1,651 19,120 11.58	1,411 23,511 16.66	1,742 20,950 12.03	1,528 17,163 11.23	11.8% 10.2% 87%	5.3% 4.2%	
Cabbage (Kubis)	ha ton ton/ha	2,573 49,942 19.41	3,819 87,545 22.92	4,812 115,627 24.03	4,961 130,739 26.35	4,374 114,211 26.11	4,767 128,530 26.96	4,580 117,161 25.58	3,245 75,626 23.31	4,141 102,423 24.73	27.1% 28.8% 106%	14.3% 25.2%	
Carrot (Wortel)	ha ton ton/ha	130 0 0.00	406 7,620 18.77	231 3,577 15.48	155 2,630 16.97	253 4,355 17.21	281 5,340 19.00	369 7,137 19.34	506 9,764 19.30	291 5,053 17.34	5.9% 5.8% 98%	1.0% 1.2%	
Red kidney bean or Cow pea (Kacang merah)	ha ton ton/ha	4,958 11,660 2.35	6,958 23,511 3.38	4,340 9,244 2.13	5,475 874 0.16	5,947 20,866 3.51	4,993 18,697 3.74	3,871 16,232 4.19	5,490 39,724 7.24	5,254 17,601 3.35	41.0% 37.4% 91%	18.2% 4.3%	
Yardlong bean or Asparagus bean (Kacang panjang)	ha ton ton/ha	2,759 30,630 11.10	1,376 11,612 8.44	1,192 12,046 10.11	1,111 14,532 13.08	1,527 37,442 24.52	1,279 23,669 18.51	1,286 14,757 11.48	1,409 25,593 18.16	1,492 21,285 14.26	4.7% 10.8% 228%	5.2% 5.2%	
Tomato (Tomat)	ha ton ton/ha	985 12,340 12.53	1,034 18,656 18.04	1,500 29,624 19.75	1,828 21,653 11.85	1,844 5,776 3.13	2,048 61,469 30.01	1,391 40,584 29.18	1,944 41,245 21.22	1,572 28,918 18.40	14.7% 20.3% 138%	5.4% 7.1%	
Chili (Cabe or Lombok)	ha ton ton/ha	2,869 11,256 3.92	3,188 15,695 4.92	4,315 37,696 8.74	4,175 50,983 12.21	4,116 86,717 21.07	5,012 137,344 27.40	3,538 127,317 35.99	3,341 26,754 8.01	3,819 61,720 16.16	15.7% 34.6% 220%	13.2% 15.2%	
Amaranth or Spinach (Bayam)	ha ton ton/ha	62 337 5.44	214 1,149 5.37	176 1,342 7.63	90 426 4.73	239 3,112 13.02	199 2,950 14.82	152 1,546 10.17	371 2,686 7.24	188 1,694 9.01	3.4% 6.8% 201%	0.6% 0.4%	
Chayote (Labu siam)	ha ton ton/ha	114 2,505 21.97	365 6,454 17.68	330 9,862 29.88	131 2,861 21.84	276 8,545 30.96	320 12,569 39.28	245 7,181 29.31	243 2,975 12.24	253 6,619 26.16	13.5% 18.0% 133%	0.9% 1.6%	
French bean or Snap bean (Kacang buncis)	ha ton ton/ha	655 1,422 2.17	1,147 7,868 6.86	1,119 9,691 8.66	960 10,332 10.76	1,418 11,423 8.06	1,079 16,174 14.99	991 21,822 22.02	1,207 24,620 20.40	1,072 12,919 12.05	15.1% 20.7% 137%	3.7% 3.2%	
Garlic (Bawang putih)	ha ton ton/ha	113 567 5.02	146 1,026 7.03	117 727 6.21	89 0 0.00	113 0 0.00	159 1,532 9.64	0 0 0	69 668 9.68	101 565 5.61	12.2% 9.4% 77%	0.3% 0.1%	
Chinese radish (Lobak)	ha ton ton/ha	39 129 3.31	100 704 7.04	87 606 6.97	52 1,177 22.63	21 353 16.81	0 0 0	0 0 0	0 0 0	37 371 9.93	4.0% 4.0% 98%	0.1% 0.1%	
Eggplant (Terong)	ha ton ton/ha	647 3,606 5.57	821 14,675 17.87	915 13,929 15.22	644 9,499 14.75	863 21,092 24.44	685 14,984 21.87	554 14,389 25.97	600 9,085 15.14	716 12,657 17.67	8.1% 15.9% 196%	2.5% 3.1%	
Swamp cabbage (Kangkung)	ha ton ton/ha	255 2,398 9.40	442 1,376 3.11	379 6,648 17.54	286 6,257 21.88	293 3,555 12.13	260 3,787 14.57	0 0 0	232 3,630 15.65	268 3,456 12.88	4.6% 6.3% 137%	0.9% 0.8%	
Cucumber (Ketinum)	ha ton ton/ha	660 8,216 12.45	1,346 19,103 14.19	809 17,408 21.52	708 9,183 12.97	837 36,503 43.61	672 17,775 26.45	734 22,371 30.48	681 12,071 17.73	806 17,829 22.12	3.9% 8.2% 208%	2.8% 4.4%	
Total	ha ton ton/ha	22,682 204,750 9.0	29,621 336,005 11.3	29,621 337,446 11.4	29,878 364,979 12.2	31,519 474,173 15.0	32,483 599,760 18.5	26,905 528,975 19.7	28,863 408,842 14.2	28,947 406,866 14.1	14.2% 18.8% 133%	100.0% 100.0%	
% to Province	Area Production Yield	11.3% 12.6% 112%	13.8% 17.3% 125%	14.2% 16.4% 115%	14.6% 16.6% 114%	14.4% 19.1% 132%	16.1% 24.6% 153%	15.0% 24.2% 161%	14.1% 17.1% 122%	14.2% 18.8% 133%			

Source: Annual Report, Provincial Agricultural Service of West Jawa



**Table II-7 Vegetable Production of Sumedang District**

		<b>Sumedang District</b>										
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	Share to province	Ratio in the area
Red onion or Shallot (Bawang merah)	ha ton ton/ha	155 821 5.30	227 1,119 4.93	332 1,528 4.60	184 784 4.26	176 718 4.08	189 797 4.22	115 514 4.47	145 669 4.61	190 869 4.56	1.5% 0.9% 62%	5.0% 2.6%
Welsh onion or Scallion (Bawang daun)	ha ton ton/ha	84 321 3.82	178 1,063 5.97	305 5,216 17.10	299 1,831 6.12	347 2,831 8.16	344 4,895 14.23	245 3,485 14.22	292 3,874 13.27	262 2,940 11.23	2.0% 1.9% 96%	6.8% 8.7%
Potato (Kentang)	ha ton ton/ha	176 1,496 8.50	171 2,997 17.53	678 10,729 15.82	98 1,282 13.08	150 1,379 9.19	122 1,692 13.87	113 1,716 15.19	133 2,148 16.15	205 2,930 14.28	1.4% 1.2% 82%	5.4% 8.7%
Chinese cabbage & Mustard green (Petsai/Sawi)	ha ton ton/ha	36 167 4.64	54 403 7.46	241 2,657 11.02	217 2,436 11.23	211 2,475 11.73	190 2,375 12.50	145 1,811 12.49	261 3,095 11.86	169 1,927 11.38	1.3% 1.2% 88%	4.4% 5.7%
Cabbage (Kubis)	ha ton ton/ha	211 2,379 11.27	165 1,983 12.02	207 2,865 13.84	181 2,355 13.01	245 3,542 14.46	235 3,820 16.26	159 2,581 16.23	364 5,644 15.51	221 3,146 14.24	1.4% 0.9% 61%	5.8% 9.3%
Carrot (Wortel)	ha ton ton/ha	8 106 13.25	1 11 11.00	2 28 14.00	11 140 12.73	3 42 14.00	37 457 12.35	6 80 13.33	8 94 11.75	10 120 12.61	0.2% 0.1% 72%	0.2% 0.4%
Red kidney bean or Cow pea (Kacang merah)	ha ton ton/ha	688 1,205 1.75	1,016 1,557 1.53	748 1,864 2.49	597 10,743 17.99	250 1,250 5.00	0 0 0	0 0 0	744 4,791 6.44	505 2,676 5.30	3.9% 5.7% 144%	13.2% 7.9%
Yardlong bean or Asparagus bean (Kacang panjang)	ha ton ton/ha	570 1,004 1.76	319 1,387 4.35	671 1,886 2.81	471 1,977 4.20	585 3,890 6.65	423 2,826 6.68	545 3,628 6.66	514 3,677 7.15	512 2,534 4.95	1.6% 1.3% 79%	13.4% 7.5%
Tomato (Tomat)	ha ton ton/ha	454 2,237 4.93	371 2,826 7.62	513 4,056 7.91	466 3,135 6.73	504 4,747 9.42	271 3,378 12.46	432 5,139 11.90	485 5,176 10.67	437 3,837 8.78	4.1% 2.7% 66%	11.4% 11.3%
Chili (Cabe or Lombok)	ha ton ton/ha	311 983 3.16	429 2,219 5.17	590 3,202 5.43	712 2,537 3.56	516 3,694 7.16	500 3,589 7.18	504 3,595 7.13	520 3,751 7.21	510 2,946 5.77	2.1% 1.6% 79%	13.3% 8.7%
Amaranth or Spinach (Bayam)	ha ton ton/ha	12 47 3.92	20 141 7.05	25 237 9.48	14 50 3.57	18 57 3.17	31 115 3.71	9 36 4.00	19 73 3.84	19 95 5.11	0.3% 0.4% 114%	0.5% 0.3%
Chayote (Labu siam)	ha ton ton/ha	40 421 10.53	19 337 17.74	95 2,384 25.09	142 1,105 7.78	23 170 7.39	0 0 0	0 0 20.00	1 20 13.87	40 555 13.87	2.1% 1.5% 71%	1.0% 1.6%
French bean or Snap bean (Kacang buncis)	ha ton ton/ha	83 270 3.25	125 269 2.15	255 1,021 4.00	147 604 4.11	219 1,062 4.85	131 978 7.47	85 534 6.28	155 1,220 7.87	150 745 4.97	2.1% 1.2% 57%	3.9% 2.2%
Garlic (Bawang putih)	ha ton ton/ha	17 47 2.76	8 34 4.25	3 19 6.33	0 0 0	1 9 9.00	0 0 0	0 0 0	0 0 3.76	4 14 3.76	0.4% 0.2% 52%	0.1% 0.0%
Chinese radish (Lobak)	ha ton ton/ha	18 235 13.06	24 215 8.96	88 1,084 12.32	10 95 9.50	2 34 17.00	0 0 0	0 0 9.67	3 29 11.67	18 212 11.67	2.0% 2.3% 115%	0.5% 0.6%
Eggplant (Terong)	ha ton ton/ha	151 823 5.45	91 487 5.35	139 1,170 8.42	196 1,855 9.46	129 999 7.74	96 859 8.95	93 1,162 12.49	109 1,341 12.30	126 1,087 8.66	1.4% 1.4% 96%	3.3% 3.2%
Swamp cabbage (Kangkung)	ha ton ton/ha	45 481 10.69	31 64 2.06	47 837 17.81	53 446 8.42	42 362 8.62	35 252 7.20	60 578 9.63	41 377 9.20	44 425 9.60	0.8% 0.8% 102%	1.2% 1.3%
Cucumber (Ketinum)	ha ton ton/ha	300 3,961 13.20	334 3,139 9.40	442 11,869 26.85	381 4,312 11.32	522 7,175 13.75	329 6,802 20.67	407 8,760 21.52	509 8,471 16.64	403 6,811 16.90	2.0% 3.1% 159%	10.5% 20.1%
Total	ha ton ton/ha	3,359 17,004 5.1	3,583 20,251 5.7	5,381 52,652 9.8	4,179 35,687 8.5	3,943 34,436 8.7	2,933 32,835 11.2	2,918 33,619 11.5	4,303 44,450 10.3	3,825 33,867 8.9	1.9% 1.6% 84%	100.0% 100.0%
% to Province	Area	1.7%	1.7%	2.6%	2.0%	1.8%	1.5%	1.6%	2.1%	1.9%		
	Production	1.0%	1.0%	2.6%	1.6%	1.4%	1.3%	1.5%	1.9%	1.6%		
	Yield	63%	62%	99%	79%	77%	93%	95%	89%	84%		

Source: Annual Report, Provincial Agricultural Service of West Jawa

**Table II-8 Vegetable Production of Kuningan District**

<b>Kuningan District</b>												
Year		1991	1992	1993	1994	1995	1996	1997	1998	Average	% to Province	Ratio in the area
Red onion or Shallot (Bawang merah)	ha	1,495	1,541	1,922	2,026	1,682	1,605	1,223	1,015	1,564	12.2%	34.1%
	ton	10,424	15,826	17,650	16,650	11,683	9,301	8,311	5,585	11,929	12.6%	31.6%
	ton/ha	6.97	10.27	9.18	8.22	6.95	5.80	6.80	5.50	7.63	103%	
Welsh onion or Scallion (Bawang daun)	ha	365	448	1,028	1,265	1,154	1,422	1,113	1,863	1,082	8.2%	23.6%
	ton	2,685	3,572	11,670	12,074	17,229	22,757	10,983	19,465	12,554	8.1%	33.3%
	ton/ha	7.36	7.97	11.35	9.54	14.93	16.00	9.87	10.45	11.60	99%	
Potato (Kentang)	ha	155	242	215	270	385	260	229	158	239	1.7%	5.2%
	ton	1,013	2,141	1,739	2,105	2,862	2,239	2,537	1,861	2,062	0.8%	5.5%
	ton/ha	6.54	8.85	8.09	7.80	7.43	8.61	11.08	11.78	8.62	49%	
Chinese cabbage & Mustard green (Petsai/Sawi)	ha	224	114	158	226	280	300	273	303	235	1.8%	5.1%
	ton	7,813	806	1,504	2,290	2,281	2,201	3,031	3,408	2,917	1.7%	7.7%
	ton/ha	34.88	7.07	9.52	10.13	8.15	7.34	11.10	11.25	12.42	96%	
Cabbage (Kubis)	ha	118	82	65	102	179	140	106	89	110	0.7%	2.4%
	ton	1,280	1,056	657	1,694	3,399	2,444	1,289	1,095	1,614	0.5%	4.3%
	ton/ha	10.85	12.88	10.11	16.61	18.99	17.46	12.16	12.30	14.66	63%	
Carrot (Wortel)	ha	58	71	54	106	110	84	51	65	75	1.5%	1.6%
	ton	2,869	601	516	955	1,166	1,217	427	352	1,013	1.2%	2.7%
	ton/ha	49.47	8.46	9.56	9.01	10.60	14.49	8.37	5.42	13.53	77%	
Red kidney bean or Cow pea (Kacang merah)	ha	110	291	110	174	255	157	69	107	159	1.2%	3.5%
	ton	111	564	448	155	233	206	114	688	315	0.7%	0.8%
	ton/ha	1.01	1.94	4.07	0.89	0.91	1.31	1.65	6.43	1.98	54%	
Yardlong bean or Asparagus bean (Kacang panjang)	ha	256	349	262	213	109	105	128	137	195	0.6%	4.3%
	ton	789	420	988	375	312	292	345	688	526	0.3%	1.4%
	ton/ha	3.08	1.20	3.77	1.76	2.86	2.78	2.70	5.02	2.70	43%	
Tomato (Tomat)	ha	76	127	178	167	147	192	178	110	147	1.4%	3.2%
	ton	388	1,157	1,729	886	515	1,079	706	719	897	0.6%	2.4%
	ton/ha	5.11	9.11	9.71	5.31	3.50	5.62	3.97	6.54	6.11	46%	
Chili (Cabe or Lombok)	ha	345	424	496	411	412	326	418	89	365	1.5%	8.0%
	ton	738	2,143	2,747	1,446	1,536	895	1,999	1,095	1,575	0.9%	4.2%
	ton/ha	2.14	5.05	5.54	3.52	3.73	2.75	4.78	12.30	4.31	59%	
Amaranth or Spinach (Bayam)	ha	11	0	2	0	3	1	6	6	4	0.1%	0.1%
	ton	20	0	9	0	9	9	20	12	10	0.0%	0.0%
	ton/ha	1.82		4.50		3.00	9.00	3.33	2.00	2.72	61%	
Chayote (Labu siam)	ha	8	2	1	16	0	0	0	0	3	0.2%	0.1%
	ton	126	19	9	0	0	0	0	0	19	0.1%	0.1%
	ton/ha	15.75	9.50	9.00	0.00					5.70	29%	
French bean or Snap bean (Kacang buncis)	ha	159	196	223	256	208	264	245	242	224	3.2%	4.9%
	ton	1,051	953	1,066	1,008	899	1,136	1,024	1,889	1,128	1.8%	3.0%
	ton/ha	6.61	4.86	4.78	3.94	4.32	4.30	4.18	7.81	5.03	57%	
Garlic (Bawang putih)	ha	124	147	176	76	95	47	0	44	89	10.7%	1.9%
	ton	711	920	1,377	751	300	203	0	280	568	9.5%	1.5%
	ton/ha	5.73	6.26	7.82	9.88	3.16	4.32		6.36	6.41	88%	
Chinese radish (Lobak)	ha	22	0	0	12	0	0	0	0	4	0.5%	0.1%
	ton	58	0	0	0	31	0	0	0	11	0.1%	0.0%
	ton/ha	2.64			0.00					2.62	26%	
Eggplant (Terong)	ha	84	54	37	24	14	23	25	25	36	0.4%	0.8%
	ton	501	526	284	115	101	78	242	168	252	0.3%	0.7%
	ton/ha	5.96	9.74	7.68	4.79	7.21	3.39	9.68	6.72	7.05	78%	
Swamp cabbage (Kangkung)	ha	19	9	5	5	10	12	27	17	13	0.2%	0.3%
	ton	161	52	21	12	36	154	261	12	89	0.2%	0.2%
	ton/ha	8.47	5.78	4.20	2.40	3.60	12.83	9.67	0.71	6.82	73%	
Cucumber (Ketinum)	ha	12	41	23	44	76	20	64	49	41	0.2%	0.9%
	ton	50	174	71	117	213	162	595	644	253	0.1%	0.7%
	ton/ha	4.17	4.24	3.09	2.66	2.80	8.10	9.30	13.14	6.16	58%	
Total	ha	3,641	4,138	4,955	5,393	5,119	4,958	4,155	4,319	4,585	2.2%	100.0%
	ton	30,788	30,930	42,485	40,633	42,805	44,373	31,884	37,961	37,732	1.7%	100.0%
	ton/ha	8.5	7.5	8.6	7.5	8.4	8.9	7.7	8.8	8.2	78%	
% to Province	Area	1.8%	1.9%	2.4%	2.6%	2.3%	2.5%	2.3%	2.1%	2.2%		
	Production	1.9%	1.6%	2.1%	1.9%	1.7%	1.8%	1.5%	1.6%	1.7%		
	Yield	105%	82%	87%	70%	74%	74%	63%	75%	78%		

Source: Annual Report, Provincial Agricultural Service of West Jawa

**Table II-9 Improvement Plan of Farming Technology (1/4)**

Items	Improvement plan
1. Cropping schedule / Cropping pattern	<ul style="list-style-type: none"> <li>• Cropping pattern and schedule should be settled considering market price in the harvest season according to the information of market price announcement and production/ demand forecast.</li> <li>• Crop selection should be considered based on the crop suitability for both seasons of dry and wet, and availability of financial condition of farmers.</li> <li>• On the one hand, the production will be required constant and stable shipping with considerable amount by traders and consumers.</li> <li>• On the basis of information from the market-price announcement and traders, the farmer group should discuss and decide basic cropping schedule for the area, farmers plants individually along with the schedule.</li> </ul>
2. Crop diversification	<ul style="list-style-type: none"> <li>• Production cost of vegetables is required several times of food crops. Consequently, production cost may unrecoverable if the cultivation technique is much lower.</li> <li>• Therefore, crop diversification from paddy/ palawija to vegetable is made to expand gradually according to the improvement in farmers' vegetable cultivation technology, and the increase of financial condition of farmers.</li> </ul>
3. Crop selection	<ul style="list-style-type: none"> <li>• The crops produced in the model areas have to be selected based on the natural and socio-economic conditions such as market, and farming technology level. The vegetables that are introduced or expanded in the highland area are as follow. The supply-demand forecast of vegetables is described in 3.2.4 of the Main Report.               <ul style="list-style-type: none"> <li>Solanaceae: Tomato, Chili, potato, Sweet pepper and Eggplant (new variety)</li> <li>Cruciferae: Cabbage, Chinese cabbage, Mustard green, Cauliflower, Broccoli and Chinese radish (new variety)</li> <li>Leguminosae: Kidney bean, French bean and Green pea</li> <li>Liliaceae: Welsh onion, Red onion, Garlic</li> <li>Umbellifers: Carrot, Celery and Parsley</li> <li>Cucurbitaceae: Watermelon, Melon, Chayote, Cucumber (new variety) and Pumpkin</li> <li>Compositae: Lettuce</li> <li>Gramineae: Sweet corn, Baby corn</li> </ul> </li> </ul>
4. Avoidance of replant failure	<ul style="list-style-type: none"> <li>• In order to avoid continuous injury of crops, same crop or crops of same species in the same field have to be planted with interval of one year or more.</li> </ul>
5. Quality improvement of products	<ul style="list-style-type: none"> <li>• Horticulture crops are required to be competitive in the market with high quality suitable for consumers' needs than yield increase.</li> <li>• High quality products should be marketed through using seed of competitive variety, proper farm management such as nursery management, transplanting, fertilization, plant protection, irrigation, weed control, and harvesting.</li> <li>• Seeds should be purchased jointly by farmers cooperative from reliable seed producers or seed traders through discussion in the farmer groups.</li> </ul>
6. Income increase and stabilization of production	<ul style="list-style-type: none"> <li>• Since the production cost of vegetables is required several times comparing with food crops, production cost is unrecoverable if the yield is too low.</li> <li>• It is required to prepare and distribute the easy farming guidebook which can be used simply lest farmers fail in farming</li> <li>• Provincial Task team, staff of the adaptive trial farm prepare the farming guidebook.</li> </ul>
7. Fertilization	<ul style="list-style-type: none"> <li>• Proper and effective fertilization is required in kind of fertilizers, application times, and timing, including application of compost.</li> <li>• The farming guidebook should contain amount of fertilizer to be applied, ratios of net nutrient, ratio of base and top-dressing application, timing of top-dressing, necessity of lime and micro-nutrients, other supplementary fertilizer etc.</li> <li>• Over-fertilization of nitrogen should avoid because it makes to decrease of product quality, to increase production cost and to pollute soil by nitrite ion.</li> </ul>

**Table II-9 Improvement Plan of Farming Technology (2/4)**

8. Pest and disease control	<ul style="list-style-type: none"> <li>• The damage of pest and disease is a serious problem for vegetable cultivation. Therefore the pest/disease control is most important for horticulture farming.</li> <li>• Overdose of agro- chemicals is shown in some part of advanced vegetable production area. Especially during the wet season, lot of agro-chemicals used.</li> <li>• According to the field investigation, over-application of agro-chemicals was seen such as twice a week in dry season, once a week in rainy season.</li> <li>• It is required to avoid excess application of agro-chemicals to reduce the production cost, to preserve natural environment and for safety products for human health.</li> <li>• It is required proper and effective pest control, and same time, it needs to urge to growth the healthy crops with the strong resistance by proper farm management of improvement of the soil by healthy nurserying technique and usage of compost, proper irrigation, drainage, application of fertilizer, and weeding</li> <li>• The research result of Integrated Pest Control (IPM) should be introduced, and effective measures against pest should be performed. And broader-based information on pest should be simultaneously collected as an initial preparation stage of the generating forecast about pest.</li> <li>• The provincial task team should prepare the cultivation guidebook for farmers about the basic knowledge and the prevention and extermination method about main pest by crops.</li> </ul>
9. Weed control	<ul style="list-style-type: none"> <li>• The herbicide has not been used in the model areas, only done by manual weeding at present. Some farmers are using mulching by the plastic film for weed control and prevent of evaporation of soil moisture. But generally there are lots of weed causing by inadequate weed control</li> <li>• It is to be desired not to use herbicide for ever, and ecological weed control by dense planting of mixed cropping or relay cropping, and manual weeding 2 to 3 times a cropping season.</li> </ul>
10. Irrigation and soil moisture management	<ul style="list-style-type: none"> <li>• By improvement of irrigation facility, vegetable can become irrigable. The irrigation water will be managed by water users' association along with rotation system of irrigation block.</li> <li>• Although the farmers have basic technique of field irrigation, in order to use effectively limited water, water-saved irrigation method has to be disseminated into farmers.</li> <li>• For the soil moisture control, it is required as well to manage properly soil moisture during the dry season as high ridge cultivation in the rainy season.</li> <li>• Farmland developed level terraces like paddy field, border formation will be useful to prevent run-off of irrigation water and rainwater. The border ridge formation is urged to effective use of field moisture, and underground osmosis of rain, and can be expected to prevent soil erosion and effect of groundwater recharge.</li> </ul>
11. Harvesting	<ul style="list-style-type: none"> <li>• Harvesting should be done in proper schedule on the assumption of transportation period to the market.</li> <li>• Vegetables should be harvested in early morning and shipped to market at same day in principle.</li> </ul>
12. Reduction of production cost	<ul style="list-style-type: none"> <li>• Production cost and dose of fertilizer and agro-chemicals will be reduced by proper and effective use of them and introduction of IPM mentioned above</li> <li>• Farmers will be get cheaper and good compost by compost production using raw carbon organic-matter (rice straw) and high nitrogen organic-matter (poultry manure).</li> </ul>

**Table II-9 Improvement Plan of Farming Technology (3/4)**

<p>13. Compost production</p>	<ul style="list-style-type: none"> <li>• Farmers use generally organic manure, livestock manure of 10-20 ton/ha or poultry manure of 3-5 ton/ha for vegetable cultivation. Most of farmers buy compost from faraway stock-raising zone. The market prices are Rp. 100/kg for livestock manure and Rp. 200-250/kg for poultry manure. Compost cost occupies 20% to all input cost.</li> <li>• Production cost for compost amount to about 20% of total farming material cost. Moreover, the compost is in short and difficult to obtain. The following measures can be proposed for the compost shortage.             <ul style="list-style-type: none"> <li>(a) Compost supply by increase of sheep, milk cow or chicken in the village                 <p>Livestock is an important income source of farmers in the highland. Lots of farmers are raising livestock, milk cow, sheep, goat or poultry. However, as a large initial investment and running cost for raising milk cow and scaled poultry, it is limited to expand the population. Moreover, as shortage of forage, especially during the dry season, it is difficult to expand the number of livestock.</p> </li> <li>(b) Compost production using organic materials.                 <p>If lots of organic-materials are available, farmers can produce compost them selves. There are disposal vegetables after sorting and rice straw in the paddy area for organic materials. The former is used for livestock forage, and the later can be used in or near paddy production area. The model areas with the exception of Langensari area are located nearly the paddy production zone. It is possible to supply maturated compost in good quality by mixed with rice straw and chicken manure. Although it will take several months to produce the compost, it is possible to get cheaper compost in good quality. The production cost of compost is roughly estimated to be Rp. 50/kg, equivalent with 50% of the market price of it as below:</p> <table style="margin-left: 40px; border: none;"> <tr> <td>Rice straw:</td> <td>20 ton x Rp5,000/ton</td> <td>= Rp 100,000</td> </tr> <tr> <td>Transportation:</td> <td>20 ton x Rp10,000/ton</td> <td>= Rp 200,000</td> </tr> <tr> <td colspan="3">(Straw collection by manure and transportation from less than several km)</td> </tr> <tr> <td>Chicken manure</td> <td>500 kg x Rp250/kg</td> <td>= Rp 125,000</td> </tr> <tr> <td colspan="3">(2 to 3% to rice straw)</td> </tr> <tr> <td>Labor cost:</td> <td>10 m-d x Rp7,000</td> <td>= Rp 70,000</td> </tr> <tr> <td colspan="3">(Piling and mixing of 3 times)</td> </tr> <tr> <td>Total</td> <td>= Rp 495,000/10ton</td> <td>= <u>Rp 50/kg</u></td> </tr> </table> </li> <li>(c) Joint purchase from livestock area (dairy cattle, sheep, poultry farming)                 <p>Although the source of supply is the same as present condition, the transportation cost can be reduced by joint purchase through farmers' cooperative.</p> </li> <li>(d) Introduction of green manure                 <p>Soil improvement will be done by introduction of green manure to cropping pattern and plough it into soil. However, there are some problems, e.g. cropping intensity will decrease, cheap seeds for green manure are not available in market. It is necessary to examine of availability of green manure such as Leguminosae, rape etc.</p> </li> </ul> </li> </ul>	Rice straw:	20 ton x Rp5,000/ton	= Rp 100,000	Transportation:	20 ton x Rp10,000/ton	= Rp 200,000	(Straw collection by manure and transportation from less than several km)			Chicken manure	500 kg x Rp250/kg	= Rp 125,000	(2 to 3% to rice straw)			Labor cost:	10 m-d x Rp7,000	= Rp 70,000	(Piling and mixing of 3 times)			Total	= Rp 495,000/10ton	= <u>Rp 50/kg</u>
Rice straw:	20 ton x Rp5,000/ton	= Rp 100,000																							
Transportation:	20 ton x Rp10,000/ton	= Rp 200,000																							
(Straw collection by manure and transportation from less than several km)																									
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Labor cost:	10 m-d x Rp7,000	= Rp 70,000																							
(Piling and mixing of 3 times)																									
Total	= Rp 495,000/10ton	= <u>Rp 50/kg</u>																							
<p>14. Soil erosion protection</p>	<ul style="list-style-type: none"> <li>• For land conservation and prevention of soil erosion, it is required to farm terrace land for sloped lands by farmers.</li> <li>• Engineering works and ecological measure will be applied for soil erosion protection as below:             <ul style="list-style-type: none"> <li>(a) Terrace formation of inclined lands</li> <li>(b) Reduction of run-off water by formation border ridge in level terraced land.</li> <li>(c) Soil erosion protection works for long slope (Installation of facilities and vegetation zone)</li> <li>(d) Contour cropping</li> <li>(e) Soil mulching by plastic film or rice straw</li> <li>(f) Covering of surface with mixed cropping and/or relay planting</li> </ul> </li> </ul>																								

**Table II-9 Improvement Plan of Farming Technology (4/4)**

15. Prevention of water quality and soil pollution	<ul style="list-style-type: none"><li>• Farmers have to recognize about the prevention of water and soil pollution which are caused by incorrect use or treatment accident of agro-chemicals, the limitation use of agro-chemicals with residual toxicity, and the prevention of groundwater contamination by excess input of nitrogen fertilizer.</li></ul>
16. Low agricultural-chemicals cultivation	<ul style="list-style-type: none"><li>• Consumers demand natural foods or non-or reduced agro-chemical foods considering human health and influences of gene against lots of application of agro-chemicals and fertilizer recently. Some supermarkets request in the specification of contract shipping/production with farmers.</li><li>• There is some case, which specifies use restriction of agricultural chemicals also in contract with a supermarket.</li><li>• Farmers should cope with low agro-chemicals cultivation in answer to these consumers' needs.</li></ul>

**Table II-10 Procedure of Compost Production**

1	Materials - Carbon source	Rice straw, Plant stalks/ Leaves, Sawdust, etc.  Cut the materials if necessary.
	- Nitrogen source	Excrement and urine of livestock (cattle, goat, sheep, pig),  Chicken manure (fowl droppings), or high organic nitrogen materials.
2	Piling	Piling of carbon and nitrogen organic materials
3	Piling method - Piling on ground	Pile compost materials on the paved ground, the ground have to be pave by concrete for avoidance of penetration polluted water.
	- Piling in trench	Pile compost materials into trench of ground with simple roof for avoiding flow into rainwater.
	- Piling in frame box	Pile compost materials in wood frame box.
4	Moisture control	Control moisture of compost material between 60 and 65% by watering.
5	Acid-alkali control	Neutralize by powder of calcium carbonate, if the compost is strong acid containing organic acid and/or nitrate acid.
6	Temperature control	Keep suitable temperature of 40 – 55 °C for maturing of compost. The temperature may rise to 65 °C initial stage, in the final stage it will be kept a little higher than air temperature.
7	Mixing	Mix the piled un-matured compost several times, every 3 weeks making.
8	Maturing/fermentation	Since aerotropic bacteria do fermentation, it needs to be mixed sometimes.
9	Period of maturing	Generally 3 – 4 months after piling
10	Quality of compost	Heavy metals (Cd, Hg, Pb, Cr, etc.) and/or harmful ions should not be contained over the regulation limit.  C/N ratio (carbon/nitrogen) between 15 and 20.

**Table II-11 Present Crop Budget of Mekarjaya Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Qty	Price	Value	Qty	Price	Value	Qty	Price	Value	Qty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>12,760</b>			<b>21,040</b>			<b>22,440</b>			<b>13,680</b>
Main products	kg	11,000	1,160	12,760	4,000	5,260	21,040	12,000	1,870	22,440	18,000	760	13,680
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>10,375</b>			<b>15,367</b>			<b>16,667</b>			<b>8,907</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>7,379</b>			<b>12,346</b>			<b>13,747</b>			<b>6,329</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	200	1,100	220	200	1,100	220	80	1,100	88	200	1,100
	Urea	kg	240	1,200	288	240	1,200	288	160	1,200	192	240	1,200
	TSP	kg	200	1,700	340	200	1,700	340	160	1,700	272	200	1,700
	KCL	kg	80	2,000	160	80	2,000	160	80	2,000	160	80	2,000
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	16	55,000	880	16	55,000	880	12	55,000	660	16	55,000	880
Fungicide	kg	24	55,000	1,320	20	55,000	1,100	12	55,000	660	16	55,000	880
Others		2	10,000	20	2	10,000	20	6	10,000	60	6	10,000	60
Others				351			588			655			301
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>3,753</b>	<b>592</b>	<b>2,000</b>	<b>3,434</b>	<b>550</b>		<b>3,190</b>	<b>557</b>		<b>3,231</b>
(Hired labor: 65%)		<b>421</b>		<b>2,439</b>	<b>385</b>		<b>2,232</b>	<b>358</b>		<b>2,074</b>	<b>362</b>		<b>2,100</b>
(Family labor: 35%)		<b>226</b>		<b>1,313</b>	<b>207</b>		<b>1,202</b>	<b>193</b>		<b>1,117</b>	<b>195</b>		<b>1,131</b>
Nursery preparat'n/managm't	m-d	7	5,800	41	7	5,800	41	0	5,800	0	7	5,800	41
Land preparation	m-d	140	5,800	812	140	5,800	812	140	5,800	812	140	5,800	812
Seeding/transplanting	m-d	60	5,800	348	60	5,800	348	60	5,800	348	60	5,800	348
Organic manure application	m-d	80	5,800	464	80	5,800	464	80	5,800	464	80	5,800	464
Fertilizer application	m-d	40	5,800	232	40	5,800	232	40	5,800	232	40	5,800	232
Pest control	m-d	75	5,800	435	70	5,800	406	45	5,800	261	60	5,800	348
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261	45	5,800	261	45	5,800	261
Irrigation	m-d	30	5,800	174	30	5,800	174	30	5,800	174	30	5,800	174
Harvesting	m-d	60	5,800	348	50	5,800	290	40	5,800	232	40	5,800	232
Hauling/Post-harvest	m-d	50	5,800	290	30	5,800	174	40	5,800	232	35	5,800	203
Other management	m-d	60	5,800	348	40	5,800	232	30	5,800	174	20	5,800	116
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>557</b>			<b>789</b>			<b>874</b>			<b>478</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,300</b>			<b>1,821</b>			<b>1,968</b>			<b>1,190</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			775			1,296			1,443			665
<b>4 Total Cost</b>	<b>Rp</b>			<b>11,675</b>			<b>17,188</b>			<b>18,635</b>			<b>10,097</b>
<b>5 Profit</b>	<b>Rp</b>			<b>1,085</b>			<b>3,852</b>			<b>3,805</b>			<b>3,583</b>
<b>Profit ratio</b>	<b>%</b>			<b>9%</b>			<b>18%</b>			<b>17%</b>			<b>26%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Qty	Price	Value	Qty	Price	Value	Qty	Price	Value	Qty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>9,300</b>			<b>8,220</b>			<b>22,380</b>			<b>13,680</b>
Main products	kg	15,000	620	9,300	6,000	1,370	8,220	6,000	3,730	22,380	8,000	1,710	13,680
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>7,375</b>			<b>3,600</b>			<b>6,902</b>			<b>6,902</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,044</b>			<b>1,495</b>			<b>4,679</b>			<b>4,679</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,000	1,500	1,500	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0	10	100,000	1,000	10	100,000	1,000
Chemical fertilizer	ZA	kg		1,100	0		1,100	0		176	160	1,100	176
	Urea	kg	90	1,200	108	160	1,200	192	240	1,200	288	240	1,200
	TSP	kg	80	1,700	136	60	1,700	102	160	1,700	272	160	1,700
	KCL	kg	80	2,000	160	100	2,000	200	160	2,000	320	160	2,000
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	8	55,000	440	5	55,000	275	8	55,000	440	8	55,000	440
Fungicide	kg	8	55,000	440	5	55,000	275	8	55,000	440	8	55,000	440
Others		2	10,000	20	2	10,000	20	2	10,000	20	2	10,000	20
Others				240			71			223			223
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>2,970</b>	<b>500</b>		<b>2,900</b>	<b>490</b>		<b>2,842</b>	<b>490</b>		<b>2,842</b>
(Hired labor)		<b>333</b>		<b>1,930</b>	<b>325</b>		<b>1,885</b>	<b>319</b>		<b>1,847</b>	<b>319</b>		<b>1,847</b>
(Family labor)		<b>179</b>		<b>1,039</b>	<b>175</b>		<b>1,015</b>	<b>172</b>		<b>995</b>	<b>172</b>		<b>995</b>
Nursery preparat'n/managm't	m-d	7	5,800	41	0	5,800	0	0	5,800	0	0	5,800	0
Land preparation	m-d	140	5,800	812	140	5,800	812	140	5,800	812	140	5,800	812
Seeding/transplanting	m-d	60	5,800	348	30	5,800	174	60	5,800	348	60	5,800	348
Organic manure application	m-d	80	5,800	464	50	5,800	290	50	5,800	290	50	5,800	290
Fertilizer application	m-d	30	5,800	174	40	5,800	232	40	5,800	232	40	5,800	232
Pest control	m-d	30	5,800	174	30	5,800	174	30	5,800	174	30	5,800	174
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261	45	5,800	261	45	5,800	261
Irrigation	m-d	25	5,800	145	25	5,800	145	25	5,800	145	30	5,800	174
Harvesting	m-d	40	5,800	232	60	5,800	348	40	5,800	232	40	5,800	232
Hauling/Post-harvest	m-d	35	5,800	203	30	5,800	174	30	5,800	174	25	5,800	145
Other management	m-d	20	5,800	116	50	5,800	290	30	5,800	174	30	5,800	174
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>401</b>			<b>220</b>			<b>376</b>			<b>376</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,055</b>			<b>682</b>			<b>1,016</b>			<b>1,016</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			530			157			491			491
<b>4 Total Cost</b>	<b>Rp</b>			<b>8,430</b>			<b>4,282</b>			<b>7,918</b>			<b>7,918</b>
<b>5 Profit</b>	<b>Rp</b>			<b>1,925</b>			<b>4,620</b>			<b>15,478</b>			<b>6,778</b>
<b>Profit ratio</b>	<b>%</b>			<b>21%</b>			<b>56%</b>			<b>69%</b>			<b>50%</b>



**Table II-11 Present Crop Budget of Mekarjaya Model Area (2/2)**

(per ha)

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Qty	Price	Value	Qty	Price	Value	Qty	Price	Value	Qty	Price	Value
<b>1 Gross Income</b>				(Rp) (Rp.1000)			(Rp) (Rp.1000)			(Rp) (Rp.1000)			(Rp) (Rp.1000)
Main products	kg	10,000	880	8,800	7,000	1,300	9,100	3,500	1,400	4,900	1,400	2,100	2,940
By-product	kg												
<b>2 Direct Cost</b>				<b>5,032</b>			<b>2,970</b>			<b>2,716</b>			<b>2,293</b>
<b>2.1 Inputs</b>				<b>3,014</b>			<b>1,313</b>			<b>1,187</b>			<b>908</b>
Seed	kg	1.5	200,000	300	30	17,000	510	35	3,000	105	15	17,000	255
Compost	ton	15	100,000	1,500		100,000	0		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0	80	1,100	88		1,100	0		1,100	0
Urea	kg	240	1,200	288	240	1,200	288	300	1,200	360	200	1,200	240
TSP	kg	160	1,700	272	120	1,700	204	100	1,700	170	100	1,700	170
KCL	kg	80	2,000	160	80	2,000	160	100	2,000	200	100	2,000	200
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	3	55,000	165		55,000	0	5	55,000	275		55,000	0
Fungicide	kg	3	55,000	165		55,000	0		55,000	0		55,000	0
Others		2	10,000	20		10,000	0	2	10,000	20		10,000	0
Others				144			63			57			43
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>2,668</b>	<b>392</b>		<b>2,274</b>	<b>362</b>		<b>2,100</b>	<b>330</b>		<b>1,914</b>
<b>(Hired labor)</b>		<b>299</b>		<b>1,734</b>	<b>255</b>		<b>1,478</b>	<b>235</b>		<b>1,365</b>	<b>215</b>		<b>1,244</b>
<b>(Family labor)</b>		<b>161</b>		<b>934</b>	<b>137</b>		<b>796</b>	<b>127</b>		<b>735</b>	<b>116</b>		<b>670</b>
Nursery prepar'n/managm't	m-d	0	5,800	0	7	5,800	41	7	5,800	41	0	5,800	0
Land preparation	m-d	140	5,800	812	140	5,800	812	90	5,800	522	120	5,800	696
Seeding/transplanting	m-d	20	5,800	116	60	5,800	348	60	5,800	348	40	5,800	232
Organic manure application	m-d	70	5,800	406		5,800	0		5,800	0		5,800	0
Fertilizer application	m-d	30	5,800	174	40	5,800	232	30	5,800	174	40	5,800	232
Pest control	m-d	15	5,800	87		5,800	0	15	5,800	87		5,800	0
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261	40	5,800	232	45	5,800	261
Irrigation	m-d	30	5,800	174	25	5,800	145	30	5,800	174	25	5,800	145
Harvesting	m-d	40	5,800	232	40	5,800	232	60	5,800	348	40	5,800	232
Post-harvest	m-d	30	5,800	174	25	5,800	145	15	5,800	87	15	5,800	87
Other management	m-d	40	5,800	232	10	5,800	58	15	5,800	87	5	5,800	29
<b>2.3 Tool/Equipment</b>	<b>5% of labor/input cost</b>			<b>284</b>			<b>179</b>			<b>164</b>			<b>141</b>
<b>3 Indirect Cost</b>				<b>841</b>			<b>663</b>			<b>650</b>			<b>620</b>
Water charge													
Tax /duty				25			25			25			25
Land fee				500			500			500			500
Interest				316			138			125			95
<b>4 Total Cost</b>				<b>5,873</b>			<b>3,632</b>			<b>3,365</b>			<b>2,914</b>
<b>5 Profit</b>				<b>2,927</b>			<b>5,468</b>			<b>1,535</b>			<b>26</b>
<b>Profit ratio</b>	<b>%</b>			<b>33%</b>			<b>60%</b>			<b>31%</b>			<b>1%</b>

(per ha)

Name of Crops	Unit	Sweet Potato			Soybean		
		Qty	Price	Value	Qty	Price	Value
<b>1 Gross Income</b>	<b>Rp</b>			<b>2,800</b>			<b>0</b>
Main products	kg	7,000	400	2,800		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>1,207</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8</b>			<b>0</b>
Seed	kg	10	800	8		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>295</b>		<b>1,711</b>			<b>0</b>
<b>(Hired labor)</b>		<b>192</b>		<b>1,112</b>			<b>0</b>
<b>(Family labor)</b>		<b>103</b>		<b>599</b>			<b>0</b>
Nursery prepar'n/managm't	m-d	5	5,800	29		5,800	0
Land preparation	m-d	140	5,800	812		5,800	0
Seeding/transplanting	m-d	30	5,800	174		5,800	0
Organic manure application	m-d		5,800	0		5,800	0
Fertilizer application	m-d		5,800	0		5,800	0
Pest control	m-d		5,800	0		5,800	0
Weeding/cultivation	m-d	30	5,800	174		5,800	0
Irrigation	m-d	10	5,800	58		5,800	0
Harvesting	m-d	40	5,800	232		5,800	0
Post-harvest	m-d	20	5,800	116		5,800	0
Other management	m-d	20	5,800	116		5,800	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>86</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>526</b>			<b>525</b>
Water charge	Rp						
Tax /duty	Rp			25			25
Land fee	Rp			500			500
Interest	Rp			1			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>1,732</b>			<b>525</b>
<b>5 Profit</b>	<b>Rp</b>			<b>1,593</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>			<b>57%</b>			

**Table II-12 Proposed Crop Budget of Mekarjaya Model Area (1/2)**

(per ha)

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>20,880</b>			<b>31,560</b>			<b>31,790</b>			<b>15,960</b>
Main products	kg	18,000	1,160	20,880	6,000	5,260	31,560	17,000	1,870	31,790	21,000	760	15,960
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>11,270</b>			<b>16,201</b>			<b>17,249</b>			<b>9,692</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8,232</b>			<b>13,141</b>			<b>14,301</b>			<b>7,077</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	1,100	275	kg	1,100	275	kg	1,100	110	kg	1,100	275
	Urea	kg	1,200	360	kg	1,200	360	kg	1,200	240	kg	1,200	360
	TSP	kg	1,700	425	kg	1,700	425	kg	1,700	340	kg	1,700	425
	KCL	kg	2,000	200	kg	2,000	200	kg	2,000	200	kg	2,000	200
	Complex	kg	3,000	0	kg	3,000	0	kg	3,000	0	kg	3,000	0
Agro-chemicals													
Insecticide	lit	20	55,000	1,100	20	55,000	1,100	15	55,000	825	20	55,000	1,100
Fungicide	kg	30	55,000	1,650	25	55,000	1,375	15	55,000	825	20	55,000	1,100
Others		3	10,000	30	3	10,000	30	8	10,000	80	8	10,000	80
Others				392			626			681			337
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>3,753</b>	<b>592</b>		<b>2,000</b>	<b>3,434</b>		<b>3,190</b>	<b>557</b>		<b>3,231</b>
(Hired labor: 65%)		<b>421</b>		<b>2,439</b>	<b>385</b>		<b>2,232</b>	<b>358</b>		<b>2,074</b>	<b>362</b>		<b>2,100</b>
(Family labor: 35%)		<b>226</b>		<b>1,313</b>	<b>207</b>		<b>1,202</b>	<b>193</b>		<b>1,117</b>	<b>195</b>		<b>1,131</b>
Nursery preparat'n/managm't	m-d	7	5,800	41	7	5,800	41	0	5,800	0	7	5,800	41
Land preparation	m-d	140	5,800	812	140	5,800	812	140	5,800	812	140	5,800	812
Seeding/transplanting	m-d	60	5,800	348	60	5,800	348	60	5,800	348	60	5,800	348
Organic manure application	m-d	80	5,800	464	80	5,800	464	80	5,800	464	80	5,800	464
Fertilizer application	m-d	40	5,800	232	40	5,800	232	40	5,800	232	40	5,800	232
Pest control	m-d	75	5,800	435	70	5,800	406	45	5,800	261	60	5,800	348
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261	45	5,800	261	45	5,800	261
Irrigation	m-d	30	5,800	174	30	5,800	174	30	5,800	174	30	5,800	174
Harvesting	m-d	60	5,800	348	50	5,800	290	40	5,800	232	40	5,800	232
Hauling/Post-harvest	m-d	50	5,800	290	30	5,800	174	40	5,800	232	35	5,800	203
Other management	m-d	60	5,800	348	40	5,800	232	30	5,800	174	20	5,800	116
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>599</b>			<b>829</b>			<b>875</b>			<b>515</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,394</b>			<b>1,910</b>			<b>2,032</b>			<b>1,273</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			864			1,380			1,502			743
<b>4 Total Cost</b>	<b>Rp</b>			<b>12,665</b>			<b>18,111</b>			<b>19,281</b>			<b>10,965</b>
<b>5 Profit</b>	<b>Rp</b>			<b>8,215</b>			<b>13,449</b>			<b>12,509</b>			<b>4,995</b>
<b>Profit ratio</b>	<b>%</b>			<b>39%</b>			<b>43%</b>			<b>39%</b>			<b>31%</b>

(per ha)

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>11,160</b>			<b>13,700</b>			<b>26,110</b>			<b>20,520</b>
Main products	kg	18,000	620	11,160	10,000	1,370	13,700	7,000	3,730	26,110	12,000	1,710	20,520
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>7,737</b>			<b>4,511</b>			<b>7,436</b>			<b>7,436</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,389</b>			<b>2,363</b>			<b>5,187</b>			<b>5,187</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,000	1,500	1,500	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0	10	100,000	1,000	10	100,000	1,000
Chemical fertilizer	ZA	kg	1,100	0		1,100	0	200	1,100	220	200	1,100	220
	Urea	kg	110	132	250	1,200	300	300	1,200	360	300	1,200	360
	TSP	kg	100	170	100	1,700	170	200	1,700	340	200	1,700	340
	KCL	kg	100	200	150	2,000	300	200	2,000	400	200	2,000	400
	Complex	kg	3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	10	55,000	550	10	55,000	550	10	55,000	550	10	55,000	550
Fungicide	kg	10	55,000	550	10	55,000	550	10	55,000	550	10	55,000	550
Others		3	10,000	30	2	10,000	20	2	10,000	20	2	10,000	20
Others				257			113			247			247
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>2,970</b>	<b>500</b>		<b>2,900</b>	<b>490</b>		<b>2,842</b>	<b>490</b>		<b>2,842</b>
(Hired labor)		<b>333</b>		<b>1,930</b>	<b>325</b>		<b>1,885</b>	<b>319</b>		<b>1,847</b>	<b>319</b>		<b>1,847</b>
(Family labor)		<b>179</b>		<b>1,039</b>	<b>175</b>		<b>1,015</b>	<b>172</b>		<b>995</b>	<b>172</b>		<b>995</b>
Nursery preparat'n/managm't	m-d	7	5,800	41	0	5,800	0	0	5,800	0	0	5,800	0
Land preparation	m-d	140	5,800	812	140	5,800	812	140	5,800	812	140	5,800	812
Seeding/transplanting	m-d	60	5,800	348	30	5,800	174	60	5,800	348	60	5,800	348
Organic manure application	m-d	80	5,800	464	50	5,800	290	50	5,800	290	50	5,800	290
Fertilizer application	m-d	30	5,800	174	40	5,800	232	40	5,800	232	40	5,800	232
Pest control	m-d	30	5,800	174	30	5,800	174	30	5,800	174	30	5,800	174
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261	45	5,800	261	45	5,800	261
Irrigation	m-d	25	5,800	145	25	5,800	145	25	5,800	145	30	5,800	174
Harvesting	m-d	40	5,800	232	60	5,800	348	40	5,800	232	40	5,800	232
Hauling/Post-harvest	m-d	35	5,800	203	30	5,800	174	30	5,800	174	25	5,800	145
Other management	m-d	20	5,800	116	50	5,800	290	30	5,800	174	30	5,800	174
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>418</b>			<b>263</b>			<b>401</b>			<b>401</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,096</b>			<b>778</b>			<b>1,075</b>			<b>1,075</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			566			248			545			545
<b>4 Total Cost</b>	<b>Rp</b>			<b>8,833</b>			<b>5,289</b>			<b>8,510</b>			<b>8,510</b>
<b>5 Profit</b>	<b>Rp</b>			<b>3,423</b>			<b>9,189</b>			<b>18,674</b>			<b>13,084</b>
<b>Profit ratio</b>	<b>%</b>			<b>31%</b>			<b>67%</b>			<b>72%</b>			<b>64%</b>

**Table II-12 Proposed Crop Budget of Mekarjaya Model Area (2/2)**

(per ha)

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(Rp)	(1000Rp)	(Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>13,200</b>			<b>10,400</b>			<b>0</b>			<b>0</b>
Main products	kg	15,000	880	13,200	8,000	1,300	10,400			1,400		2,100	0
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>5,484</b>			<b>3,174</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>3,444</b>			<b>1,507</b>			<b>0</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510			3,000		17,000	0
Compost	ton	15	100,000	1,500		100,000	0			100,000		100,000	0
Chemical fertilizer	kg		1,100	0	100	1,100	110			1,100		1,100	0
ZA	kg				300	1,200	360			1,200		1,200	0
Urea	kg				200	1,700	340			1,700		1,700	0
TSP	kg				100	2,000	200			2,000		2,000	0
KCL	kg					3,000	0			3,000		3,000	0
Complex	kg												
Agro-chemicals													
Insecticide	lit	5	55,000	275		55,000	0			55,000		55,000	0
Fungicide	kg	5	55,000	275		55,000	0			55,000		55,000	0
Others		3	10,000	30		10,000	0			10,000		10,000	0
Others				164			72						0
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>2,668</b>	<b>392</b>		<b>2,274</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>		<b>299</b>		<b>1,734</b>	<b>255</b>		<b>1,478</b>			<b>0</b>			<b>0</b>
<b>(Family labor)</b>		<b>161</b>		<b>934</b>	<b>137</b>		<b>796</b>			<b>0</b>			<b>0</b>
Nursery prepar'n/managm't	m-d	0	5,800	0	7	5,800	41			5,800		5,800	0
Land preparation	m-d	140	5,800	812	140	5,800	812			5,800		5,800	0
Seeding/transplanting	m-d	20	5,800	116	60	5,800	348			5,800		5,800	0
Organic manure application	m-d	70	5,800	406		5,800	0			5,800		5,800	0
Fertilizer application	m-d	30	5,800	174	40	5,800	232			5,800		5,800	0
Pest control	m-d	15	5,800	87		5,800	0			5,800		5,800	0
Weeding/cultivation	m-d	45	5,800	261	45	5,800	261			5,800		5,800	0
Irrigation	m-d	30	5,800	174	25	5,800	145			5,800		5,800	0
Harvesting	m-d	40	5,800	232	40	5,800	232			5,800		5,800	0
Post-harvest	m-d	30	5,800	174	25	5,800	145			5,800		5,800	0
Other management	m-d	40	5,800	232	10	5,800	58			5,800		5,800	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>306</b>			<b>189</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>892</b>			<b>688</b>						
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			362			158			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>6,375</b>			<b>3,862</b>			<b>0</b>			<b>0</b>
<b>5 Profit</b>	<b>Rp</b>			<b>6,825</b>			<b>6,538</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>			<b>52%</b>			<b>63%</b>						

(per ha)

Name of Crops	Unit	Sweet Potato			Soybean		
		Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0		1,100	0
ZA	kg						
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery prepar'n/managm't	m-d		5,800	0		5,800	0
Land preparation	m-d		5,800	0		5,800	0
Seeding/transplanting	m-d		5,800	0		5,800	0
Organic manure application	m-d		5,800	0		5,800	0
Fertilizer application	m-d		5,800	0		5,800	0
Pest control	m-d		5,800	0		5,800	0
Weeding/cultivation	m-d		5,800	0		5,800	0
Irrigation	m-d		5,800	0		5,800	0
Harvesting	m-d		5,800	0		5,800	0
Post-harvest	m-d		5,800	0		5,800	0
Other management	m-d		5,800	0		5,800	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
Water charge	Rp						
Tax /duty	Rp			30			30
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						

**Table II-13 Summary of Crop Budgets of Present/Proposed Conditions of Mekarjaya Model Area**

**Present**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	12,760	7,379	2,439	557	10,375	1,300	11,675	1,085	9%	99	1,061
Chili	21,040	12,346	2,232	789	15,367	1,821	17,188	3,852	18%	963	4,297
Potato	22,440	13,747	2,074	847	16,667	1,968	18,635	3,805	17%	317	1,553
Cabbage	13,680	6,329	2,100	478	8,907	1,190	10,097	3,583	26%	199	561
Chinese cabbage	9,300	5,044	1,930	401	7,375	1,055	8,430	870	9%	58	562
Bean vegetables	8,220	1,495	1,885	220	3,600	682	4,282	3,938	48%	656	714
Red onion	22,380	4,679	1,847	376	6,902	1,016	7,918	14,462	65%	2,410	1,320
Welsh onion	13,680	4,679	1,847	376	6,902	1,016	7,918	5,762	42%	720	990
Carrot	8,800	3,014	1,734	284	5,032	841	5,873	2,927	33%	293	587
Sweet corn	9,100	1,313	1,478	179	2,970	663	3,632	5,468	60%	781	519
Paddy	4,900	1,187	1,365	164	2,716	650	3,365	1,535	31%	439	961
Maize	2,940	908	1,244	141	2,293	620	2,914	26	1%	19	2,081
Sweet potato	2,800	8	1,112	86	1,207	526	1,732	1,068	38%	153	247
Soybean	0	0	0	0	0	0	0	0			

**Proposed**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	20,880	8,232	2,439	599	11,270	1,394	12,665	8,215	39%	456	704
Chili	31,560	13,141	2,232	829	16,201	1,910	18,111	13,449	43%	2,241	3,019
Potato	31,790	14,301	2,074	875	17,249	2,032	19,281	12,509	39%	736	1,134
Cabbage	15,960	7,077	2,100	515	9,692	1,273	10,965	4,995	31%	238	522
Chinese cabbage	11,160	5,389	1,930	418	7,737	1,096	8,833	2,327	21%	129	491
Bean vegetables	13,700	2,363	1,885	263	4,511	778	5,289	8,411	61%	841	529
Red onion	26,110	5,187	1,847	401	7,436	1,075	8,510	17,600	67%	2,514	1,216
Welsh onion	20,520	5,187	1,847	401	7,436	1,075	8,510	12,010	59%	1,001	709
Carrot	13,200	3,444	1,734	306	5,484	892	6,375	6,825	52%	455	425
Sweet corn	10,400	1,507	1,478	189	3,174	688	3,862	6,538	63%	817	483
Paddy	0	0	0	0	0	0	0	0			
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Table II-14 Present Crop Budget of Tanjungkarya Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>20,880</b>			<b>31,560</b>			<b>33,660</b>			<b>16,720</b>
Main products	kg	18,000	1,160	20,880	6,000	5,260	31,560	18,000	1,870	33,660	22,000	760	16,720
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>10,559</b>			<b>15,777</b>			<b>16,930</b>			<b>9,065</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>7,382</b>			<b>12,579</b>			<b>13,851</b>			<b>6,332</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	200	1,100	220	220	1,100	242	90	1,100	99	220	1,100
	Urea	kg	270	1,200	324	270	1,200	324	180	1,200	216	270	1,200
	TSP	kg	180	1,700	306	220	1,700	374	180	1,700	306	220	1,700
	KCL	kg	80	2,000	160	90	2,000	180	90	2,000	180	90	2,000
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	15	55,000	825	18	55,000	990	12	55,000	660	15	55,000	825
Fungicide	kg	25	55,000	1,375	20	55,000	1,100	12	55,000	660	15	55,000	825
Others		2	10,000	20	2	10,000	20	7	10,000	70	6	10,000	60
Others				352			599			660			302
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>4,011</b>	<b>592</b>	<b>2,000</b>	<b>3,670</b>	<b>550</b>	<b>3,410</b>	<b>557</b>			<b>3,453</b>
(Hired labor: 65%)		<b>421</b>		<b>2,607</b>	<b>385</b>		<b>2,386</b>	<b>358</b>		<b>2,217</b>			<b>2,245</b>
(Family labor: 35%)		<b>226</b>		<b>1,404</b>	<b>207</b>		<b>1,285</b>	<b>193</b>		<b>1,194</b>			<b>1,209</b>
Nursery preparat'n/managm't	m-d	7	6,200	43	7	6,200	43	0	6,200	0	7	6,200	43
Land preparation	m-d	140	6,200	868	140	6,200	868	140	6,200	868	140	6,200	868
Seeding/transplanting	m-d	60	6,200	372	60	6,200	372	60	6,200	372	60	6,200	372
Organic manure application	m-d	80	6,200	496	80	6,200	496	80	6,200	496	80	6,200	496
Fertilizer application	m-d	40	6,200	248	40	6,200	248	40	6,200	248	40	6,200	248
Pest control	m-d	75	6,200	465	70	6,200	434	45	6,200	279	60	6,200	372
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	45	6,200	279	45	6,200	279
Irrigation	m-d	30	6,200	186	30	6,200	186	30	6,200	186	30	6,200	186
Harvesting	m-d	60	6,200	372	50	6,200	310	40	6,200	248	40	6,200	248
Hauling/Post-harvest	m-d	50	6,200	310	30	6,200	186	40	6,200	248	35	6,200	217
Other management	m-d	60	6,200	372	40	6,200	248	30	6,200	186	20	6,200	124
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>570</b>			<b>812</b>			<b>863</b>			<b>489</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,300</b>			<b>1,846</b>			<b>1,979</b>			<b>1,190</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			775			1,321			1,454			665
<b>4 Total Cost</b>	<b>Rp</b>			<b>11,859</b>			<b>17,623</b>			<b>18,909</b>			<b>10,255</b>
<b>5 Profit</b>	<b>Rp</b>			<b>9,021</b>			<b>13,937</b>			<b>14,751</b>			<b>6,465</b>
<b>Profit ratio</b>	<b>%</b>			<b>43%</b>			<b>44%</b>			<b>44%</b>			<b>39%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>10,540</b>			<b>9,590</b>			<b>26,110</b>			<b>0</b>
Main products	kg	17,000	620	10,540	7,000	1,370	9,590	7,000	3,730	26,110			0
By-product	kg												0
<b>2 Direct Cost</b>	<b>Rp</b>			<b>7,559</b>			<b>4,405</b>			<b>7,141</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,083</b>			<b>2,128</b>			<b>4,775</b>			<b>0</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,000	1,500	1,500			0
Compost	ton	20	100,000	2,000		100,000	0	10	100,000	1,000	100,000	0	0
Chemical fertilizer	ZA	kg	1,100	0		1,100	0	180	1,100	198	1,100	0	0
	Urea	kg	90	1,200	108	220	1,200	264	270	1,200	324	1,200	0
	TSP	kg	90	1,700	153	90	1,700	153	180	1,700	306	1,700	0
	KCL	kg	90	2,000	180	120	2,000	240	160	2,000	320	2,000	0
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	8	55,000	440	9	55,000	495	8	55,000	440	55,000	0	0
Fungicide	kg	8	55,000	440	9	55,000	495	8	55,000	440	55,000	0	0
Others		2	10,000	20	2	10,000	20	2	10,000	20	10,000	0	0
Others				242			101			227			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>3,174</b>	<b>500</b>		<b>3,100</b>	<b>490</b>		<b>3,038</b>			<b>0</b>
(Hired labor)		<b>333</b>		<b>2,063</b>	<b>325</b>		<b>2,015</b>	<b>319</b>		<b>1,975</b>			<b>0</b>
(Family labor)		<b>179</b>		<b>1,111</b>	<b>175</b>		<b>1,085</b>	<b>172</b>		<b>1,063</b>			<b>0</b>
Nursery preparat'n/managm't	m-d	7	6,200	43	0	6,200	0	0	6,200	0	6,200	0	0
Land preparation	m-d	140	6,200	868	140	6,200	868	140	6,200	868	140	6,200	868
Seeding/transplanting	m-d	60	6,200	372	30	6,200	186	60	6,200	372	6,200	0	0
Organic manure application	m-d	80	6,200	496	50	6,200	310	50	6,200	310	6,200	0	0
Fertilizer application	m-d	30	6,200	186	40	6,200	248	40	6,200	248	6,200	0	0
Pest control	m-d	30	6,200	186	30	6,200	186	30	6,200	186	6,200	0	0
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	45	6,200	279	6,200	0	0
Irrigation	m-d	25	6,200	155	25	6,200	155	25	6,200	155	6,200	0	0
Harvesting	m-d	40	6,200	248	60	6,200	372	40	6,200	248	6,200	0	0
Hauling/Post-harvest	m-d	35	6,200	217	30	6,200	186	30	6,200	186	6,200	0	0
Other management	m-d	20	6,200	124	50	6,200	310	30	6,200	186	6,200	0	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>413</b>			<b>261</b>			<b>391</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,059</b>			<b>748</b>			<b>1,026</b>			<b>525</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			534			223			501			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>8,618</b>			<b>5,153</b>			<b>8,167</b>			<b>525</b>
<b>5 Profit</b>	<b>Rp</b>			<b>2,981</b>			<b>5,185</b>			<b>18,969</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>			<b>28%</b>			<b>54%</b>			<b>73%</b>			<b>0</b>

**Table II-14 Present Crop Budget of Tanjungkarya Model Area (2/2)**

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Qty	Price	Value	Qty	Price	Value	Qty	Price	Value	Qty	Price	Value
			(Rp)	(Rp.1000)		(Rp)	(Rp.1000)		(Rp)	(Rp.1000)		(Rp)	(Rp.1000)
<b>1 Gross Income</b>				<b>14,960</b>		<b>9,100</b>		<b>5,600</b>		<b>0</b>			<b>0</b>
Main products	kg	17,000	880	14,960	7,000	1,300	9,100	4,000	1,400	5,600		2,100	0
By-product	kg												
<b>2 Direct Cost</b>				<b>5,381</b>		<b>3,153</b>		<b>2,817</b>		<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>				<b>3,224</b>		<b>1,383</b>		<b>1,187</b>		<b>0</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510	35	3,000	105		17,000	0
Compost	ton	15	100,000	1,500		100,000	0		100,000	0		100,000	0
Chemical fertilizer	ZA				90	1,100	99		1,100	0		1,100	0
	Urea				270	1,200	324		300	1,200		360	0
	TSP				180	1,700	306		100	1,700		170	0
	KCL				90	2,000	180		100	2,000		200	0
	Complex					3,000	0			3,000		0	0
Agro-chemicals													
Insecticide	lit	4	55,000	220		55,000	0	5	55,000	275		55,000	0
Fungicide	kg	4	55,000	220		55,000	0		55,000	0		55,000	0
Others		2	10,000	20		10,000	0	2	10,000	20		10,000	0
				154			66			57			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>2,852</b>	<b>392</b>		<b>2,430</b>	<b>362</b>		<b>2,244</b>			<b>0</b>
<b>(Hired labor)</b>		<b>299</b>		<b>1,854</b>	<b>255</b>		<b>1,580</b>	<b>235</b>		<b>1,459</b>			<b>0</b>
<b>(Family labor)</b>		<b>161</b>		<b>998</b>	<b>137</b>		<b>851</b>	<b>127</b>		<b>786</b>			<b>0</b>
Nursery prepart'n/managm't	m-d	0	6,200	0	7	6,200	43	7	6,200	43		6,200	0
Land preparation	m-d	140	6,200	868	140	6,200	868	90	6,200	558		6,200	0
Seeding/transplanting	m-d	20	6,200	124	60	6,200	372	60	6,200	372		6,200	0
Organic manure application	m-d	70	6,200	434		6,200	0		6,200	0		6,200	0
Fertilizer application	m-d	30	6,200	186	40	6,200	248	30	6,200	186		6,200	0
Pest control	m-d	15	6,200	93		6,200	0	15	6,200	93		6,200	0
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	40	6,200	248		6,200	0
Irrigation	m-d	30	6,200	186	25	6,200	155	30	6,200	186		6,200	0
Harvesting	m-d	40	6,200	248	40	6,200	248	60	6,200	372		6,200	0
Post-harvest	m-d	30	6,200	186	25	6,200	155	15	6,200	93		6,200	0
Other management	m-d	40	6,200	248	10	6,200	62	15	6,200	93		6,200	0
<b>2.3 Tool/Equipment</b>	<b>5% of labor/input cost</b>			<b>304</b>			<b>191</b>			<b>172</b>			<b>0</b>
<b>3 Indirect Cost</b>				<b>863</b>			<b>670</b>			<b>650</b>			<b>525</b>
Water charge													
Tax /duty				25			25			25			25
Land fee				500			500			500			500
Interest				338			145			125			0
<b>4 Total Cost</b>				<b>6,245</b>			<b>3,823</b>			<b>3,466</b>			<b>525</b>
<b>5 Profit</b>				<b>8,715</b>			<b>5,277</b>			<b>2,134</b>			<b>-525</b>
<b>Profit ratio</b>	<b>%</b>			<b>58%</b>			<b>58%</b>			<b>38%</b>			

Name of Crops	Unit	Sweet Potato			Soybean		
		Qty	Price	Value	Qty	Price	Value
			(Rp)	(1000Rp)		(Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	ZA					1,100	0
	Urea					1,200	0
	TSP					1,700	0
	KCL					2,000	0
	Complex					3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery prepart'n/managm't	m-d		6,200	0		6,200	0
Land preparation	m-d		6,200	0		6,200	0
Seeding/transplanting	m-d		6,200	0		6,200	0
Organic manure application	m-d		6,200	0		6,200	0
Fertilizer application	m-d		6,200	0		6,200	0
Pest control	m-d		6,200	0		6,200	0
Weeding/cultivation	m-d		6,200	0		6,200	0
Irrigation	m-d		6,200	0		6,200	0
Harvesting	m-d		6,200	0		6,200	0
Post-harvest	m-d		6,200	0		6,200	0
Other management	m-d		6,200	0		6,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
Water charge	Rp						
Tax /duty	Rp			25			25
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						

**Table II-15 Proposed Crop Budget of Tanjungkarya Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>23,200</b>			<b>36,820</b>			<b>37,400</b>			<b>18,240</b>
Main products	kg	20,000	1,160	23,200	7,000	5,260	36,820	20,000	1,870	37,400	24,000	760	18,240
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>11,452</b>			<b>16,367</b>			<b>17,403</b>			<b>9,848</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8,232</b>			<b>13,141</b>			<b>14,301</b>			<b>7,077</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	1,100	275	kg	1,100	275	100	1,100	110	250	1,100	275
	Urea	kg	1,200	360	kg	1,200	360	200	1,200	240	300	1,200	360
	TSP	kg	1,700	425	kg	1,700	425	200	1,700	340	250	1,700	425
	KCL	kg	2,000	200	kg	2,000	200	100	2,000	200	100	2,000	200
	Complex	kg	3,000	0	kg	3,000	0	kg	3,000	0	kg	3,000	0
Agro-chemicals													
Insecticide	lit	20	55,000	1,100	20	55,000	1,100	15	55,000	825	20	55,000	1,100
Fungicide	kg	30	55,000	1,650	25	55,000	1,375	15	55,000	825	20	55,000	1,100
Others		3	10,000	30	3	10,000	30	8	10,000	80	8	10,000	80
Others				392			626			681			337
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>4,011</b>	<b>592</b>		<b>3,670</b>	<b>550</b>		<b>3,410</b>	<b>557</b>		<b>3,453</b>
(Hired labor: 65%)		<b>421</b>		<b>2,607</b>	<b>385</b>		<b>2,386</b>	<b>358</b>		<b>2,217</b>	<b>362</b>		<b>2,245</b>
(Family labor: 35%)		<b>226</b>		<b>1,404</b>	<b>207</b>		<b>1,285</b>	<b>193</b>		<b>1,194</b>	<b>195</b>		<b>1,209</b>
Nursery preparat'n/managm't	m-d	7	6,200	43	7	6,200	43	0	6,200	0	7	6,200	43
Land preparation	m-d	140	6,200	868	140	6,200	868	140	6,200	868	140	6,200	868
Seeding/transplanting	m-d	60	6,200	372	60	6,200	372	60	6,200	372	60	6,200	372
Organic manure application	m-d	80	6,200	496	80	6,200	496	80	6,200	496	80	6,200	496
Fertilizer application	m-d	40	6,200	248	40	6,200	248	40	6,200	248	40	6,200	248
Pest control	m-d	75	6,200	465	70	6,200	434	45	6,200	279	60	6,200	372
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	45	6,200	279	45	6,200	279
Irrigation	m-d	30	6,200	186	30	6,200	186	30	6,200	186	30	6,200	186
Harvesting	m-d	60	6,200	372	50	6,200	310	40	6,200	248	40	6,200	248
Hauling/Post-harvest	m-d	50	6,200	310	30	6,200	186	40	6,200	248	35	6,200	217
Other management	m-d	60	6,200	372	40	6,200	248	30	6,200	186	20	6,200	124
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>612</b>			<b>841</b>			<b>886</b>			<b>527</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,394</b>			<b>1,910</b>			<b>2,032</b>			<b>1,273</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			864			1,380			1,502			743
<b>4 Total Cost</b>	<b>Rp</b>			<b>12,846</b>			<b>18,277</b>			<b>19,435</b>			<b>11,121</b>
<b>5 Profit</b>	<b>Rp</b>			<b>10,354</b>			<b>18,543</b>			<b>17,965</b>			<b>7,119</b>
<b>Profit ratio</b>	<b>%</b>			<b>45%</b>			<b>50%</b>			<b>48%</b>			<b>39%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>11,160</b>			<b>13,700</b>			<b>29,840</b>			<b>0</b>
Main products	kg	18,000	620	11,160	10,000	1,370	13,700	8,000	3,730	29,840		1,710	0
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>7,880</b>			<b>4,651</b>			<b>7,573</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,389</b>			<b>2,363</b>			<b>5,187</b>			<b>0</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,000	1,500	1,500		1,500	0
Compost	ton	20	100,000	2,000		100,000	0	10	100,000	1,000		100,000	0
Chemical fertilizer	ZA	kg	1,100	0		1,100	0	200	1,100	220		1,100	0
	Urea	kg	110	132	250	1,200	300	300	1,200	360		1,200	0
	TSP	kg	100	170	100	1,700	170	200	1,700	340		1,700	0
	KCL	kg	100	200	150	2,000	300	200	2,000	400		2,000	0
	Complex	kg	3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	10	55,000	550	10	55,000	550	10	55,000	550		55,000	0
Fungicide	kg	10	55,000	550	10	55,000	550	10	55,000	550		55,000	0
Others		3	10,000	30	2	10,000	20	2	10,000	20		10,000	0
Others				257			113			247			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>3,174</b>	<b>500</b>		<b>3,100</b>	<b>490</b>		<b>3,038</b>			<b>0</b>
(Hired labor)		<b>333</b>		<b>2,063</b>	<b>325</b>		<b>2,015</b>	<b>319</b>		<b>1,975</b>			<b>0</b>
(Family labor)		<b>179</b>		<b>1,111</b>	<b>175</b>		<b>1,085</b>	<b>172</b>		<b>1,063</b>			<b>0</b>
Nursery preparat'n/managm't	m-d	7	6,200	43	0	6,200	0	0	6,200	0		6,200	0
Land preparation	m-d	140	6,200	868	140	6,200	868	140	6,200	868		6,200	0
Seeding/transplanting	m-d	60	6,200	372	30	6,200	186	60	6,200	372		6,200	0
Organic manure application	m-d	80	6,200	496	50	6,200	310	50	6,200	310		6,200	0
Fertilizer application	m-d	30	6,200	186	40	6,200	248	40	6,200	248		6,200	0
Pest control	m-d	30	6,200	186	30	6,200	186	30	6,200	186		6,200	0
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	45	6,200	279		6,200	0
Irrigation	m-d	25	6,200	155	25	6,200	155	25	6,200	155		6,200	0
Harvesting	m-d	40	6,200	248	60	6,200	372	40	6,200	248		6,200	0
Hauling/Post-harvest	m-d	35	6,200	217	30	6,200	186	30	6,200	186		6,200	0
Other management	m-d	20	6,200	124	50	6,200	310	30	6,200	186		6,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>428</b>			<b>273</b>			<b>411</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,096</b>			<b>778</b>			<b>1,075</b>			<b>530</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			566			248			545			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>8,976</b>			<b>5,429</b>			<b>8,648</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>3,280</b>			<b>9,049</b>			<b>22,267</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>			<b>29%</b>			<b>66%</b>			<b>75%</b>			<b>0</b>

**Table II-15 Proposed Crop Budget of Tanjungkarya Model Area (2/2)**

(per ha)

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>15,840</b>			<b>11,700</b>			<b>6,300</b>			<b>0</b>
Main products	kg	18,000	880	15,840	9,000	1,300	11,700	4,500	1,400	6,300		2,100	0
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>5,613</b>			<b>3,283</b>			<b>2,817</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>3,444</b>			<b>1,507</b>			<b>1,187</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510	35	3,000	105		17,000	0
Compost	ton	15	100,000	1,500		100,000	0		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0	100	1,100	110		1,100	0		1,100	0
Urea	kg	300	1,200	360	300	1,200	360	300	1,200	360		1,200	0
TSP	kg	200	1,700	340	150	1,700	255	100	1,700	170		1,700	0
KCL	kg	100	2,000	200	100	2,000	200	100	2,000	200		2,000	0
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	5	55,000	275		55,000	0	5	55,000	275		55,000	0
Fungicide	kg	5	55,000	275		55,000	0		55,000	0		55,000	0
Others		3	10,000	30		10,000	0	2	10,000	20		10,000	0
Others				164			72			57			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>2,852</b>	<b>392</b>		<b>2,430</b>	<b>362</b>		<b>2,244</b>			<b>0</b>
<b>(Hired labor)</b>		<b>299</b>		<b>1,854</b>	<b>255</b>		<b>1,580</b>	<b>235</b>		<b>1,459</b>			<b>0</b>
<b>(Family labor)</b>		<b>161</b>		<b>998</b>	<b>137</b>		<b>851</b>	<b>127</b>		<b>786</b>			<b>0</b>
Nursery preparat'n/managm't	m-d	0	6,200	0	7	6,200	43	7	6,200	43		6,200	0
Land preparation	m-d	140	6,200	868	140	6,200	868	90	6,200	558		6,200	0
Seeding/transplanting	m-d	20	6,200	124	60	6,200	372	60	6,200	372		6,200	0
Organic manure application	m-d	70	6,200	434		6,200	0		6,200	0		6,200	0
Fertilizer application	m-d	30	6,200	186	40	6,200	248	30	6,200	186		6,200	0
Pest control	m-d	15	6,200	93		6,200	0	15	6,200	93		6,200	0
Weeding/cultivation	m-d	45	6,200	279	45	6,200	279	40	6,200	248		6,200	0
Irrigation	m-d	30	6,200	186	25	6,200	155	30	6,200	186		6,200	0
Harvesting	m-d	40	6,200	248	40	6,200	248	60	6,200	372		6,200	0
Post-harvest	m-d	30	6,200	186	25	6,200	155	15	6,200	93		6,200	0
Other management	m-d	40	6,200	248	10	6,200	62	15	6,200	93		6,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>315</b>			<b>197</b>			<b>172</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>892</b>			<b>688</b>			<b>655</b>			<b>530</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			362			158			125			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>6,504</b>			<b>3,972</b>			<b>3,471</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>9,336</b>			<b>7,728</b>			<b>2,829</b>			<b>-530</b>
<b>Profit ratio</b>	<b>%</b>			<b>59%</b>			<b>66%</b>			<b>45%</b>			

(per ha)

Name of Crops	Unit	Sweet Potato			Soybean		
		Q'ty	Price (Rp)	Value (1000Rp)	Q'ty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d		6,200	0		6,200	0
Land preparation	m-d		6,200	0		6,200	0
Seeding/transplanting	m-d		6,200	0		6,200	0
Organic manure application	m-d		6,200	0		6,200	0
Fertilizer application	m-d		6,200	0		6,200	0
Pest control	m-d		6,200	0		6,200	0
Weeding/cultivation	m-d		6,200	0		6,200	0
Irrigation	m-d		6,200	0		6,200	0
Harvesting	m-d		6,200	0		6,200	0
Post-harvest	m-d		6,200	0		6,200	0
Other management	m-d		6,200	0		6,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
Water charge	Rp						
Tax /duty	Rp			30			30
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						



**Table II-16 Summary of Crop Budgets of Present and Proposed Conditions of Tanjungkarya Model Area**

**Present**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	20,880	7,382	2,607	570	10,559	1,300	11,859	9,021	43%	501	659
Chili	31,560	12,579	2,386	812	15,777	1,846	17,623	13,937	44%	2,323	2,937
Potato	33,660	13,851	2,217	863	16,930	1,979	18,909	14,751	44%	819	1,051
Cabbage	16,720	6,332	2,245	489	9,065	1,190	10,255	6,465	39%	294	466
Chinese cabbage	10,540	5,083	2,063	413	7,559	1,059	8,618	1,922	18%	113	507
Bean vegetables	9,590	2,128	2,015	261	4,405	748	5,153	4,437	46%	634	736
Red onion	26,110	4,775	1,975	391	7,141	1,026	8,167	17,943	69%	2,563	1,167
Welsh onion	0	0	0	0	0	0	0	0			
Carrot	14,960	3,224	1,854	304	5,381	863	6,245	8,715	58%	513	367
Sweet corn	9,100	1,383	1,580	191	3,153	670	3,823	5,277	58%	754	546
Paddy	5,600	1,187	1,459	172	2,817	650	3,466	2,134	38%	533	867
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Proposed**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	23,200	8,232	2,607	612	11,452	1,394	12,846	10,354	45%	518	642
Chili	36,820	13,141	2,386	841	16,367	1,910	18,277	18,543	50%	2,649	2,611
Potato	37,400	14,301	2,217	886	17,403	2,032	19,435	17,965	48%	898	972
Cabbage	18,240	7,077	2,245	527	9,848	1,273	11,121	7,119	39%	297	463
Chinese cabbage	11,160	5,389	2,063	428	7,880	1,096	8,976	2,184	20%	121	499
Bean vegetables	13,700	2,363	2,015	273	4,651	778	5,429	8,271	60%	827	543
Red onion	29,840	5,187	1,975	411	7,573	1,075	8,648	21,192	71%	2,649	1,081
Welsh onion	0	0	0	0	0	0	0	0			
Carrot	15,840	3,444	1,854	315	5,613	892	6,504	9,336	59%	519	361
Sweet corn	11,700	1,507	1,580	197	3,283	688	3,972	7,728	66%	859	441
Paddy	6,300	1,187	1,459	172	2,817	655	3,471	2,829	45%	629	771
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Table II-17 Present Crop Budget of Gekbrong Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>17,400</b>			<b>42,080</b>			<b>22,440</b>			<b>15,200</b>
Main products	kg	15,000	1,160	17,400	8,000	5,260	42,080	12,000	1,870	22,440	20,000	760	15,200
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>9,774</b>			<b>14,767</b>			<b>16,171</b>			<b>8,418</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>7,497</b>			<b>12,406</b>			<b>13,861</b>			<b>6,458</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	220	1,100	242	220	1,100	242	90	1,100	99	220	1,100
	Urea	kg	270	1,200	324	270	1,200	324	180	1,200	216	270	1,200
	TSP	kg	220	1,700	374	220	1,700	374	180	1,700	306	220	1,700
	KCL	kg	90	2,000	180	90	2,000	180	90	2,000	180	90	2,000
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	15	55,000	825	15	55,000	825	12	55,000	660	16	55,000	880
Fungicide	kg	25	55,000	1,375	20	55,000	1,100	12	55,000	660	16	55,000	880
Others		2	10,000	20	2	10,000	20	8	10,000	80	7	10,000	70
Others				357			591			660			308
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>2,717</b>	<b>592</b>	<b>2,000</b>	<b>2,486</b>	<b>550</b>	<b>2,310</b>	<b>557</b>			<b>2,339</b>
(Hired labor: 65%)		<b>421</b>		<b>1,766</b>	<b>385</b>		<b>1,616</b>	<b>358</b>		<b>1,502</b>			<b>1,521</b>
(Family labor: 35%)		<b>226</b>		<b>951</b>	<b>207</b>		<b>870</b>	<b>193</b>		<b>809</b>			<b>819</b>
Nursery preparat'n/managm't	m-d	7	4,200	29	7	4,200	29	0	4,200	0	7	4,200	29
Land preparation	m-d	140	4,200	588	140	4,200	588	140	4,200	588	140	4,200	588
Seeding/transplanting	m-d	60	4,200	252	60	4,200	252	60	4,200	252	60	4,200	252
Organic manure application	m-d	80	4,200	336	80	4,200	336	80	4,200	336	80	4,200	336
Fertilizer application	m-d	40	4,200	168	40	4,200	168	40	4,200	168	40	4,200	168
Pest control	m-d	75	4,200	315	70	4,200	294	45	4,200	189	60	4,200	252
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189	45	4,200	189	45	4,200	189
Irrigation	m-d	30	4,200	126	30	4,200	126	30	4,200	126	30	4,200	126
Harvesting	m-d	60	4,200	252	50	4,200	210	40	4,200	168	40	4,200	168
Hauling/Post-harvest	m-d	50	4,200	210	30	4,200	126	40	4,200	168	35	4,200	147
Other management	m-d	60	4,200	252	40	4,200	168	30	4,200	126	20	4,200	84
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>511</b>			<b>745</b>			<b>809</b>			<b>440</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,312</b>			<b>1,828</b>			<b>1,980</b>			<b>1,203</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			787			1,303			1,455			678
<b>4 Total Cost</b>	<b>Rp</b>			<b>11,086</b>			<b>16,594</b>			<b>18,152</b>			<b>9,621</b>
<b>5 Profit</b>	<b>Rp</b>			<b>6,314</b>			<b>25,486</b>			<b>4,288</b>			<b>5,579</b>
<b>Profit ratio</b>	<b>%</b>			<b>36%</b>			<b>61%</b>			<b>19%</b>			<b>37%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>10,540</b>			<b>9,590</b>			<b>0</b>			<b>22,230</b>
Main products	kg	17,000	620	10,540	7,000	1,370	9,590	3,730	0	0	13,000	1,710	22,230
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>6,856</b>			<b>3,583</b>			<b>0</b>			<b>6,499</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,096</b>			<b>2,013</b>			<b>0</b>			<b>4,817</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,500	0	0	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0	100,000	0	0	10	100,000	1,000
Chemical fertilizer	ZA	kg		1,100	0		1,100	0		0	180	1,100	198
	Urea	kg	100	1,200	120	220	1,200	264	1,200	0	270	1,200	324
	TSP	kg	90	1,700	153	90	1,700	153	1,700	0	180	1,700	306
	KCL	kg	90	2,000	180	120	2,000	240	2,000	0	180	2,000	360
	Complex	kg		3,000	0		3,000	0		0		3,000	0
Agro-chemicals													
Insecticide	lit	8	55,000	440	8	55,000	440	55,000	0	0	8	55,000	440
Fungicide	kg	8	55,000	440	8	55,000	440	55,000	0	0	8	55,000	440
Others		2	10,000	20	2	10,000	20	10,000	0	0	2	10,000	20
Others				243			96			0			229
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>2,150</b>	<b>500</b>		<b>2,100</b>	<b>0</b>		<b>490</b>			<b>2,058</b>
(Hired labor)		<b>333</b>		<b>1,398</b>	<b>325</b>		<b>1,365</b>	<b>0</b>		<b>319</b>			<b>1,338</b>
(Family labor)		<b>179</b>		<b>753</b>	<b>175</b>		<b>735</b>	<b>0</b>		<b>172</b>			<b>720</b>
Nursery preparat'n/managm't	m-d	7	4,200	29	0	4,200	0	4,200	0	0	0	4,200	0
Land preparation	m-d	140	4,200	588	140	4,200	588	4,200	0	140	4,200	588	
Seeding/transplanting	m-d	60	4,200	252	30	4,200	126	4,200	0	60	4,200	252	
Organic manure application	m-d	80	4,200	336	50	4,200	210	4,200	0	50	4,200	210	
Fertilizer application	m-d	30	4,200	126	40	4,200	168	4,200	0	40	4,200	168	
Pest control	m-d	30	4,200	126	30	4,200	126	4,200	0	30	4,200	126	
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189	4,200	0	45	4,200	189	
Irrigation	m-d	25	4,200	105	25	4,200	105	4,200	0	30	4,200	126	
Harvesting	m-d	40	4,200	168	60	4,200	252	4,200	0	40	4,200	168	
Hauling/Post-harvest	m-d	35	4,200	147	30	4,200	126	4,200	0	25	4,200	105	
Other management	m-d	20	4,200	84	50	4,200	210	4,200	0	30	4,200	126	
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>362</b>			<b>206</b>			<b>0</b>			<b>344</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,060</b>			<b>736</b>			<b>525</b>			<b>1,031</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			535			211			0			506
<b>4 Total Cost</b>	<b>Rp</b>			<b>7,916</b>			<b>4,320</b>			<b>525</b>			<b>7,530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>3,684</b>			<b>6,007</b>			<b>0</b>			<b>15,731</b>
<b>Profit ratio</b>	<b>%</b>			<b>35%</b>			<b>63%</b>			<b>0%</b>			<b>71%</b>

**Table II-17 Present Crop Budget of Gekbrong Model Area (2/2)**

(per ha)

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize			
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	
		(Rp)			(Rp.1000)			(Rp)			(Rp.1000)			
<b>1 Gross Income</b>				<b>16,720</b>			<b>10,400</b>			<b>0</b>			<b>4,620</b>	
Main products	kg	19,000	880	16,720	8,000	1,300	10,400			1,400	0	2,200	2,100	4,620
By-product	kg													
<b>2 Direct Cost</b>				<b>4,737</b>			<b>2,623</b>			<b>0</b>				<b>1,924</b>
<b>2.1 Inputs</b>				<b>3,224</b>			<b>1,401</b>			<b>0</b>				<b>908</b>
Seed	kg	1.5	200,000	300	30	17,000	510			3,000	0	15	17,000	255
Compost	ton	15	100,000	1,500		100,000	0			100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0	90	1,100	99			1,100	0		1,100	0
Urea	kg	270	1,200	324	270	1,200	324			1,200	0	200	1,200	240
TSP	kg	180	1,700	306	130	1,700	221			1,700	0	100	1,700	170
KCL	kg	90	2,000	180	90	2,000	180			2,000	0	100	2,000	200
Complex	kg		3,000	0		3,000	0			3,000	0		3,000	0
Agro-chemicals														
Insecticide	lit	4	55,000	220		55,000	0			55,000	0		55,000	0
Fungicide	kg	4	55,000	220		55,000	0			55,000	0		55,000	0
Others		2	10,000	20		10,000	0			10,000	0		10,000	0
Others				154			67							43
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>1,932</b>	<b>392</b>		<b>1,646</b>			<b>0</b>		<b>330</b>		<b>1,386</b>
<b>(Hired labor)</b>		<b>299</b>		<b>1,256</b>	<b>255</b>		<b>1,070</b>			<b>0</b>		<b>215</b>		<b>901</b>
<b>(Family labor)</b>		<b>161</b>		<b>676</b>	<b>137</b>		<b>576</b>			<b>0</b>		<b>116</b>		<b>485</b>
Nursery preparat'n/managm't	m-d	0	4,200	0	7	4,200	29			4,200	0	0	4,200	0
Land preparation	m-d	140	4,200	588	140	4,200	588			4,200	0	120	4,200	504
Seeding/transplanting	m-d	20	4,200	84	60	4,200	252			4,200	0	40	4,200	168
Organic manure application	m-d	70	4,200	294		4,200	0			4,200	0		4,200	0
Fertilizer application	m-d	30	4,200	126	40	4,200	168			4,200	0	40	4,200	168
Pest control	m-d	15	4,200	63		4,200	0			4,200	0		4,200	0
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189			4,200	0	45	4,200	189
Irrigation	m-d	30	4,200	126	25	4,200	105			4,200	0	25	4,200	105
Harvesting	m-d	40	4,200	168	40	4,200	168			4,200	0	40	4,200	168
Post-harvest	m-d	30	4,200	126	25	4,200	105			4,200	0	15	4,200	63
Other management	m-d	40	4,200	168	10	4,200	42			4,200	0	5	4,200	21
<b>2.3 Tool/Equipment</b>	<b>5% of labor/input cost</b>			<b>258</b>			<b>152</b>			<b>0</b>				<b>115</b>
<b>3 Indirect Cost</b>				<b>863</b>			<b>672</b>			<b>525</b>				<b>620</b>
Water charge														
Tax /duty				25			25			25				25
Land fee				500			500			500				500
Interest				338			147			0				95
<b>4 Total Cost</b>				<b>5,601</b>			<b>3,295</b>			<b>525</b>				<b>2,544</b>
<b>5 Profit</b>				<b>11,119</b>			<b>7,105</b>			<b>-525</b>				<b>2,076</b>
<b>Profit ratio</b>	<b>%</b>			<b>67%</b>			<b>68%</b>							<b>45%</b>

(per ha)

Name of Crops	Unit	Sweet Potato			Soybean		
		Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)			(1000Rp)		
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d		4,200	0		4,200	0
Land preparation	m-d		4,200	0		4,200	0
Seeding/transplanting	m-d		4,200	0		4,200	0
Organic manure application	m-d		4,200	0		4,200	0
Fertilizer application	m-d		4,200	0		4,200	0
Pest control	m-d		4,200	0		4,200	0
Weeding/cultivation	m-d		4,200	0		4,200	0
Irrigation	m-d		4,200	0		4,200	0
Harvesting	m-d		4,200	0		4,200	0
Post-harvest	m-d		4,200	0		4,200	0
Other management	m-d		4,200	0		4,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
Water charge	Rp						
Tax /duty	Rp			25			25
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						

**Table II-18 Proposed Crop Budget of Gekbrong Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>23,200</b>			<b>47,340</b>			<b>31,790</b>			<b>18,240</b>
Main products	kg	20,000	1,160	23,200	9,000	5,260	47,340	17,000	1,870	31,790	24,000	760	18,240
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>10,546</b>			<b>15,538</b>			<b>16,633</b>			<b>9,068</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8,232</b>			<b>13,141</b>			<b>14,301</b>			<b>7,077</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer ZA	kg	250	1,100	275	250	1,100	275	100	1,100	110	250	1,100	275
Urea	kg	300	1,200	360	300	1,200	360	200	1,200	240	300	1,200	360
TSP	kg	250	1,700	425	250	1,700	425	200	1,700	340	250	1,700	425
KCL	kg	100	2,000	200	100	2,000	200	100	2,000	200	100	2,000	200
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	20	55,000	1,100	20	55,000	1,100	15	55,000	825	20	55,000	1,100
Fungicide	kg	30	55,000	1,650	25	55,000	1,375	15	55,000	825	20	55,000	1,100
Others	kg	3	10,000	30	3	10,000	30	8	10,000	80	8	10,000	80
Others				392			626			681			337
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>2,717</b>	<b>592</b>		<b>2,486</b>	<b>550</b>		<b>2,310</b>	<b>557</b>		<b>2,339</b>
(Hired labor: 65%)		<b>421</b>		<b>1,766</b>	<b>385</b>		<b>1,616</b>	<b>358</b>		<b>1,502</b>	<b>362</b>		<b>1,521</b>
(Family labor: 35%)		<b>226</b>		<b>951</b>	<b>207</b>		<b>870</b>	<b>193</b>		<b>809</b>	<b>195</b>		<b>819</b>
Nursery preparat'n/managm't	m-d	7	4,200	29	7	4,200	29	0	4,200	0	7	4,200	29
Land preparation	m-d	140	4,200	588	140	4,200	588	140	4,200	588	140	4,200	588
Seeding/transplanting	m-d	60	4,200	252	60	4,200	252	60	4,200	252	60	4,200	252
Organic manure application	m-d	80	4,200	336	80	4,200	336	80	4,200	336	80	4,200	336
Fertilizer application	m-d	40	4,200	168	40	4,200	168	40	4,200	168	40	4,200	168
Pest control	m-d	75	4,200	315	70	4,200	294	45	4,200	189	60	4,200	252
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189	45	4,200	189	45	4,200	189
Irrigation	m-d	30	4,200	126	30	4,200	126	30	4,200	126	30	4,200	126
Harvesting	m-d	60	4,200	252	50	4,200	210	40	4,200	168	40	4,200	168
Hauling/Post-harvest	m-d	50	4,200	210	30	4,200	126	40	4,200	168	35	4,200	147
Other management	m-d	60	4,200	252	40	4,200	168	30	4,200	126	20	4,200	84
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>547</b>			<b>781</b>			<b>831</b>			<b>471</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,394</b>			<b>1,910</b>			<b>2,032</b>			<b>1,273</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			864			1,380			1,502			743
<b>4 Total Cost</b>	<b>Rp</b>			<b>11,940</b>			<b>17,448</b>			<b>18,665</b>			<b>10,342</b>
<b>5 Profit</b>	<b>Rp</b>			<b>11,260</b>			<b>29,892</b>			<b>13,125</b>			<b>7,898</b>
<b>Profit ratio</b>	<b>%</b>			<b>49%</b>			<b>63%</b>			<b>41%</b>			<b>43%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>11,160</b>			<b>13,700</b>			<b>0</b>			<b>23,940</b>
Main products	kg	18,000	620	11,160	10,000	1,370	13,700				14,000	1,710	23,940
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>7,163</b>			<b>3,951</b>			<b>0</b>			<b>6,887</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,389</b>			<b>2,363</b>			<b>0</b>			<b>5,187</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360		1,500	0	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0		100,000	0	10	100,000	1,000
Chemical fertilizer ZA	kg		1,100	0		1,100	0		1,100	0	200	1,100	220
Urea	kg	110	1,200	132	250	1,200	300		1,200	0	300	1,200	360
TSP	kg	100	1,700	170	100	1,700	170		1,700	0	200	1,700	340
KCL	kg	100	2,000	200	150	2,000	300		2,000	0	200	2,000	400
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	10	55,000	550	10	55,000	550		55,000	0	10	55,000	550
Fungicide	kg	10	55,000	550	10	55,000	550		55,000	0	10	55,000	550
Others	kg	3	10,000	30	2	10,000	20		10,000	0	2	10,000	20
Others				257			113			0			247
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>2,150</b>	<b>500</b>		<b>2,100</b>	<b>0</b>		<b>490</b>	<b>490</b>		<b>2,058</b>
(Hired labor)		<b>333</b>		<b>1,398</b>	<b>325</b>		<b>1,365</b>	<b>0</b>		<b>319</b>	<b>319</b>		<b>1,338</b>
(Family labor)		<b>179</b>		<b>753</b>	<b>175</b>		<b>735</b>	<b>0</b>		<b>172</b>	<b>172</b>		<b>720</b>
Nursery preparat'n/managm't	m-d	7	4,200	29	0	4,200	0		4,200	0	0	4,200	0
Land preparation	m-d	140	4,200	588	140	4,200	588		4,200	0	140	4,200	588
Seeding/transplanting	m-d	60	4,200	252	30	4,200	126		4,200	0	60	4,200	252
Organic manure application	m-d	80	4,200	336	50	4,200	210		4,200	0	50	4,200	210
Fertilizer application	m-d	30	4,200	126	40	4,200	168		4,200	0	40	4,200	168
Pest control	m-d	30	4,200	126	30	4,200	126		4,200	0	30	4,200	126
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189		4,200	0	45	4,200	189
Irrigation	m-d	25	4,200	105	25	4,200	105		4,200	0	30	4,200	126
Harvesting	m-d	40	4,200	168	60	4,200	252		4,200	0	40	4,200	168
Hauling/Post-harvest	m-d	35	4,200	147	30	4,200	126		4,200	0	25	4,200	105
Other management	m-d	20	4,200	84	50	4,200	210		4,200	0	30	4,200	126
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>377</b>			<b>223</b>			<b>0</b>			<b>362</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,096</b>			<b>778</b>			<b>530</b>			<b>1,075</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			566			248			0			545
<b>4 Total Cost</b>	<b>Rp</b>			<b>8,259</b>			<b>4,729</b>			<b>530</b>			<b>7,962</b>
<b>5 Profit</b>	<b>Rp</b>			<b>3,997</b>			<b>9,749</b>			<b>0</b>			<b>17,053</b>
<b>Profit ratio</b>	<b>%</b>			<b>36%</b>			<b>71%</b>						<b>71%</b>

**Table II-18 Proposed Crop Budget of Gekbrong Model Area (2/2)**

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize (per ha)		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>19,360</b>			<b>13,000</b>			<b>0</b>			<b>0</b>
Main products	kg	22,000	880	19,360	10,000	1,300	13,000			1,400			2,100
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>4,969</b>			<b>2,735</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>3,444</b>			<b>1,507</b>			<b>0</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510			3,000			17,000
Compost	ton	15	100,000	1,500		100,000	0			100,000			100,000
Chemical fertilizer ZA	kg		1,100	0	100	1,100	110			1,100			1,100
Urea	kg	300	1,200	360	300	1,200	360			1,200			1,200
TSP	kg	200	1,700	340	150	1,700	255			1,700			1,700
KCL	kg	100	2,000	200	100	2,000	200			2,000			2,000
Complex	kg		3,000	0		3,000	0			3,000			3,000
Agro-chemicals													
Insecticide	lit	5	55,000	275		55,000	0			55,000			55,000
Fungicide	kg	5	55,000	275		55,000	0			55,000			55,000
Others		3	10,000	30		10,000	0			10,000			10,000
Others				164			72						0
<b>2.2 Labor (Hired labor)</b>	<b>m-d</b>	<b>460</b>		<b>1,932</b>	<b>392</b>		<b>1,646</b>			<b>0</b>			<b>0</b>
<b>(Family labor)</b>		<b>299</b>		<b>1,256</b>	<b>255</b>		<b>1,070</b>			<b>0</b>			<b>0</b>
<b>(Family labor)</b>		<b>161</b>		<b>676</b>	<b>137</b>		<b>576</b>			<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d	0	4,200	0	7	4,200	29			4,200			4,200
Land preparation	m-d	140	4,200	588	140	4,200	588			4,200			4,200
Seeding/transplanting	m-d	20	4,200	84	60	4,200	252			4,200			4,200
Organic manure application	m-d	70	4,200	294		4,200	0			4,200			4,200
Fertilizer application	m-d	30	4,200	126	40	4,200	168			4,200			4,200
Pest control	m-d	15	4,200	63		4,200	0			4,200			4,200
Weeding/cultivation	m-d	45	4,200	189	45	4,200	189			4,200			4,200
Irrigation	m-d	30	4,200	126	25	4,200	105			4,200			4,200
Harvesting	m-d	40	4,200	168	40	4,200	168			4,200			4,200
Post-harvest	m-d	30	4,200	126	25	4,200	105			4,200			4,200
Other management	m-d	40	4,200	168	10	4,200	42			4,200			4,200
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>269</b>			<b>158</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>892</b>			<b>688</b>			<b>530</b>			<b>530</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			362			158			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>5,860</b>			<b>3,423</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>13,500</b>			<b>9,577</b>			<b>-530</b>			<b>-530</b>
<b>Profit ratio</b>	<b>%</b>			<b>70%</b>			<b>74%</b>						

Name of Crops	Unit	Sweet Potato			Soybean		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer ZA	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d		4,200	0		4,200	0
Land preparation	m-d		4,200	0		4,200	0
Seeding/transplanting	m-d		4,200	0		4,200	0
Organic manure application	m-d		4,200	0		4,200	0
Fertilizer application	m-d		4,200	0		4,200	0
Pest control	m-d		4,200	0		4,200	0
Weeding/cultivation	m-d		4,200	0		4,200	0
Irrigation	m-d		4,200	0		4,200	0
Harvesting	m-d		4,200	0		4,200	0
Post-harvest	m-d		4,200	0		4,200	0
Other management	m-d		4,200	0		4,200	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
Water charge	Rp						
Tax /duty	Rp			30			30
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						

**Table II-19 Summary of Crop Budgets of Present/Proposed Conditions of Gekbrong Model Area**

**Present**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	17,400	7,497	1,766	511	9,774	1,312	11,086	6,314	36%	421	739
Chili	42,080	12,406	1,616	745	14,767	1,828	16,594	25,486	61%	3,186	2,074
Potato	22,440	13,861	1,502	809	16,171	1,980	18,152	4,288	19%	357	1,513
Cabbage	15,200	6,458	1,521	440	8,418	1,203	9,621	5,579	37%	279	481
Chinese cabbage	10,540	5,096	1,398	362	6,856	1,060	7,916	2,624	25%	154	466
Bean vegetables	9,590	2,013	1,365	206	3,583	736	4,320	5,270	55%	753	617
Red onion	0	0	0	0	0	0	0	0			
Welsh onion	22,230	4,817	1,338	344	6,499	1,031	7,530	14,700	66%	1,131	579
Carrot	16,720	3,224	1,256	258	4,737	863	5,601	11,119	67%	585	295
Sweet corn	10,400	1,401	1,070	152	2,623	672	3,295	7,105	68%	888	412
Paddy	0	0	0	0	0	0	0	0			
Maize	4,620	908	901	115	1,924	620	2,544	2,076	45%	944	1,156
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Proposed**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	23,200	8,232	1,766	547	10,546	1,394	11,940	11,260	49%	563	597
Chili	47,340	13,141	1,616	781	15,538	1,910	17,448	29,892	63%	3,321	1,939
Potato	31,790	14,301	1,502	831	16,633	2,032	18,665	13,125	41%	772	1,098
Cabbage	18,240	7,077	1,521	471	9,068	1,273	10,342	7,898	43%	329	431
Chinese cabbage	11,160	5,389	1,398	377	7,163	1,096	8,259	2,901	26%	161	459
Bean vegetables	13,700	2,363	1,365	223	3,951	778	4,729	8,971	65%	897	473
Red onion	0	0	0	0	0	0	0	0			
Welsh onion	23,940	5,187	1,338	362	6,887	1,075	7,962	15,978	67%	1,141	569
Carrot	19,360	3,444	1,256	269	4,969	892	5,860	13,500	70%	614	266
Sweet corn	13,000	1,507	1,070	158	2,735	688	3,423	9,577	74%	958	342
Paddy	0	0	0	0	0	0	0	0			
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Table II-20 Present Crop Budget of Langensari Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>23,200</b>			<b>34,190</b>			<b>29,920</b>			<b>17,480</b>
Main products	kg	20,000	1,160	23,200	6,500	5,260	34,190	16,000	1,870	29,920	23,000	760	17,480
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>11,723</b>			<b>16,616</b>			<b>17,634</b>			<b>10,082</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8,232</b>			<b>13,141</b>			<b>14,301</b>			<b>7,077</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer	ZA	kg	250	1,100	275	250	1,100	275	100	1,100	110	250	1,100
	Urea	kg	300	1,200	360	300	1,200	360	200	1,200	240	300	1,200
	TSP	kg	250	1,700	425	250	1,700	425	200	1,700	340	250	1,700
	KCL	kg	100	2,000	200	100	2,000	200	100	2,000	200	100	2,000
	Complex	kg		3,000	0		3,000	0		3,000	0		3,000
Agro-chemicals													
Insecticide	lit	20	55,000	1,100	20	55,000	1,100	15	55,000	825	20	55,000	1,100
Fungicide	kg	30	55,000	1,650	25	55,000	1,375	15	55,000	825	20	55,000	1,100
Others		3	10,000	30	3	10,000	30	8	10,000	80	8	10,000	80
Others				392			626			681			337
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>4,400</b>	<b>592</b>	<b>2,000</b>	<b>4,026</b>	<b>550</b>		<b>3,740</b>	<b>557</b>		<b>3,788</b>
(Hired labor: 65%)		<b>421</b>		<b>2,860</b>	<b>385</b>		<b>2,617</b>	<b>358</b>		<b>2,431</b>	<b>362</b>		<b>2,462</b>
(Family labor: 35%)		<b>226</b>		<b>1,540</b>	<b>207</b>		<b>1,409</b>	<b>193</b>		<b>1,309</b>	<b>195</b>		<b>1,326</b>
Nursery preparat'n/managm't	m-d	7	6,800	48	7	6,800	48	0	6,800	0	7	6,800	48
Land preparation	m-d	140	6,800	952	140	6,800	952	140	6,800	952	140	6,800	952
Seeding/transplanting	m-d	60	6,800	408	60	6,800	408	60	6,800	408	60	6,800	408
Organic manure application	m-d	80	6,800	544	80	6,800	544	80	6,800	544	80	6,800	544
Fertilizer application	m-d	40	6,800	272	40	6,800	272	40	6,800	272	40	6,800	272
Pest control	m-d	75	6,800	510	70	6,800	476	45	6,800	306	60	6,800	408
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306	45	6,800	306	45	6,800	306
Irrigation	m-d	30	6,800	204	30	6,800	204	30	6,800	204	30	6,800	204
Harvesting	m-d	60	6,800	408	50	6,800	340	40	6,800	272	40	6,800	272
Hauling/Post-harvest	m-d	50	6,800	340	30	6,800	204	40	6,800	272	35	6,800	238
Other management	m-d	60	6,800	408	40	6,800	272	30	6,800	204	20	6,800	136
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>632</b>			<b>858</b>			<b>902</b>			<b>543</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,389</b>			<b>1,905</b>			<b>2,027</b>			<b>1,268</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			864			1,380			1,502			743
<b>4 Total Cost</b>	<b>Rp</b>			<b>13,113</b>			<b>18,520</b>			<b>19,661</b>			<b>11,350</b>
<b>5 Profit</b>	<b>Rp</b>			<b>10,087</b>			<b>15,670</b>			<b>10,259</b>			<b>6,130</b>
<b>Profit ratio</b>	<b>%</b>			<b>43%</b>			<b>46%</b>			<b>34%</b>			<b>35%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>11,160</b>			<b>10,960</b>			<b>0</b>			<b>20,520</b>
Main products	kg	18,000	620	11,160	8,000	1,370	10,960	3,730	0	0	12,000	1,710	20,520
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>8,095</b>			<b>4,861</b>			<b>0</b>			<b>7,779</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,389</b>			<b>2,363</b>			<b>0</b>			<b>5,187</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360	1,500	0	0	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0	100,000	0	0	10	100,000	1,000
Chemical fertilizer	ZA	kg		1,100	0		1,100	0		0	200	1,100	220
	Urea	kg	110	1,200	132	250	1,200	300	1,200	0	300	1,200	360
	TSP	kg	100	1,700	170	100	1,700	170	1,700	0	200	1,700	340
	KCL	kg	100	2,000	200	150	2,000	300	2,000	0	200	2,000	400
	Complex	kg		3,000	0		3,000	0		0		3,000	0
Agro-chemicals													
Insecticide	lit	10	55,000	550	10	55,000	550	55,000	0	0	10	55,000	550
Fungicide	kg	10	55,000	550	10	55,000	550	55,000	0	0	10	55,000	550
Others		3	10,000	30	2	10,000	20	10,000	0	0	2	10,000	20
Others				257			113			0			247
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>3,482</b>	<b>500</b>		<b>3,400</b>			<b>0</b>	<b>490</b>		<b>3,332</b>
(Hired labor)		<b>333</b>		<b>2,263</b>	<b>325</b>		<b>2,210</b>			<b>0</b>	<b>319</b>		<b>2,166</b>
(Family labor)		<b>179</b>		<b>1,219</b>	<b>175</b>		<b>1,190</b>			<b>0</b>	<b>172</b>		<b>1,166</b>
Nursery preparat'n/managm't	m-d	7	6,800	48	0	6,800	0	6,800	0	0	0	6,800	0
Land preparation	m-d	140	6,800	952	140	6,800	952	6,800	0	140	6,800	952	
Seeding/transplanting	m-d	60	6,800	408	30	6,800	204	6,800	0	60	6,800	408	
Organic manure application	m-d	80	6,800	544	50	6,800	340	6,800	0	50	6,800	340	
Fertilizer application	m-d	30	6,800	204	40	6,800	272	6,800	0	40	6,800	272	
Pest control	m-d	30	6,800	204	30	6,800	204	6,800	0	30	6,800	204	
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306	6,800	0	45	6,800	306	
Irrigation	m-d	25	6,800	170	25	6,800	170	6,800	0	30	6,800	204	
Harvesting	m-d	40	6,800	272	60	6,800	408	6,800	0	40	6,800	272	
Hauling/Post-harvest	m-d	35	6,800	238	30	6,800	204	6,800	0	25	6,800	170	
Other management	m-d	20	6,800	136	50	6,800	340	6,800	0	30	6,800	204	
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>444</b>			<b>288</b>			<b>0</b>			<b>426</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,091</b>			<b>773</b>			<b>525</b>			<b>1,070</b>
Water charge	Rp												
Tax /duty	Rp			25			25			25			25
Land fee	Rp			500			500			500			500
Interest	Rp			566			248			0			545
<b>4 Total Cost</b>	<b>Rp</b>			<b>9,186</b>			<b>5,634</b>			<b>525</b>			<b>8,848</b>
<b>5 Profit</b>	<b>Rp</b>			<b>3,065</b>			<b>6,099</b>			<b>0</b>			<b>12,741</b>
<b>Profit ratio</b>	<b>%</b>			<b>27%</b>			<b>56%</b>			<b>0%</b>			<b>62%</b>

**Table II-20 Present Crop Budget of Langensari Model Area (2/2)**

(per ha)

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(Rp.1000)	(Rp.1000)	(Rp)	(Rp.1000)	(Rp.1000)	(Rp)	(Rp.1000)	(Rp.1000)	(Rp)	(Rp.1000)	(Rp.1000)
<b>1 Gross Income</b>				<b>17,600</b>			<b>10,400</b>			<b>0</b>			<b>0</b>
Main products	kg	20,000	880	17,600	8,000	1,300	10,400	1,400	0	0	2,100	0	0
By-product	kg												
<b>2 Direct Cost</b>				<b>5,806</b>			<b>3,448</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>				<b>3,444</b>			<b>1,507</b>			<b>0</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510	3,000	0	0	17,000	0	0
Compost	ton	15	100,000	1,500		100,000	0	100,000	0	0	100,000	0	0
Chemical fertilizer	kg		1,100	0	100	1,100	110	1,100	0	0	1,100	0	0
Urea	kg	300	1,200	360	300	1,200	360	1,200	0	0	1,200	0	0
TSP	kg	200	1,700	340	150	1,700	255	1,700	0	0	1,700	0	0
KCL	kg	100	2,000	200	100	2,000	200	2,000	0	0	2,000	0	0
Complex	kg		3,000	0		3,000	0	3,000	0	0	3,000	0	0
Agro-chemicals													
Insecticide	lit	5	55,000	275		55,000	0	55,000	0	0	55,000	0	0
Fungicide	kg	5	55,000	275		55,000	0	55,000	0	0	55,000	0	0
Others		3	10,000	30		10,000	0	10,000	0	0	10,000	0	0
Others				164			72			0			0
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>3,128</b>	<b>392</b>		<b>2,666</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>		<b>299</b>		<b>2,033</b>	<b>255</b>		<b>1,733</b>			<b>0</b>			<b>0</b>
<b>(Family labor)</b>		<b>161</b>		<b>1,095</b>	<b>137</b>		<b>933</b>			<b>0</b>			<b>0</b>
Nursery prepar'n/managm't	m-d	0	6,800	0	7	6,800	48	6,800	0	0	6,800	0	0
Land preparation	m-d	140	6,800	952	140	6,800	952	6,800	0	0	6,800	0	0
Seeding/transplanting	m-d	20	6,800	136	60	6,800	408	6,800	0	0	6,800	0	0
Organic manure application	m-d	70	6,800	476		6,800	0	6,800	0	0	6,800	0	0
Fertilizer application	m-d	30	6,800	204	40	6,800	272	6,800	0	0	6,800	0	0
Pest control	m-d	15	6,800	102		6,800	0	6,800	0	0	6,800	0	0
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306	6,800	0	0	6,800	0	0
Irrigation	m-d	30	6,800	204	25	6,800	170	6,800	0	0	6,800	0	0
Harvesting	m-d	40	6,800	272	40	6,800	272	6,800	0	0	6,800	0	0
Post-harvest	m-d	30	6,800	204	25	6,800	170	6,800	0	0	6,800	0	0
Other management	m-d	40	6,800	272	10	6,800	68	6,800	0	0	6,800	0	0
<b>2.3 Tool/Equipment</b>	<b>5% of labor/input cost</b>			<b>329</b>			<b>209</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>				<b>887</b>			<b>683</b>			<b>525</b>			<b>525</b>
Water charge													
Tax /duty				25			25			25			25
Land fee				500			500			500			500
Interest				362			158			0			0
<b>4 Total Cost</b>				<b>6,692</b>			<b>4,131</b>			<b>525</b>			<b>525</b>
<b>5 Profit</b>				<b>10,908</b>			<b>6,269</b>			<b>-525</b>			<b>-525</b>
<b>Profit ratio</b>	<b>%</b>			<b>62%</b>			<b>60%</b>						

(per ha)

Name of Crops	Unit	Sweet Potato			Soybean		
		Q'ty	Price	Value	Q'ty	Price	Value
		(Rp)	(1000Rp)	(1000Rp)	(Rp)	(1000Rp)	(1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
<b>(Hired labor)</b>				<b>0</b>			<b>0</b>
<b>(Family labor)</b>				<b>0</b>			<b>0</b>
Nursery prepar'n/managm't	m-d		6,800	0		6,800	0
Land preparation	m-d		6,800	0		6,800	0
Seeding/transplanting	m-d		6,800	0		6,800	0
Organic manure application	m-d		6,800	0		6,800	0
Fertilizer application	m-d		6,800	0		6,800	0
Pest control	m-d		6,800	0		6,800	0
Weeding/cultivation	m-d		6,800	0		6,800	0
Irrigation	m-d		6,800	0		6,800	0
Harvesting	m-d		6,800	0		6,800	0
Post-harvest	m-d		6,800	0		6,800	0
Other management	m-d		6,800	0		6,800	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
Water charge	Rp						
Tax /duty	Rp			25			25
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>525</b>			<b>525</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						



**Table II-21 Proposed Crop Budget of Langensari Model Area (1/2)**

Name of Crops	Unit	Tomato			Chili			Potato			Cabbage (per ha)		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>25,520</b>			<b>42,080</b>			<b>39,270</b>			<b>19,000</b>
Main products	kg	22,000	1,160	25,520	8,000	5,260	42,080	21,000	1,870	39,270	25,000	760	19,000
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>11,723</b>			<b>16,616</b>			<b>17,634</b>			<b>10,082</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>8,232</b>			<b>13,141</b>			<b>14,301</b>			<b>7,077</b>
Seed	kg	0.3	6,000,000	1,800	0.3	22,500,000	6,750	1,000	10,000	10,000	0.3	4,000,000	1,200
Compost	ton	20	100,000	2,000	20	100,000	2,000	10	100,000	1,000	20	100,000	2,000
Chemical fertilizer ZA	kg	250	1,100	275	250	1,100	275	100	1,100	110	250	1,100	275
Urea	kg	300	1,200	360	300	1,200	360	200	1,200	240	300	1,200	360
TSP	kg	250	1,700	425	250	1,700	425	200	1,700	340	250	1,700	425
KCL	kg	100	2,000	200	100	2,000	200	100	2,000	200	100	2,000	200
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	20	55,000	1,100	20	55,000	1,100	15	55,000	825	20	55,000	1,100
Fungicide	kg	30	55,000	1,650	25	55,000	1,375	15	55,000	825	20	55,000	1,100
Others	kg	3	10,000	30	3	10,000	30	8	10,000	80	8	10,000	80
Others				392			626			681			337
<b>2.2 Labor</b>	<b>m-d</b>	<b>647</b>		<b>4,400</b>	<b>592</b>		<b>4,026</b>	<b>550</b>		<b>3,740</b>	<b>557</b>		<b>3,788</b>
(Hired labor: 65%)		<b>421</b>		<b>2,860</b>	<b>385</b>		<b>2,617</b>	<b>358</b>		<b>2,431</b>	<b>362</b>		<b>2,462</b>
(Family labor: 35%)		<b>226</b>		<b>1,540</b>	<b>207</b>		<b>1,409</b>	<b>193</b>		<b>1,309</b>	<b>195</b>		<b>1,326</b>
Nursery preparat'n/managm't	m-d	7	6,800	48	7	6,800	48	0	6,800	0	7	6,800	48
Land preparation	m-d	140	6,800	952	140	6,800	952	140	6,800	952	140	6,800	952
Seeding/transplanting	m-d	60	6,800	408	60	6,800	408	60	6,800	408	60	6,800	408
Organic manure application	m-d	80	6,800	544	80	6,800	544	80	6,800	544	80	6,800	544
Fertilizer application	m-d	40	6,800	272	40	6,800	272	40	6,800	272	40	6,800	272
Pest control	m-d	75	6,800	510	70	6,800	476	45	6,800	306	60	6,800	408
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306	45	6,800	306	45	6,800	306
Irrigation	m-d	30	6,800	204	30	6,800	204	30	6,800	204	30	6,800	204
Harvesting	m-d	60	6,800	408	50	6,800	340	40	6,800	272	40	6,800	272
Hauling/Post-harvest	m-d	50	6,800	340	50	6,800	340	40	6,800	272	35	6,800	238
Other management	m-d	60	6,800	408	40	6,800	272	30	6,800	204	20	6,800	136
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>632</b>			<b>858</b>			<b>902</b>			<b>543</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,394</b>			<b>1,910</b>			<b>2,032</b>			<b>1,273</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			864			1,380			1,502			743
<b>4 Total Cost</b>	<b>Rp</b>			<b>13,118</b>			<b>18,525</b>			<b>19,666</b>			<b>11,355</b>
<b>5 Profit</b>	<b>Rp</b>			<b>12,402</b>			<b>23,555</b>			<b>19,604</b>			<b>7,645</b>
<b>Profit ratio</b>	<b>%</b>			<b>49%</b>			<b>56%</b>			<b>50%</b>			<b>40%</b>

Name of Crops	Unit	Chinese cabbage/Mustard green			Bean Vegetables			Red Onion			Welsh Onion		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>12,400</b>			<b>13,700</b>			<b>0</b>			<b>25,650</b>
Main products	kg	20,000	620	12,400	10,000	1,370	13,700				15,000	1,710	25,650
By-product	kg												
<b>2 Direct Cost</b>	<b>Rp</b>			<b>8,095</b>			<b>4,861</b>			<b>0</b>			<b>7,779</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>5,389</b>			<b>2,363</b>			<b>0</b>			<b>5,187</b>
Seed	kg	0.3	5,000,000	1,500	30	12,000	360		1,500	0	1,000	1,500	1,500
Compost	ton	20	100,000	2,000		100,000	0		100,000	0	10	100,000	1,000
Chemical fertilizer ZA	kg		1,100	0		1,100	0		1,100	0	200	1,100	220
Urea	kg	110	1,200	132	250	1,200	300		1,200	0	300	1,200	360
TSP	kg	100	1,700	170	100	1,700	170		1,700	0	200	1,700	340
KCL	kg	100	2,000	200	150	2,000	300		2,000	0	200	2,000	400
Complex	kg		3,000	0		3,000	0		3,000	0		3,000	0
Agro-chemicals													
Insecticide	lit	10	55,000	550	10	55,000	550		55,000	0	10	55,000	550
Fungicide	kg	10	55,000	550	10	55,000	550		55,000	0	10	55,000	550
Others	kg	3	10,000	30	2	10,000	20		10,000	0	2	10,000	20
Others				257			113			0			247
<b>2.2 Labor</b>	<b>m-d</b>	<b>512</b>		<b>3,482</b>	<b>500</b>		<b>3,400</b>	<b>0</b>		<b>490</b>	<b>0</b>		<b>3,332</b>
(Hired labor)		<b>333</b>		<b>2,263</b>	<b>325</b>		<b>2,210</b>	<b>0</b>		<b>319</b>	<b>0</b>		<b>2,166</b>
(Family labor)		<b>179</b>		<b>1,219</b>	<b>175</b>		<b>1,190</b>	<b>0</b>		<b>172</b>	<b>0</b>		<b>1,166</b>
Nursery preparat'n/managm't	m-d	7	6,800	48	0	6,800	0		6,800	0	0	6,800	0
Land preparation	m-d	140	6,800	952	140	6,800	952		6,800	0	140	6,800	952
Seeding/transplanting	m-d	60	6,800	408	30	6,800	204		6,800	0	60	6,800	408
Organic manure application	m-d	80	6,800	544	50	6,800	340		6,800	0	50	6,800	340
Fertilizer application	m-d	30	6,800	204	40	6,800	272		6,800	0	40	6,800	272
Pest control	m-d	30	6,800	204	30	6,800	204		6,800	0	30	6,800	204
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306		6,800	0	45	6,800	306
Irrigation	m-d	25	6,800	170	25	6,800	170		6,800	0	30	6,800	204
Harvesting	m-d	40	6,800	272	60	6,800	408		6,800	0	40	6,800	272
Hauling/Post-harvest	m-d	35	6,800	238	30	6,800	204		6,800	0	25	6,800	170
Other management	m-d	20	6,800	136	50	6,800	340		6,800	0	30	6,800	204
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>444</b>			<b>288</b>			<b>0</b>			<b>426</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>1,096</b>			<b>778</b>			<b>530</b>			<b>1,075</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			566			248			0			545
<b>4 Total Cost</b>	<b>Rp</b>			<b>9,191</b>			<b>5,639</b>			<b>530</b>			<b>8,853</b>
<b>5 Profit</b>	<b>Rp</b>			<b>4,305</b>			<b>8,839</b>			<b>0</b>			<b>17,871</b>
<b>Profit ratio</b>	<b>%</b>			<b>35%</b>			<b>65%</b>			<b>70%</b>			<b>70%</b>

**Table II-21 Proposed Crop Budget of Langensari Model Area (2/2)**

Name of Crops	Unit	Carrot			Sweet Corn			Paddy			Maize		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>19,360</b>			<b>13,000</b>			<b>0</b>			<b>0</b>
Main products	kg	22,000	880	19,360	10,000	1,300	13,000			1,400			0
By-product	kg												2,100
<b>2 Direct Cost</b>	<b>Rp</b>			<b>5,806</b>			<b>3,448</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>3,444</b>			<b>1,507</b>			<b>0</b>			<b>0</b>
Seed	kg	1.5	200,000	300	30	17,000	510			3,000			17,000
Compost	ton	15	100,000	1,500		100,000	0			100,000			100,000
Chemical fertilizer ZA	kg		1,100	0	100	1,100	110			1,100			1,100
Urea	kg	300	1,200	360	300	1,200	360			1,200			1,200
TSP	kg	200	1,700	340	150	1,700	255			1,700			1,700
KCL	kg	100	2,000	200	100	2,000	200			2,000			2,000
Complex	kg		3,000	0		3,000	0			3,000			3,000
Agro-chemicals													
Insecticide	lit	5	55,000	275		55,000	0			55,000			55,000
Fungicide	kg	5	55,000	275		55,000	0			55,000			55,000
Others		3	10,000	30		10,000	0			10,000			10,000
Others				164			72						0
<b>2.2 Labor</b>	<b>m-d</b>	<b>460</b>		<b>3,128</b>	<b>392</b>		<b>2,666</b>			<b>0</b>			<b>0</b>
(Hired labor)		<b>299</b>		<b>2,033</b>	<b>255</b>		<b>1,733</b>			<b>0</b>			<b>0</b>
(Family labor)		<b>161</b>		<b>1,095</b>	<b>137</b>		<b>933</b>			<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d	0	6,800	0	7	6,800	48			6,800			6,800
Land preparation	m-d	140	6,800	952	140	6,800	952			6,800			6,800
Seeding/transplanting	m-d	20	6,800	136	60	6,800	408			6,800			6,800
Organic manure application	m-d	70	6,800	476		6,800	0			6,800			6,800
Fertilizer application	m-d	30	6,800	204	40	6,800	272			6,800			6,800
Pest control	m-d	15	6,800	102		6,800	0			6,800			6,800
Weeding/cultivation	m-d	45	6,800	306	45	6,800	306			6,800			6,800
Irrigation	m-d	30	6,800	204	25	6,800	170			6,800			6,800
Harvesting	m-d	40	6,800	272	40	6,800	272			6,800			6,800
Post-harvest	m-d	30	6,800	204	25	6,800	170			6,800			6,800
Other management	m-d	40	6,800	272	10	6,800	68			6,800			6,800
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>329</b>			<b>209</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>892</b>			<b>688</b>			<b>530</b>			<b>530</b>
Water charge	Rp												
Tax /duty	Rp			30			30			30			30
Land fee	Rp			500			500			500			500
Interest	Rp			362			158			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>6,697</b>			<b>4,136</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>12,663</b>			<b>8,864</b>			<b>-530</b>			<b>-530</b>
<b>Profit ratio</b>	<b>%</b>			<b>65%</b>			<b>68%</b>						

Name of Crops	Unit	Sweet Potato			Soybean		
		Qty	Price (Rp)	Value (1000Rp)	Qty	Price (Rp)	Value (1000Rp)
<b>1 Gross Income</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Main products	kg		400	0		1,800	0
By-product	kg						
<b>2 Direct Cost</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>2.1 Inputs</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
Seed	kg		800	0		3,500	0
Compost	ton		100,000	0		100,000	0
Chemical fertilizer ZA	kg		1,100	0		1,100	0
Urea	kg		1,200	0		1,200	0
TSP	kg		1,700	0		1,700	0
KCL	kg		2,000	0		2,000	0
Complex	kg		3,000	0		3,000	0
Agro-chemicals							
Insecticide	lit		55,000	0		55,000	0
Fungicide	kg		55,000	0		55,000	0
Others			10,000	0		10,000	0
Others				0			0
<b>2.2 Labor</b>	<b>m-d</b>			<b>0</b>			<b>0</b>
(Hired labor)				<b>0</b>			<b>0</b>
(Family labor)				<b>0</b>			<b>0</b>
Nursery preparat'n/managm't	m-d		6,800	0		6,800	0
Land preparation	m-d		6,800	0		6,800	0
Seeding/transplanting	m-d		6,800	0		6,800	0
Organic manure application	m-d		6,800	0		6,800	0
Fertilizer application	m-d		6,800	0		6,800	0
Pest control	m-d		6,800	0		6,800	0
Weeding/cultivation	m-d		6,800	0		6,800	0
Irrigation	m-d		6,800	0		6,800	0
Harvesting	m-d		6,800	0		6,800	0
Post-harvest	m-d		6,800	0		6,800	0
Other management	m-d		6,800	0		6,800	0
<b>2.3 Tool/Equipment</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>3 Indirect Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
Water charge	Rp						
Tax /duty	Rp			30			30
Land fee	Rp			500			500
Interest	Rp			0			0
<b>4 Total Cost</b>	<b>Rp</b>			<b>530</b>			<b>530</b>
<b>5 Profit</b>	<b>Rp</b>			<b>0</b>			<b>0</b>
<b>Profit ratio</b>	<b>%</b>						

**Table II-22 Summary of Crop Budgets of Present/Proposed Conditions of Langensari Model Area**

**Present**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	23,200	8,232	2,860	632	11,723	1,389	13,113	10,087	43%	504	656
Chili	34,190	13,141	2,617	858	16,616	1,905	18,520	15,670	46%	2,411	2,849
Potato	29,920	14,301	2,431	902	17,634	2,027	19,661	10,259	34%	641	1,229
Cabbage	17,480	7,077	2,462	543	10,082	1,268	11,350	6,130	35%	267	493
Chinese cabbage	11,160	5,389	2,263	444	8,095	1,091	9,186	1,974	18%	110	510
Bean vegetables	10,960	2,363	2,210	288	4,861	773	5,634	5,326	49%	666	704
Red onion	0	0	0	0	0	0	0	0			
Welsh onion	20,520	5,187	2,166	426	7,779	1,070	8,848	11,672	57%	973	737
Carrot	17,600	3,444	2,033	329	5,806	887	6,692	10,908	62%	545	335
Sweet corn	10,400	1,507	1,733	209	3,448	683	4,131	6,269	60%	784	516
Paddy	0	0	0	0	0	0	0	0			
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Proposed**

Name of Crops	Gross income Rp.1000/ha	Direct production cost				Indirect cost Rp.1000/ha	Total of production cost Rp.1000/ha	Profit Rp.1000/ha	Profit/ Gross income %	Profit/ Product Rp./kg	Production cost /Product Rp./kg
		Input Rp.1000/ha	Hired labor Rp.1000/ha	Tool/equipment Rp.1000/ha	Total Rp.1000/ha						
Tomato	25,520	8,232	2,860	632	11,723	1,394	13,118	12,402	49%	564	596
Chili	42,080	13,141	2,617	858	16,616	1,910	18,525	23,555	56%	2,944	2,316
Potato	39,270	14,301	2,431	902	17,634	2,032	19,666	19,604	50%	934	936
Cabbage	19,000	7,077	2,462	543	10,082	1,273	11,355	7,645	40%	306	454
Chinese cabbage	12,400	5,389	2,263	444	8,095	1,096	9,191	3,209	26%	160	460
Bean vegetables	13,700	2,363	2,210	288	4,861	778	5,639	8,061	59%	806	564
Red onion	0	0	0	0	0	0	0	0			
Welsh onion	25,650	5,187	2,166	426	7,779	1,075	8,853	16,797	65%	1,120	590
Carrot	19,360	3,444	2,033	329	5,806	892	6,697	12,663	65%	576	304
Sweet corn	13,000	1,507	1,733	209	3,448	688	4,136	8,864	68%	886	414
Paddy	0	0	0	0	0	0	0	0			
Maize	0	0	0	0	0	0	0	0			
Sweet potato	0	0	0	0	0	0	0	0			
Soybean	0	0	0	0	0	0	0	0			

**Table II-23 Cropped Area and Production of Present/Proposed Conditions of Mekarjaya Model Area**

**Net Area (ha) 83**

<b>Present</b>					
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %	
<b>Vegetables</b>					
Tomato	8	11,000	88	10%	
Chili	10	4,000	40	12%	
Potato	7	12,000	84	8%	
Cabbage	5	18,000	90	6%	
Chinese cabbage	3	15,000	45	4%	
Bean vegetables	11	6,000	66	13%	
Red onion	2	6,000	12	2%	
Welsh onion	2	8,000	16	2%	
Carrot	4	10,000	40	5%	
Sweet corn	2	7,000	14	2%	
Sub-total	54	9,167	495	65%	
<b>Food crops</b>					
Paddy	66	3,500	231	80%	
Maize	13	1,400	18	16%	
Sweet potato	16	7,000	112	19%	
Soybean	0	0	0	0%	
Sub-total	95			114%	
<b>Total</b>	<b>149</b>			<b>180%</b>	

<b>Proposed</b>					
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %	
<b>Vegetables</b>					
Tomato	27	18,000	486	33%	
Chili	17	6,000	102	20%	
Potato	27	17,000	459	33%	
Cabbage	25	21,000	525	30%	
Chinese cabbage	15	18,000	270	18%	
Bean vegetables	37	10,000	370	45%	
Red onion	20	7,000	140	24%	
Welsh onion	13	12,000	156	16%	
Carrot	24	15,000	360	29%	
Sweet corn	7	8,000	56	8%	
Sub-total	212	13,792	2,924	255%	
<b>Food crops</b>					
Paddy	0	0	0	0%	
Maize	0	0	0	0%	
Sweet potato	0	0	0	0%	
Soybean	0	0	0	0%	
Sub-total	0			0%	
<b>Total</b>	<b>212</b>			<b>255%</b>	

<b>Incremental</b>					
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %	
<b>Vegetables</b>					
Tomato	19	7,000	398	23%	
Chili	7	2,000	62	8%	
Potato	20	5,000	375	24%	
Cabbage	20	3,000	435	24%	
Chinese cabbage	12	3,000	225	14%	
Bean vegetables	26	4,000	304	31%	
Red onion	18	1,000	128	22%	
Welsh onion	11	4,000	140	13%	
Carrot	20	5,000	320	24%	
Sweet corn	5	1,000	42	6%	
Sub-total	158	4,626	2,429	190%	
<b>Food crops</b>					
Paddy	-66	-3,500	-231	-80%	
Maize	-13	-1,400	-18	-16%	
Sweet potato	-16	-7,000	-112	-19%	
Soybean	0	0	0	0	
Sub-total	-95			-114%	
<b>Total</b>	<b>63</b>			<b>76%</b>	

**Table II-24 Cropped Area and Production under Present/Proposed Conditions of Tanjungkarya Model Area**

					Net Area (ha)	77
<b>Present</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	17	18,000	306	22%		
Chili	8	6,000	48	10%		
Potato	0	18,000	0	0%		
Cabbage	24	22,000	528	31%		
Chinese cabbage	5	17,000	85	6%		
Bean vegetables	14	7,000	98	18%		
Red onion	2	7,000	14	3%		
Welsh onion	0	0	0	0%		
Carrot	2	17,000	34	3%		
Sweet corn	5	7,000	35	6%		
Sub-total	77	14,909	1,148	100%		
Food crops						
Paddy	93	4,000	372	121%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	93			121%		
<b>Total</b>	<b>170</b>			<b>221%</b>		
<b>Proposed</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	35	20,000	700	45%		
Chili	15	7,000	105	19%		
Potato	3	20,000	60	4%		
Cabbage	35	24,000	840	45%		
Chinese cabbage	15	18,000	270	19%		
Bean vegetables	30	10,000	300	39%		
Red onion	5	8,000	40	6%		
Welsh onion	0	0	0	0%		
Carrot	6	18,000	108	8%		
Sweet corn	6	9,000	54	8%		
Sub-total	150	16,513	2,477	195%		
Food crops						
Paddy	54	4,500	243	70%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	54			70%		
<b>Total</b>	<b>204</b>			<b>265%</b>		
<b>Incremental</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	18	2,000	394	23%		
Chili	7	1,000	57	9%		
Potato	3	2,000	60	4%		
Cabbage	11	2,000	312	14%		
Chinese cabbage	10	1,000	185	13%		
Bean vegetables	16	3,000	202	21%		
Red onion	3	1,000	26	4%		
Welsh onion	0	0	0	0%		
Carrot	4	1,000	74	5%		
Sweet corn	1	2,000	19	1%		
Sub-total	73	1,604	1,329	95%		
Food crops						
Paddy	-39	500	-129	-51%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	-39			-51%		
<b>Total</b>	<b>34</b>			<b>44%</b>		

**Table II-25 Cropped Area and Production of Present/Proposed Conditions of Gekbrong Model Area**

					Net Area (ha)	50
<b>Present</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	26	15,000	390	52%		
Chili	18	8,000	144	36%		
Potato	4	12,000	48	8%		
Cabbage	3	20,000	60	6%		
Chinese cabbage	5	17,000	85	10%		
Bean vegetables	2	7,000	14	4%		
Red onion	0	0	0	0%		
Welsh onion	2	13,000	26	4%		
Carrot	4	19,000	76	8%		
Sweet corn	3	8,000	24	6%		
Sub-total	67	12,940	867	134%		
Food crops						
Paddy	0	0	0	0%		
Maize	25	2,200	55	50%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	25			50%		
<b>Total</b>	<b>92</b>			<b>184%</b>		
<b>Proposed</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	32	20,000	640	64%		
Chili	13	9,000	117	26%		
Potato	10	17,000	170	20%		
Cabbage	25	24,000	600	50%		
Chinese cabbage	20	18,000	360	40%		
Bean vegetables	11	10,000	110	22%		
Red onion	0	0	0	0%		
Welsh onion	4	14,000	56	8%		
Carrot	15	22,000	330	30%		
Sweet corn	5	10,000	50	10%		
Sub-total	135	18,022	2,433	270%		
Food crops						
Paddy	0	0	0	0%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	0			0%		
<b>Total</b>	<b>135</b>			<b>270%</b>		
<b>Incremental</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	6	5,000	250	12%		
Chili	-5	1,000	-27	-10%		
Potato	6	5,000	122	12%		
Cabbage	22	4,000	540	44%		
Chinese cabbage	15	1,000	275	30%		
Bean vegetables	9	3,000	96	18%		
Red onion	0	0	0	0%		
Welsh onion	2	1,000	30	4%		
Carrot	11	3,000	254	22%		
Sweet corn	2	2,000	26	4%		
Sub-total	68		1,566	136%		
Food crops						
Paddy	0	0	0	0%		
Maize	-25	-2,200	-55	-50%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	-25			-50%		
<b>Total</b>	<b>43</b>			<b>86%</b>		

**Table II-26 Cropped Area and Production of Present/Proposed Conditions of Langensari Model Area**

					Net Area (ha)	58
<b>Present</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	26	20,000	520	45%		
Chili	24	6,500	156	41%		
Potato	15	16,000	240	26%		
Cabbage	34	23,000	782	59%		
Chinese cabbage	25	18,000	450	43%		
Bean vegetables	5	8,000	40	9%		
Red onion	0	0	0	0%		
Welsh onion	2	12,000	24	3%		
Carrot	0	20,000	0	0%		
Sweet corn	2	8,000	16	3%		
Sub-total	133	16,752	2,228	229%		
Food crops						
Paddy	0	0	0	0%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	0			0%		
<b>Total</b>	<b>133</b>			<b>229%</b>		
<b>Proposed</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	30	22,000	660	52%		
Chili	25	8,000	200	43%		
Potato	18	21,000	378	31%		
Cabbage	35	25,000	875	60%		
Chinese cabbage	25	20,000	500	43%		
Bean vegetables	20	10,000	200	34%		
Red onion	0	0	0	0%		
Welsh onion	4	15,000	60	7%		
Carrot	4	22,000	88	7%		
Sweet corn	4	10,000	40	7%		
Sub-total	165	18,188	3,001	284%		
Food crops						
Paddy	0	0	0	0%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	0			0%		
<b>Total</b>	<b>165</b>			<b>284%</b>		
<b>Incremental</b>						
	Cropped Area ha	Unit yield kg/ha	Production ton	Cropping intensity %		
Vegetables						
Tomato	4	2,000	140	7%		
Chili	1	1,500	44	2%		
Potato	3	5,000	138	5%		
Cabbage	1	2,000	93	2%		
Chinese cabbage	0	2,000	50	0%		
Bean vegetables	15	2,000	160	26%		
Red onion	0	0	0	0%		
Welsh onion	2	3,000	36	3%		
Carrot	4	2,000	88	7%		
Sweet corn	2	2,000	24	3%		
Sub-total	32	1,436	773	55%		
Food crops						
Paddy	0	0	0	0%		
Maize	0	0	0	0%		
Sweet potato	0	0	0	0%		
Soybean	0	0	0	0%		
Sub-total	0			0%		
<b>Total</b>	<b>32</b>			<b>55%</b>		

**Table TII-27 Production Value and Incremental Benefit of Mekarjaya Model Area**

**Present** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit	
		Inputs	Hired labor	Tool/equipmen				
<b>Vegetables</b>								
Tomato	102.1	59.0	19.5	4.5	83.0	10.4	8.7	
Chili	210.4	123.5	22.3	7.9	153.7	18.2	38.5	
Potato	157.1	96.2	14.5	5.9	116.7	13.8	26.6	
Cabbage	68.4	31.6	10.5	2.4	44.5	5.9	17.9	
Chinese cabbage	27.9	15.1	5.8	1.2	22.1	3.2	2.6	
Bean vegetables	90.4	16.4	20.7	2.4	39.6	7.5	43.3	
Red onion	44.8	9.4	3.7	0.8	13.8	2.0	28.9	
Welsh onion	27.4	9.4	3.7	0.8	13.8	2.0	11.5	
Carrot	35.2	12.1	6.9	1.1	20.1	3.4	11.7	
Sweet corn	18.2	2.6	3.0	0.4	5.9	1.3	10.9	
<b>Sub-total</b>	<b>781.8</b>	<b>375.3</b>	<b>110.7</b>	<b>27.3</b>	<b>513.3</b>	<b>67.8</b>	<b>581.0</b>	<b>200.8</b>
<b>Food crops</b>								
Paddy	323.4	78.3	90.1	10.8	179.2	42.9	101.3	
Maize	38.2	11.8	16.2	1.8	29.8	8.1	0.3	
Sweet potato	44.8	0.1	17.8	1.4	19.3	8.4	17.1	
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Sub-total</b>	<b>406.4</b>	<b>90.3</b>	<b>124.0</b>	<b>14.1</b>	<b>228.3</b>	<b>59.4</b>	<b>287.7</b>	<b>118.7</b>
<b>Total</b>	<b>1,188.2</b>	<b>465.6</b>	<b>234.7</b>	<b>41.3</b>	<b>741.6</b>	<b>127.1</b>	<b>868.7</b>	<b>319.5</b>

**Proposed** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit
		Inputs	Hired labor	Tool/equipmen			
<b>Vegetables</b>							
Tomato	563.8	222.3	65.9	16.2	304.3	37.6	221.8
Chili	536.5	223.4	37.9	14.1	275.4	32.5	228.6
Potato	858.3	386.1	56.0	23.6	465.7	54.9	337.8
Cabbage	399.0	176.9	52.5	12.9	242.3	31.8	124.9
Chinese cabbage	167.4	80.8	29.0	6.3	116.1	16.4	34.9
Bean vegetables	506.9	87.4	69.7	9.7	166.9	28.8	311.2
Red onion	522.2	103.7	36.9	8.0	148.7	21.5	352.0
Welsh onion	266.8	67.4	24.0	5.2	96.7	14.0	156.1
Carrot	316.8	82.7	41.6	7.3	131.6	21.4	163.8
Sweet corn	72.8	10.5	10.3	1.3	22.2	4.8	45.8
<b>Sub-total</b>	<b>4,210.5</b>	<b>1,441.3</b>	<b>423.9</b>	<b>104.7</b>	<b>1,969.9</b>	<b>263.7</b>	<b>1,976.9</b>
<b>Food crops</b>							
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>	<b>4,210.5</b>	<b>1,441.3</b>	<b>423.9</b>	<b>104.7</b>	<b>1,969.9</b>	<b>263.7</b>	<b>1,976.9</b>

**Incremental** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Incremental Benefit
		Inputs	Hired labor	Tool/equipmen			
<b>Vegetables</b>							
Tomato	461.7	163.2	46.3	11.7	221.3	27.2	213.1
Chili	326.1	99.9	15.6	6.2	121.8	14.3	190.1
Potato	701.3	289.9	41.5	17.7	349.1	41.1	311.1
Cabbage	330.6	145.3	42.0	10.5	197.8	25.9	107.0
Chinese cabbage	139.5	65.7	23.2	5.1	93.9	13.3	32.3
Bean vegetables	416.5	71.0	49.0	7.3	127.3	21.3	267.9
Red onion	477.4	94.4	33.3	7.3	134.9	19.5	323.1
Welsh onion	239.4	58.1	20.3	4.5	82.9	11.9	144.6
Carrot	281.6	70.6	34.7	6.2	111.5	18.0	152.1
Sweet corn	54.6	7.9	7.4	1.0	16.3	3.5	34.8
<b>Sub-total</b>	<b>3,428.7</b>	<b>1,066.0</b>	<b>313.3</b>	<b>77.4</b>	<b>1,456.6</b>	<b>195.9</b>	<b>1,776.1</b>
<b>Food crops</b>							
Paddy	-323.4	-78.3	-90.1	-10.8	-179.2	-42.9	-101.3
Maize	-38.2	-11.8	-16.2	-1.8	-29.8	-8.1	-0.3
Sweet potato	-44.8	-0.1	-17.8	-1.4	-19.3	-8.4	-17.1
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>-406.4</b>	<b>-90.3</b>	<b>-124.0</b>	<b>-14.1</b>	<b>-228.3</b>	<b>-59.4</b>	<b>-118.7</b>
<b>Total</b>	<b>3,022.3</b>	<b>975.7</b>	<b>189.2</b>	<b>63.3</b>	<b>1,228.3</b>	<b>136.6</b>	<b>1,657.4</b>



**Table II-28 Production Value and Incremental Benefit of Tanjungkarya Model Area**

**Present** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit	
		Inputs	Hired labor	Fool/equipmen				
<b>Vegetables</b>								
Tomato	355.0	125.5	44.3	9.7	179.5	22.1	201.6	153.4
Chili	252.5	100.6	19.1	6.5	126.2	14.8	141.0	111.5
Potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cabbage	401.3	152.0	53.9	11.7	217.6	28.6	246.1	155.2
Chinese cabbage	52.7	25.4	10.3	2.1	37.8	5.3	43.1	9.6
Bean vegetables	134.3	29.8	28.2	3.7	61.7	10.5	72.1	62.1
Red onion	52.2	9.6	3.9	0.8	14.3	2.1	16.3	35.9
Welsh onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carrot	29.9	6.4	3.7	0.6	10.8	1.7	12.5	17.4
Sweet corn	45.5	6.9	7.9	1.0	15.8	3.4	19.1	26.4
<b>Sub-total</b>	<b>1,323.3</b>	<b>456.2</b>	<b>171.4</b>	<b>36.0</b>	<b>663.6</b>	<b>88.3</b>	<b>751.9</b>	<b>571.4</b>
<b>Food crops</b>								
Paddy	520.8	110.3	135.7	16.0	262.0	60.4	322.4	198.4
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>520.8</b>	<b>110.3</b>	<b>135.7</b>	<b>16.0</b>	<b>262.0</b>	<b>60.4</b>	<b>322.4</b>	<b>198.4</b>
<b>Total</b>	<b>1,844.1</b>	<b>566.5</b>	<b>307.0</b>	<b>51.9</b>	<b>925.5</b>	<b>148.7</b>	<b>1,074.3</b>	<b>769.9</b>

**Proposed** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit	
		Inputs	Hired labor	Fool/equipmen				
<b>Vegetables</b>								
Tomato	812.0	288.1	91.3	21.4	400.8	48.8	449.6	362.4
Chili	552.3	197.1	35.8	12.6	245.5	28.6	274.2	278.1
Potato	112.2	42.9	6.6	2.7	52.2	6.1	58.3	53.9
Cabbage	638.4	247.7	78.6	18.4	344.7	44.6	389.2	249.2
Chinese cabbage	167.4	80.8	31.0	6.4	118.2	16.4	134.6	32.8
Bean vegetables	411.0	70.9	60.5	8.2	139.5	23.3	162.9	248.1
Red onion	149.2	25.9	9.9	2.1	37.9	5.4	43.2	106.0
Welsh onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carrot	95.0	20.7	11.1	1.9	33.7	5.3	39.0	56.0
Sweet corn	70.2	9.0	9.5	1.2	19.7	4.1	23.8	46.4
<b>Sub-total</b>	<b>3,007.7</b>	<b>983.2</b>	<b>334.1</b>	<b>74.9</b>	<b>1,392.2</b>	<b>182.7</b>	<b>1,574.9</b>	<b>1,432.8</b>
<b>Food crops</b>								
Paddy	340.2	64.1	78.8	9.3	152.1	35.3	187.5	152.7
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>340.2</b>	<b>64.1</b>	<b>78.8</b>	<b>9.3</b>	<b>152.1</b>	<b>35.3</b>	<b>187.5</b>	<b>152.7</b>
<b>Total</b>	<b>3,347.9</b>	<b>1,047.2</b>	<b>412.9</b>	<b>84.1</b>	<b>1,544.3</b>	<b>218.1</b>	<b>1,762.4</b>	<b>1,585.6</b>

**Incremental** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Incremental Benefit	
		Inputs	Hired labor	Fool/equipmen				
<b>Vegetables</b>								
Tomato	457.0	162.6	46.9	11.7	221.3	26.7	248.0	209.0
Chili	299.8	96.5	16.7	6.1	119.3	13.9	133.2	166.7
Potato	112.2	42.9	6.6	2.7	52.2	6.1	58.3	53.9
Cabbage	237.1	95.7	24.7	6.7	127.1	16.0	143.1	94.0
Chinese cabbage	114.7	55.4	20.6	4.4	80.4	11.1	91.5	23.2
Bean vegetables	276.7	41.1	32.2	4.5	77.9	12.9	90.7	186.0
Red onion	97.0	16.4	5.9	1.3	23.6	3.3	26.9	70.1
Welsh onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carrot	65.1	14.2	7.4	1.3	22.9	3.6	26.5	38.6
Sweet corn	24.7	2.1	1.6	0.2	3.9	0.8	4.7	20.0
<b>Sub-total</b>	<b>1,684.4</b>	<b>527.0</b>	<b>162.8</b>	<b>38.9</b>	<b>728.6</b>	<b>94.4</b>	<b>823.0</b>	<b>861.4</b>
<b>Food crops</b>								
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	-180.6	-46.3	-56.9	-6.7	-109.9	-25.1	-134.9	-45.7
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>-180.6</b>	<b>-46.3</b>	<b>-56.9</b>	<b>-6.7</b>	<b>-109.9</b>	<b>-25.1</b>	<b>-134.9</b>	<b>-45.7</b>
<b>Total</b>	<b>1,503.8</b>	<b>480.7</b>	<b>105.9</b>	<b>32.2</b>	<b>618.8</b>	<b>69.3</b>	<b>688.1</b>	<b>815.7</b>

**Table II-29 Production Value and Incremental Benefit of Gekbrong Model Area**

**Present** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit	
		Inputs	Hired labor	Tool/equipmen				Total
<b>Vegetables</b>								
Tomato	452.4	194.9	45.9	13.3	254.1	34.1	288.2	164.2
Chili	757.4	223.3	29.1	13.4	265.8	32.9	298.7	458.7
Potato	89.8	55.4	6.0	3.2	64.7	7.9	72.6	17.2
Cabbage	45.6	19.4	4.6	1.3	25.3	3.6	28.9	16.7
Chinese cabbage	52.7	25.5	7.0	1.8	34.3	5.3	39.6	13.1
Bean vegetables	19.2	4.0	2.7	0.4	7.2	1.5	8.6	10.5
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	44.5	9.6	2.7	0.7	13.0	2.1	15.1	29.4
Carrot	66.9	12.9	5.0	1.0	18.9	3.5	22.4	44.5
Sweet corn	31.2	4.2	3.2	0.5	7.9	2.0	9.9	21.3
<b>Sub-total</b>	<b>1,559.6</b>	<b>549.3</b>	<b>106.2</b>	<b>35.6</b>	<b>691.1</b>	<b>92.8</b>	<b>784.0</b>	<b>775.6</b>
<b>Food crops</b>								
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	115.5	22.7	22.5	2.9	48.1	15.5	63.6	51.9
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>115.5</b>	<b>22.7</b>	<b>22.5</b>	<b>2.9</b>	<b>48.1</b>	<b>15.5</b>	<b>63.6</b>	<b>51.9</b>
<b>Total</b>	<b>1,675.1</b>	<b>572.0</b>	<b>128.7</b>	<b>38.5</b>	<b>739.2</b>	<b>108.4</b>	<b>847.6</b>	<b>827.5</b>

**Proposed** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit	
		Inputs	Hired labor	Tool/equipmen				Total
<b>Vegetables</b>								
Tomato	742.4	263.4	56.5	17.5	337.5	44.6	382.1	360.3
Chili	615.4	170.8	21.0	10.2	202.0	24.8	226.8	388.6
Potato	317.9	143.0	15.0	8.3	166.3	20.3	186.6	131.3
Cabbage	456.0	176.9	38.0	11.8	226.7	31.8	258.5	197.5
Chinese cabbage	223.2	107.8	28.0	7.5	143.3	21.9	165.2	58.0
Bean vegetables	150.7	26.0	15.0	2.5	43.5	8.6	52.0	98.7
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	95.8	20.7	5.4	1.4	27.5	4.3	31.8	63.9
Carrot	290.4	51.7	18.8	4.0	74.5	13.4	87.9	202.5
Sweet corn	65.0	7.5	5.4	0.8	13.7	3.4	17.1	47.9
<b>Sub-total</b>	<b>2,956.8</b>	<b>967.9</b>	<b>203.1</b>	<b>64.0</b>	<b>1,235.0</b>	<b>173.2</b>	<b>1,408.2</b>	<b>1,548.6</b>
<b>Food crops</b>								
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>	<b>2,956.8</b>	<b>967.9</b>	<b>203.1</b>	<b>64.0</b>	<b>1,235.0</b>	<b>173.2</b>	<b>1,408.2</b>	<b>1,548.6</b>

**Incremental** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Incremental Benefit	
		Inputs	Hired labor	Tool/equipmen				Total
<b>Vegetables</b>								
Tomato	290.0	68.5	10.6	4.2	83.3	10.5	93.8	196.2
Chili	-142.0	-52.5	-8.1	-3.2	-63.8	-8.1	-71.9	-70.2
Potato	228.1	87.6	9.0	5.1	101.6	12.4	114.0	114.1
Cabbage	410.4	157.6	33.5	10.5	201.5	28.2	229.7	180.7
Chinese cabbage	170.5	82.3	21.0	5.7	109.0	16.6	125.6	44.9
Bean vegetables	131.5	22.0	12.3	2.0	36.3	7.1	43.4	88.1
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	51.3	11.1	2.7	0.8	14.6	2.2	16.8	34.5
Carrot	223.5	38.8	13.8	3.0	55.6	9.9	65.5	158.0
Sweet corn	33.8	3.3	2.1	0.3	5.8	1.4	7.2	26.6
<b>Sub-total</b>	<b>1,397.2</b>	<b>418.6</b>	<b>96.9</b>	<b>28.4</b>	<b>543.9</b>	<b>80.3</b>	<b>624.2</b>	<b>773.0</b>
<b>Food crops</b>								
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	-115.5	-22.7	-22.5	-2.9	-48.1	-15.5	-63.6	-51.9
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub-total</b>	<b>-115.5</b>	<b>-22.7</b>	<b>-22.5</b>	<b>-2.9</b>	<b>-48.1</b>	<b>-15.5</b>	<b>-63.6</b>	<b>-51.9</b>
<b>Total</b>	<b>1,281.7</b>	<b>395.9</b>	<b>74.3</b>	<b>25.5</b>	<b>495.8</b>	<b>64.8</b>	<b>560.6</b>	<b>721.1</b>

**Table II-30 Production Value and Incremental Benefit of Langensari Model Area**

**Present** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit
		Inputs	Hired labor	Tool/equipmen			
<b>Vegetables</b>							
Tomato	603.2	214.0	74.4	16.4	304.8	36.1	262.3
Chili	820.6	315.4	62.8	20.6	398.8	45.7	376.1
Potato	448.8	214.5	36.5	13.5	264.5	30.4	153.9
Cabbage	594.3	240.6	83.7	18.5	342.8	43.1	208.4
Chinese cabbage	279.0	134.7	56.6	11.1	202.4	27.3	49.4
Bean vegetables	54.8	11.8	11.1	1.4	24.3	3.9	26.6
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	41.0	10.4	4.3	0.9	15.6	2.1	23.3
Carrot	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet corn	20.8	3.0	3.5	0.4	6.9	1.4	12.5
Sub-total	2,862.5	1,144.5	332.7	82.8	1,560.0	190.0	1,112.5
<b>Food crops</b>							
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-total	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>2,862.5</b>	<b>1,144.5</b>	<b>332.7</b>	<b>82.8</b>	<b>1,560.0</b>	<b>190.0</b>	<b>1,112.5</b>

**Proposed** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Profit
		Inputs	Hired labor	Tool/equipmen			
<b>Vegetables</b>							
Tomato	765.6	247.0	85.8	18.9	351.7	41.8	372.1
Chili	1,052.0	328.5	65.4	21.5	415.4	47.7	588.9
Potato	706.9	257.4	43.8	16.2	317.4	36.6	352.9
Cabbage	665.0	247.7	86.2	19.0	352.9	44.6	267.6
Chinese cabbage	310.0	134.7	56.6	11.1	202.4	27.4	80.2
Bean vegetables	274.0	47.3	44.2	5.8	97.2	15.6	161.2
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	102.6	20.7	8.7	1.7	31.1	4.3	67.2
Carrot	77.4	13.8	8.1	1.3	23.2	3.6	50.7
Sweet corn	52.0	6.0	6.9	0.8	13.8	2.8	35.5
Sub-total	4,005.5	1,303.1	405.6	96.4	1,805.1	224.3	1,976.1
<b>Food crops</b>							
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-total	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>4,005.5</b>	<b>1,303.1</b>	<b>405.6</b>	<b>96.4</b>	<b>1,805.1</b>	<b>224.3</b>	<b>1,976.1</b>

**Incremental** (Unit: Rp. million)

	Production Value	Direct Production cost			Indirect cost	Total cost	Incremental Benefit
		Inputs	Hired labor	Tool/equipmen			
<b>Vegetables</b>							
Tomato	162.4	32.9	11.4	2.5	46.9	5.7	109.8
Chili	231.4	13.1	2.6	0.9	16.6	2.0	212.8
Potato	258.1	42.9	7.3	2.7	52.9	6.2	199.0
Cabbage	70.7	7.1	2.5	0.5	10.1	1.4	59.2
Chinese cabbage	31.0	0.0	0.0	0.0	0.0	0.1	30.9
Bean vegetables	219.2	35.4	33.2	4.3	72.9	11.7	134.6
Red onion	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Welsh onion	61.6	10.4	4.3	0.9	15.6	2.2	43.8
Carrot	77.4	13.8	8.1	1.3	23.2	3.6	50.7
Sweet corn	31.2	3.0	3.5	0.4	6.9	1.4	22.9
Sub-total	1,143.0	158.6	72.9	13.5	245.1	34.3	863.6
<b>Food crops</b>							
Paddy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maize	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweet potato	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soybean	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-total	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>1,143.0</b>	<b>158.6</b>	<b>72.9</b>	<b>13.5</b>	<b>245.1</b>	<b>34.3</b>	<b>863.6</b>

**Table II-31 Labor Requirement of Present/Proposed Conditions of Mekarjaya Model Area**

Present	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	8	647	5.18	3.36	1.81
Chili	10	592	5.92	3.85	2.07
Potato	7	550	3.85	2.50	1.35
Cabbage	5	557	2.79	1.81	0.97
Chinese cabbage	3	512	1.54	1.00	0.54
Bean vegetables	11	500	5.50	3.58	1.93
Red onion	2	490	0.98	0.64	0.34
Welsh onion	2	490	0.98	0.64	0.34
Carrot	4	460	1.84	1.20	0.64
Sweet corn	2	392	0.78	0.51	0.27
Sub-total	54		29.35		10.27
Food crops					0.00
Paddy	66	362	23.89	15.53	8.36
Maize	13	330	4.29	2.79	1.50
Sweet potato	16	295	4.72	3.07	1.65
Soybean	0	0	0.00	0.00	0.00
Sub-total	95		32.90	21.39	11.52
Total	149		62.25	21.39	21.79

Proposed	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	27	647	17.47	11.35	6.11
Chili	17	592	10.06	6.54	3.52
Potato	27	550	14.85	9.65	5.20
Cabbage	25	557	13.93	9.05	4.87
Chinese cabbage	15	512	7.68	4.99	2.69
Bean vegetables	37	500	18.50	12.03	6.48
Red onion	20	490	9.80	6.37	3.43
Welsh onion	13	490	6.37	4.14	2.23
Carrot	24	460	11.04	7.18	3.86
Sweet corn	7	392	2.74	1.78	0.96
Sub-total	212		112.44	73.09	39.35
Food crops					0.00
Paddy	0	0	0.00	0.00	0.00
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	0		0.00	0.00	0.00
Total	212		112.44	73.09	39.35

Incremental	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	19	0	12.29	7.99	4.30
Chili	7	0	4.14	2.69	1.45
Potato	20	0	11.00	7.15	3.85
Cabbage	20	0	11.14	7.24	3.90
Chinese cabbage	12	0	6.14	3.99	2.15
Bean vegetables	26	0	13.00	8.45	4.55
Red onion	18	0	8.82	5.73	3.09
Welsh onion	11	0	5.39	3.50	1.89
Carrot	20	0	9.20	5.98	3.22
Sweet corn	5	0	1.96	1.27	0.69
Sub-total	158	0	83.09	54.01	29.08
Food crops					0.00
Paddy	-66	-362	-23.89	-15.53	-8.36
Maize	-13	-330	-4.29	-2.79	-1.50
Sweet potato	-16	-295	-4.72	-3.07	-1.65
Soybean	0	0	0.00	0.00	0.00
Sub-total	-95	-987	-32.90	-21.39	-11.52
Total	63	-987	50.19	32.62	17.57

**Table II-32 Labor Requirement of Present/Proposed Conditions of Tanjungkarya Model Area**

Present	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	17	647	11.00	7.15	3.85
Chili	8	592	4.74	3.08	1.66
Potato	0	550	0.00	0.00	0.00
Cabbage	24	557	13.37	8.69	4.68
Chinese cabbage	5	512	2.56	1.66	0.90
Bean vegetables	14	500	7.00	4.55	2.45
Red onion	2	490	0.98	0.64	0.34
Welsh onion	0	0	0.00	0.00	0.00
Carrot	2	460	0.92	0.60	0.32
Sweet corn	5	392	1.96	1.27	0.69
Sub-total	77		42.52		14.88
Food crops					
Paddy	93	362	33.67	21.88	11.78
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	93		33.67	21.88	11.78
Total	170		76.19	21.88	26.67

Proposed	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	35	647	22.65	14.72	7.93
Chili	15	592	8.88	5.77	3.11
Potato	3	550	1.65	1.07	0.58
Cabbage	35	557	19.50	12.67	6.82
Chinese cabbage	15	512	7.68	4.99	2.69
Bean vegetables	30	500	15.00	9.75	5.25
Red onion	5	490	2.45	1.59	0.86
Welsh onion	0	0	0.00	0.00	0.00
Carrot	6	460	2.76	1.79	0.97
Sweet corn	6	392	2.35	1.53	0.82
Sub-total	150		82.91	53.89	29.02
Food crops					
Paddy	54	362	19.55	12.71	6.84
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	54		19.55	12.71	6.84
Total	204		102.46	66.60	35.86

Incremental	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	18	0	11.65	7.57	4.08
Chili	7	0	4.14	2.69	1.45
Potato	3	0	1.65	1.07	0.58
Cabbage	11	0	6.13	3.98	2.14
Chinese cabbage	10	0	5.12	3.33	1.79
Bean vegetables	16	0	8.00	5.20	2.80
Red onion	3	0	1.47	0.96	0.51
Welsh onion	0	0	0.00	0.00	0.00
Carrot	4	0	1.84	1.20	0.64
Sweet corn	1	0	0.39	0.25	0.14
Sub-total	73	0	40.39	26.25	14.14
Food crops					
Paddy	-39	0	-14.12	-9.18	-4.94
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	-39	0	-14.12	-9.18	-4.94
Total	34	0	26.27	17.08	9.19

**Table II-33 Labor Requirement of Present/Proposed Conditions of Gekbrong Model Area**

<b>Present</b>		<b>Hired labor ratio 65%</b>			
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
<b>Vegetables</b>					
Tomato	26	647	16.82	10.93	5.89
Chili	18	592	10.66	6.93	3.73
Potato	4	550	2.20	1.43	0.77
Cabbage	3	557	1.67	1.09	0.58
Chinese cabbage	5	512	2.56	1.66	0.90
Bean vegetables	2	500	1.00	0.65	0.35
Red onion	0	0	0.00	0.00	0.00
Welsh onion	2	490	0.98	0.64	0.34
Carrot	4	460	1.84	1.20	0.64
Sweet corn	3	392	1.18	0.76	0.41
Sub-total	67		38.91	25.29	13.62
<b>Food crops</b>					
Paddy	0	0	0.00	0.00	0.00
Maize	25	330	8.25	5.36	2.89
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	25		8.25	5.36	2.89
<b>Total</b>	<b>92</b>		<b>47.16</b>	<b>30.65</b>	<b>16.50</b>

<b>Proposed</b>		<b>Hired labor ratio 65%</b>			
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
<b>Vegetables</b>					
Tomato	32	647	20.70	13.46	7.25
Chili	13	592	7.70	5.00	2.69
Potato	10	550	5.50	3.58	1.93
Cabbage	25	557	13.93	9.05	4.87
Chinese cabbage	20	512	10.24	6.66	3.58
Bean vegetables	11	500	5.50	3.58	1.93
Red onion	0	0	0.00	0.00	0.00
Welsh onion	4	490	1.96	1.27	0.69
Carrot	15	460	6.90	4.49	2.42
Sweet corn	5	392	1.96	1.27	0.69
Sub-total	135		74.39	48.35	26.03
<b>Food crops</b>					
Paddy	0	0	0.00	0.00	0.00
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	0		0.00	0.00	0.00
<b>Total</b>	<b>135</b>		<b>74.39</b>	<b>48.35</b>	<b>26.03</b>

<b>Incremental</b>					
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
<b>Vegetables</b>					
Tomato	6	0	3.88	2.52	1.36
Chili	-5	0	-2.96	-1.92	-1.04
Potato	6	0	3.30	2.15	1.16
Cabbage	22	0	12.25	7.97	4.29
Chinese cabbage	15	0	7.68	4.99	2.69
Bean vegetables	9	0	4.50	2.93	1.58
Red onion	0	0	0.00	0.00	0.00
Welsh onion	2	0	0.98	0.64	0.34
Carrot	11	0	5.06	3.29	1.77
Sweet corn	2	0	0.78	0.51	0.27
Sub-total	68	0	35.48	23.06	12.42
<b>Food crops</b>					
Paddy	0	0	0.00	0.00	0.00
Maize	-25	-330	-8.25	-5.36	-2.89
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	-25	-330	-8.25	-5.36	-2.89
<b>Total</b>	<b>43</b>	<b>-330</b>	<b>27.23</b>	<b>17.70</b>	<b>9.53</b>

**Table II-34 Labor Requirement of Present/Proposed Conditions of Langensari Model Area**

Present	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	26	647	16.82	10.93	5.89
Chili	24	592	14.21	9.24	4.97
Potato	15	550	8.25	5.36	2.89
Cabbage	34	557	18.94	12.31	6.63
Chinese cabbage	25	512	12.80	8.32	4.48
Bean vegetables	5	500	2.50	1.63	0.88
Red onion	0	0	0.00	0.00	0.00
Welsh onion	2	490	0.98	0.64	0.34
Carrot	0	460	0.00	0.00	0.00
Sweet corn	2	392	0.78	0.51	0.27
Sub-total	133		75.28	48.93	26.35
Food crops					
Paddy	0	0	0.00	0.00	0.00
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	0		0.00	0.00	0.00
Total	133		75.28	48.93	26.35

With-Project	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	30	647	19.41	12.62	6.79
Chili	25	592	14.80	9.62	5.18
Potato	18	550	9.90	6.44	3.47
Cabbage	35	557	19.50	12.67	6.82
Chinese cabbage	25	512	12.80	8.32	4.48
Bean vegetables	20	500	10.00	6.50	3.50
Red onion	0	0	0.00	0.00	0.00
Welsh onion	4	490	1.96	1.27	0.69
Carrot	4	460	1.84	1.20	0.64
Sweet corn	4	392	1.57	1.02	0.55
Sub-total	165		91.77	59.65	32.12
Food crops					0.00
Paddy	0	0	0.00	0.00	0.00
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	0		0.00	0.00	0.00
Total	165		91.77	59.65	32.12

Proposed	Hired labor ratio 65%				
	Cropped area ha	Labor requirement man-day/ha	Total requirement 1000 man-day	Hired labor 1000 man-day	Family labor 1000 man-day
Vegetables					
Tomato	4	0	2.59	1.68	0.91
Chili	1	0	0.59	0.38	0.21
Potato	3	0	1.65	1.07	0.58
Cabbage	1	0	0.56	0.36	0.19
Chinese cabbage	0	0	0.00	0.00	0.00
Bean vegetables	15	0	7.50	4.88	2.63
Red onion	0	0	0.00	0.00	0.00
Welsh onion	2	0	0.98	0.64	0.34
Carrot	4	0	1.84	1.20	0.64
Sweet corn	2	0	0.78	0.51	0.27
Sub-total	32	0	16.49	10.72	5.77
Food crops					
Paddy	0	0	0.00	0.00	0.00
Maize	0	0	0.00	0.00	0.00
Sweet potato	0	0	0.00	0.00	0.00
Soybean	0	0	0.00	0.00	0.00
Sub-total	0	0	0.00	0.00	0.00
Total	32	0	16.49	10.72	5.77

**Table II-35 Results of Farm Household Economic Survey**

(Unit: Rp. 1000)

		1	2	3	4	5	6	7	8	
		Mekarjaya	Langensari	Tugumukti	Gekbrong	Cisurupan	Tanjungkarya	Mekarmukti	Cisantana	
<b>No. samples</b>		25	33	20	19	21	24	40	40	
<b>Cash Income</b>										
Annual Crops										
Paddy	(1)	2,330	0	0	0	0	1,064	2,402	468	
Vegetable	(2)	1,487	11,901	7,253	7,415	11,206	6,689	98	4,982	
Palawija	(3)	312	108	391	863	1,104	885	149	39	
Sub-otal	(4)	(1+2+3)	4,129	12,009	7,644	8,278	12,310	8,638	2,649	5,489
Other Agricultural Income										
Fruits/Estate crops	(5)	363	664	37	134	233	1,362	439	390	
Livestock	(6)	550	2,950	1,632	390	956	893	685	3,026	
Fishery	(7)	41	0	0	0	153	168	13	0	
On-farm labor wage	(8)	167	268	167	272	898	331	286	563	
Subtotal	(9)	(5+6+7+8)	1,121	3,882	1,836	796	2,240	1,423	3,979	
Non-agricultural Income										
Parmanent job	(10)	532	359	880	32	541	122	288	138	
Off-IFarm labor wage	(11)	201	359	97	150	107	408	181	458	
Rivate business	(12)	332	756	171	0	253	10	150	365	
Remittance	(13)	120	299	0	61	124	669	235	493	
Cottage industry/handic	(14)	30	0	0	152	0	54	131	0	
Total	(15)	(10+11+12+13+14)	1,215	1,773	1,148	395	1,025	1,263	985	1,454
<b>Production Cost</b>										
Annual Crops										
Paddy	(16)	870	0	0	0	0	658	920	202	
Vegetable	(17)	717	5,467	3,603	3,002	7,729	2,733	0	2,687	
Palawija	(18)	59	9	97	177	623	538	61	9	
Other cost *1	(19)	40	1,250	150	688	935	1,073	484	137	
Total	(20)	(16+17+18+19)	1,686	6,726	3,850	3,867	9,287	5,002	1,465	3,035
Other Agriculture										
Fruits/Estate crops	(21)	0	162	0	45	67	103	0	110	
Livestock	(22)	333	1,168	850	76	588	113	25	1,423	
Fishery	(23)	0	0	0	0	0	5	3	0	
On-farm labor wage	(24)	0	0	0	0	0	0	0	0	
Subtotal	(25)	(21+22+23+24)	333	1,330	850	121	655	221	28	1,533
<b>Net Income</b>										
Net Income from Annual Crop										
Paddy	(26)	(1-16)	1,460	0	0	0	406	1,482	266	
Vegetable	(27)	(2-17)	770	6,434	3,650	4,413	3,477	3,956	2,295	
Palawija	(28)	(3-18)	253	99	294	686	481	347	88	
Subtotal	(29)	(26+27+28)	2,443	5,283	3,794	4,411	3,023	3,636	1,184	2,454
Net Income from Other Agricultural Sector										
Fruits/estate crops	(30)	(5-21)	363	502	37	89	166	1,259	439	280
Livestock	(31)	(6-22)	217	1,782	782	314	368	780	660	1,603
Fishery	(32)	(7-23)	41	0	0	0	153	163	10	0
On-farm labor wage	(33)	(8-24)	167	268	167	272	898	331	286	563
Subtotal	(34)	(30+31+32+33)	788	2,552	986	675	1,585	2,533	1,395	2,446
Total of Cash Income	(35)	(4+9+15)	6,465	17,664	10,628	9,469	15,575	12,655	5,057	10,922
Total of Net Income	(36)	(15+29+34)	4,446	9,608	5,928	5,481	5,633	7,432	3,564	6,354
<b>Cash Expenses</b>										
Production Cost										
Annual crops	(37)	(25)	1,686	6,726	3,850	3,867	9,287	5,002	1,465	3,035
Other agriculture	(38)	(25)	333	1,330	850	121	655	221	28	1,533
Subtotal	(39)	(37+38)	2,019	8,056	4,700	3,988	9,942	5,223	1,493	4,568
Living Expenditure										
Food	(40)		2,717	4,358	3,660	3,024	3,247	3,928	2,780	3,698
Non-food	(41)		2,488	4,845	2,486	2,228	1,693	3,420	1,350	2,735
Subtotal	(42)	(40+41)	5,205	9,203	6,146	5,252	4,940	7,348	4,130	6,433
Investment *2	(43)		35	1,184	1,188	411	727	823	18	203
Total of Expenses	(44)	(39+42+43)	7,259	18,443	12,034	9,651	15,609	13,394	5,641	11,204
Balance	(45)	(35-44)	-794	-779	-1,406	-182	-34	-739	-584	-282

\*1: Land tenant fee, Purchase and rental fee of farm machinery/tool

\*2: Purchase of lands and transportation means, building house, private business, etc.



**Table II-36 Beneficiaries of Mekarjaya Model Area (1/5)**

No.	Name of Beneficiaries	Address		Land area (ha)	Total	No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampong	RW					Kampong	RW		
1	621 A. Yusup	Cirateun	02	0.159		43	623 Anah	Ps. Kadu	09	0.023	
2	121 Aan	Ciburuy	07	0.107		44	402 Anah	Ps. Kadu	09	0.017	0.040
3	356 Aan Mara	Ciburuy	06	0.018		45	648 Anah B. Indil	Ps. Kadu	09	0.032	
4	46 Acip	Ciburuy	05	0.108		46	635 Anah B. Inta	Ps. Kadu	09	0.043	
5	679 Acu	Ps. Kadu	09	0.070		47	322 Anah Rohanz	Ciengang	08	0.021	
6	221 Ada	Tamansari	08	0.250		48	647 Anah Ucin	Ps. Kadu	09	0.060	
7	331 Ada B. Manta	Ciburuy	07	0.470		49	632 Anah Udin	Ps. Kadu	09	0.045	0.106
8	543 Adan	Tamansari	08	0.016		50	141 Anang	Ciburuy	07	0.300	
9	544 Adan	Tamansari	08	0.235	0.251	51	502 Anang	Ciburuy	07	0.060	0.360
	1 Adang	Ciburuy	07	0.250		52	352 Anang Karmi	Ciburuy	06	0.035	
	318 Adang	Ciburuy	07	0.007		53	371 Anang Uat	Ciburuy	06	0.034	
	341 Adang	Ciburuy	07	0.035		54	373 Anang Uat	Ciburuy	06	0.037	0.071
	419 Adang	Ciburuy	07	0.033		55	569 Anda	Tamansari	08	0.065	
	420 Adang	Ciburuy	07	0.116		56	591 Anda	Tamansari	08	0.032	0.097
	164 Adang	Ciburuy	07	0.175	0.616	57	109 Andin	Ciburuy	07	0.040	
10	3 Adang Adi	Ciburuy	06	0.120		58	53 21 Aneng	Cirateun	02	0.021	
11	170 Ade	Ciburuy	05	0.230		59	54 115 Anih	Ciburuy	07	0.185	
	84 Ade	Ciburuy	05	0.055	0.285	60	55 120 Anin	Ciburuy	07	0.243	
12	301 Ade Juju	Ciburuy	07	0.016		61	56 112 Anjuh	Ciburuy	07	0.175	
13	602 Ade Kahdia	Ps. Kadu	09	0.015		62	57 576 Antenah Kay	Tamansari	08	0.260	
14	172 Ade Subandi	Dano	08	0.230		63	584 Antenah Kay	Tamansari	08	0.145	0.405
15	234 Ade Tarsa	Ciburuy	05	0.041		64	58 506 Apud	Ciengang	08	0.052	
	245 Ade Tarsa	Ciburuy	05	0.022		65	59 650 Aripin	Ps. Kadu	09	0.039	
	249 Ade Tarsa	Ciburuy	05	0.038	0.101	66	60 429 Armi	Ciburuy	07	0.062	
16	594 Ade Tatang	Ps. Kadu	09	0.023		67	455 Armi	Ciburuy	07	0.088	0.150
17	180 Adeng	Ciburuy	07	0.325		68	61 183 Arus	Ciengang	06	0.270	
	192 Adeng	Ciburuy	07	0.160	0.485	69	319 Arus	Ciengang	06	0.100	0.370
18	6 Adim	Cirateun	01	0.075		70	62 579 Asep Membr	Ciburuy	06	0.128	
19	299 Ading Eras	Ciburuy	07	0.025		71	63 513 Asih	Ciengang	08	0.356	
	396 Ading Eras	Ciburuy	07	0.126		72	64 145 Asir	Ciburuy	07	0.050	
	449 Ading Eras	Ciburuy	07	0.165	0.316	73	65 459 Aslin/Enah	Ciburuy	08	0.500	
20	8 Ai Haryati	Cibadak	02	0.320		74	66 225 Atang	Ciengang	08	0.140	
21	93 Aid	Cirateun	02	0.115		75	67 199 Atik	Ciburuy	05	0.850	
22	521 Aim	Ciburuy	06	0.195		76	239 Atik	Ciburuy	05	0.021	
23	668 Aja	Ps. Kadu	09	0.055		77	661 Atik	Ciburuy	05	0.018	
24	479 Ajang Darya	Ciburuy	07	0.016		78	87 Atik	Ciburuy	05	0.104	0.993
25	220 Ajeng	Ciburuy	07	0.210		79	68 583 Ating Eben	Ciengang	08	0.195	
26	182 Akam	Ciburuy	07	0.160		80	69 330 Aun	Bandung		0.189	
27	7 Ale	Cibadak	03	0.035		81	70 55 Awang	Ciburuy	05	0.060	
	271 Ale	Ciburuy	03	0.016	0.051	82	71 12 Ayat	Cirateun	02	0.094	
28	233 Ama	Ciburuy	05	0.009		83	72 22 Ayat	Cirateun	02	0.055	0.149
	238 Ama	Ciburuy	05	0.050		84	73 523 Ayib	Ciengang	02	0.117	
	244 Ama	Ciburuy	05	0.021		85	134 Ayib	Cirateun	02	0.240	
	555 Ama	Ciburuy	05	0.095		86	652 Ayib	Ps. Kadu	09	0.080	
	645 Ama	Ciburuy	05	0.110		87	653 Ayib	Ps. Kadu	09	0.170	0.607
	90 Ama	Ciburuy	05	0.040		88	73 366 Ayub	Ciburuy	06	0.028	
	218 Ama	Ciburuy	05	0.301	0.625	89	74 656 Ayut Rumina	Ps. Kadu	09	0.057	
29	484 Amah	Ciengang	08	0.003		90	75 196 Bandi	Ciburuy	05	0.050	
	161 Amah	Ciengang	08	0.108	0.110	91	76 140 Barma	Ciburuy	07	0.300	
30	522 Amah B. Enca	Dano	08	0.210		92	77 209 Caca	Ciburuy	05	0.020	
31	51 Aman	Ciburuy	05	0.207		93	78 125 Cacah	Ciburuy	06	0.165	
	241 Aman	Ciburuy	05	0.024	0.231	94	79 255 Cahju	Ciburuy	07	0.015	
32	408 Aman Amah	Ciburuy	07	0.235		95	258 Cahju	Ciburuy	07	0.107	
33	98 Ambin	Ciburuy	05	0.190		96	275 Cahju	Ciburuy	07	0.017	0.139
	133 Ambin	Ciburuy	05	0.110	0.300	97	80 181 Cahya	Ciburuy	07	0.105	
34	240 Ameng Enden	Cirateun	02	0.129		98	81 503 Cahyu	Ciburuy	07	0.100	
35	216 Amid (A)	Ciburuy	05	0.182		99	82 670 Ceen	Ps. Kadu	09	0.060	
36	485 Amid	Ciengang	08	0.040		100	83 44 Cicih	Ciburuy	05	0.018	
	486 Amid	Ciengang	08	0.060	0.100	101	60 Cicih	Ciburuy	05	0.060	
37	499 Amid Dati	Ciengang	08	0.076		102	202 Cicih	Ciburuy	05	0.015	
38	135 Amih	Ciburuy	06	0.265		103	162 Cicih	Ciburuy	05	0.108	
39	372 Aming	Ciburuy	06	0.016		104	266 Cicih	Ciburuy	05	0.052	0.252
	92 Aming	Ciburuy	06	0.130	0.146	105	84 340 Cicih Bandi	Ciburuy	06	0.042	
40	460 Amir	Ciburuy	06	0.173		106	85 607 Cicih Entis	Cirateun	02	0.114	
41	410 Amir Ukon	Ciburuy	07	0.100		107	608 Cicih Entis	Cirateun	02	0.039	0.153
42	78 Anah	Ciburuy	05	0.090		108	86 56 Cucu	Ciburuy	05	0.013	
	223 Anah	Ciburuy	05	0.250	0.340	109	446 Cucu	Ciburuy	05	0.098	0.111

**Table II-36 Beneficiaries of Mekarjaya Model Area (2/5)**

No.	Name of Beneficiaries	Address		Land area (ha)	Total	No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampung	RW					Kampung	RW		
87	348 Cucu Iun	Ciburuy	06	0.012		125	477 Ena Hasnalia	Ciburuy	08	0.139	
88	628 Cuhya	Ps. Kadu	09	0.029		126	144 Enah	Tamansari	08	0.070	
89	77 D. Saepudin	Ciburuy	05	0.875			563 Enah	Tamansari	08	0.255	
90	106 D. Sutono	Ciburuy	07	0.816			566 Enah	Tamansari	08	0.014	0.339
	111 D. Sutono	Ciburuy	07	0.155	0.971	127	536 Enah Eyep	Ciburuy	07	0.070	
91	359 Dadang B.Yay	Ciburuy	06	0.033		128	374 Enah Saip	Ciburuy	06	0.020	
92	441 Dani	Ciburuy	07	0.083		129	63 Enan	Ciburuy	05	0.060	
93	589 Darimi	Ciburuy	07	0.159		130	138 Enboy	Ciburuy	05	0.250	
94	130 Darip	Ciburuy	06	0.140		131	171 Enca	Dano	08	0.490	
	385 Darip	Ciburuy	06	0.033		132	86 Enceh	Cirateun	02	0.105	
	462 Darip	Ciburuy	06	0.070	0.243	133	605 Encen	Ps. Kadu	09	0.058	
95	478 Darip Oma	Ciburuy	06	0.041		134	174 Ences	Cibakung	06	0.060	
96	454 Darya	Ciburuy	06	0.088		135	163 Enco	Dano	08	0.155	
	482 Darya	Ciburuy	06	0.057		136	131 Encoh	Ciburuy	06	0.124	
	447 Dasep	Ciburuy	06	0.100		137	597 Encu	Ps. Kadu	09	0.012	
	567 Dasep	Ciburuy	06	0.121	0.366		667 Encu	Ps. Kadu	09	0.027	0.039
97	552 Dasep	Ciengang	08	0.105		138	74 Endang	Ciburuy	05	0.235	
98	153 Daum	Ciburuy	05	0.370			246 Endang	Ciburuy	05	0.011	
99	70 Dedeh	Ciburuy	05	0.137			122 Endang	Ciburuy	06	0.110	
	464 Dedeh	Ciburuy	05	0.028	0.165		380 Endang	Ciburuy	06	0.128	
100	65 Dedi	Ciburuy	05	0.028			189 Endang	Ciburuy	07	0.300	
	206 Dedi	Ciburuy	05	0.024			316 Endang	Ciburuy	07	0.019	0.803
	226 Dedi	Ciburuy	05	0.125		139	616 Endang	Ps. Kadu	09	0.058	
	114 Dedi	Ciburuy	05	0.090	0.267	140	564 Endang Anw.	Ciburuy	07	0.420	
101	435 Dedi Ama	Ciburuy	07	0.102		141	248 Endang Iur	Ciburuy	05	0.068	
102	35 Dewl	Cirateun	02	0.036		142	427 Endang Tarit	Ciburuy	07	0.110	
103	666 Dia Engkor	Ps. Kadu	09	0.264		143	568 Endang Tariq	Ciburuy	07	0.295	
104	34 Dian	Cirateun	02	0.113		144	343 Endang Tasu	Ciburuy	06	0.055	
105	102 Didi	Ciburuy	07	0.070		145	307 Ende	Ciburuy	07	0.057	
	179 Didi	Ciburuy	07	0.125			313 Ende	Ciburuy	07	0.047	0.135
	235 Didi	Ciburuy	07	0.062			303 Ende	Ciburuy	07	0.032	
	534 Didi	Ciburuy	07	0.014	0.271	146	103 Endey	Tamansari	08	0.030	
106	578 Duleh	Ciburuy	06	0.070			278 Endey	Tamansari	08	0.017	
107	210 E. Dayu	Ciburuy	05	0.025			588 Endey	Tamansari	08	0.148	
108	655 E. Sutisna	Ps. Kadu	09	0.033			577 Endey	Tamansari	08	0.430	0.625
109	346 Ece	Ciburuy	07	0.043		147	219 Endut	Cikawalu	07	0.190	
	416 Ece	Ciburuy	07	0.047		148	50 Enduy	Ciburuy	05	0.045	
	439 Ece	Ciburuy	07	0.183			201 Enduy	Ciburuy	05	0.036	0.081
	442 Ece	Ciburuy	07	0.083	0.356	149	624 Engkat	Ps. Kadu	09	0.023	
110	118 Edah	Ciburuy	08	0.155			636 Engkat	Ps. Kadu	09	0.043	
	323 Edah	Ciengang	08	0.021	0.176		649 Engkat	Ps. Kadu	09	0.059	0.125
111	224 Edeng	Ciburuy	05	0.125		150	452 Engkat	Ciburuy	07	0.465	
	230 Edeng	Ciburuy	05	0.303			533 Engkat	Ciburuy	07	0.083	0.548
	321 Edeng	Ciburuy	05	0.085	0.513	151	392 Engkat Juant.	Ciburuy	07	0.110	
112	28 Ehen	Ciburuy	05	0.099			430 Engkat Juant.	Ciburuy	07	0.069	0.179
	205 Ehen	Ciburuy	05	0.058	0.157	152	384 Engkay	Ciburuy	06	0.032	
113	253 Ejep	Ciburuy	07	0.038		153	310 Engkos	Ciburuy	07	0.021	
	257 Ejep	Ciburuy	07	0.043		154	175 Enja	Cibakung	07	0.075	
	265 Ejep	Ciburuy	07	0.007	0.089	155	9 Enjam	Cibadak	02	0.130	
114	88 Ela	Ciburuy	05	0.112			10 Enjam	Cirateun	02	0.275	
115	198 Eman	Ciburuy	05	0.011			24 Enjam	Cirateun	02	0.165	0.570
	207 Eman	Ciburuy	05	0.027		156	283 Enjoh Udin	Ciburuy	07	0.011	
	228 Eman	Ciburuy	08	0.073	0.111	157	263 Enjuh	Ciburuy	07	0.048	
116	264 Eman B. Kaja	Ciburuy	07	0.011			585 Enjuh	Ciburuy	07	0.265	0.313
117	337 Emar	Ciburuy	06	0.055		158	514 Eno B. eye	Ciburuy	06	0.072	
118	424 Emas	Ciburuy	07	0.210		159	252 Enoh	Ciburuy	07	0.200	
119	317 Emed	Ciburuy	07	0.100		160	296 Enoj	Ciburuy	07	0.078	
	541 Emed	Tamansari	08	0.080	0.180	161	113 Enok	Cirateun	02	0.045	
120	426 Emed Irot	Ciburuy	07	0.080			185 Enok	Cirateun	02	0.430	0.475
121	222 Emid	Cikawalu	08	0.190		162	293 Enok/Darimi	Ciburuy	07	0.158	
122	606 Emid Tatang	Ps. Kadu	09	0.195			295 Enok/Darimi	Ciburuy	07	0.007	0.165
	638 Emid Tatang	Ps. Kadu	09	0.045		163	48 Enoy	Ciburuy	05	0.215	
	640 Emid Tatang	Ps. Kadu	09	0.050	0.290		157 Enoy	Ciburuy	05	0.120	0.335
123	516 Empat	Ciburuy	06	0.072		164	456 Entang	Ciburuy	06	0.070	
124	184 Emus	Ciburuy	06	0.360		165	535 Entis	Tamansari	08	0.029	
	229 Emus	Ciburuy	06	0.080		166	662 Entis S	Ps. Kadu	09	0.042	
	351 Emus	Ciburuy	06	0.035		167	152 Entoy	Ciburuy	05	0.120	
	466 Emus	Ciburuy	06	0.084	0.559	168	73 Enu	Ciburuy	05	0.056	

**Table II-36 Beneficiaries of Mekarjaya Model Area (3/5)**

No.	Name of Beneficiaries	Address		Land area (ha)	Total	No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampong	RW					Kampong	RW		
169	132 Enub	Ciburuy	07	0.140	0.535	216	375 Iroh Eje	Ciburuy	06	0.060	0.200
	104 Enub	Ciburuy	07	0.185		217	379 Irot	Ciburuy	06	0.060	
	108 Enub	Ciburuy	07	0.185		218	617 Isah/Yanti	Ps. Kadu	09	0.084	
	282 Enub	Ciburuy	07	0.025		219	448 Isap	Ciburuy	07	0.100	
170	68 Enung	Ciburuy	07	0.065		320 Isap	Ciengang	08	0.100	0.263	
	480 Enung	Ciburuy	07	0.014	220	94 Ita	Cirateun	02	0.195		
171	100 Enya	Ciburuy	07	0.085	221	432 Itar Didi	Ciburuy	07	0.175	0.263	
172	545 Enyjuh	Ciburuy	07	0.245		436 Itar Didi	Ciburuy	07	0.088		
173	665 Eroh	Ps. Kadu	09	0.052	222	610 Iting	Ps. Kadu	09	0.048		
174	110 Esa	Ciburuy	06	0.130	223	470 Iun	Ciburuy	06	0.020		
	370 Esa	Ciburuy	06	0.059	224	457 Iun Mian	Ciburuy	06	0.070	0.189	
175	423 Eti	Ciburuy	07	0.080	225	333 Iur	Ciburuy	06	0.058		
176	395 Eti Oyo	Ciburuy	06	0.018	226	507 Iyep	Ciengang	08	0.016		
177	412 Eting	Ciburuy	07	0.034	227	451 Iyur	Ciburuy	07	0.080		
178	67 Eulis	Ciburuy	06	0.145	228	609 Jaja Dakin	Ps. Kadu	09	0.063		
179	562 Eulis Tita	Ciburuy	07	0.110	229	324 Jojo	Ciengang	08	0.133		
180	501 Eumo	Ciburuy	07	0.205	230	29 Juju	Ciburuy	05	0.254	0.723	
181	300 Eunang	Ciburuy	07	0.015		222 Juju	Ciburuy	05	0.295		
182	290 Euneng B. Tor	Ciburuy	07	0.028		72 Juju	Ciburuy	05	0.155		
183	571 Eunoh	Ciengang	08	0.130		599 Juju	Ciburuy	05	0.019		
	491 Eunok	Ciengang	08	0.065	231	16 Jumna	Ciburuy	05	0.200	0.324	
	494 Eunok	Ciengang	08	0.130		49 Jumna	Ciburuy	05	0.097		
184	570 Ewot	Ciburuy	07	0.065		54 Jumna	Ciburuy	05	0.140	0.958	
185	30 Eye	Pasirkadu	09	0.225		213 Jumna	Ciburuy	05	0.521		
186	105 Eye	Ciburuy	07	0.080	232	500 Karim	Ciburuy	06	0.060		
	285 Eye	Ciburuy	07	0.013		345 Karim	Ciburuy	06	0.115		
	546 Eye	Ciburuy	07	0.110	233	342 Karim Amin	Ciburuy	06	0.058	0.203	
187	79 Eyen	Ciburuy	05	0.075	234	18 Karmina	Cirateun	01	0.346		0.856
	458 Eyen	Ciburuy	05	0.070		19 Karmina	Cirateun	01	0.510		
188	188 Eyen	Cirateun	02	0.070	235	388 Karna	Ciburuy	06	0.020	0.154	
	641 Eyen	Cirateun	02	0.075		391 Karna	Ciburuy	06	0.034		
	598 Eyen	Cirateun	02	0.072		525 Karna	Ciburuy	06	0.099		
	659 Eyen	Cirateun	02	0.059	236	99 Kayah	Ciburuy	08	0.185		
189	554 Eyep	Ciburuy	07	0.070	237	32 Klaswak	Ciburuy	05	0.775	0.276	
190	193 Eyes	Ciburuy	07	0.130	238	53 Koko	Ciburuy	05	0.045		
191	528 H. Barokah	Tamansari	08	0.028	239	509 Kokom Said	Ciengang	08	0.018	0.123	
192	398 Hadiyah	Ciburuy	07	0.125	240	601 Komalawati	Ps. Kadu	09	0.123		
193	4 Hadjas	Cirateun	02	0.570	241	355 Komar Marta	Ciburuy	06	0.012	0.157	
194	147 Herman	Tamansari	08	0.050		399 Komar Marta	Ciburuy	06	0.145		
	542 Herman	Tamansari	08	0.140	242	415 Lala	Ciburuy	07	0.031	0.190	
195	404 Hodijah	Ciburuy	07	0.052	243	217 Leni	Ciburuy	05	0.281		
196	37 Hudaya	Cirateun	02	0.024	244	276 Lili	Ciburuy	07	0.035	0.289	
197	496 Ibih	Ciengang	08	0.134		277 Lili	Ciburuy	07	0.014		
198	538 Icah	Ciburuy	07	0.070		586 Lili	Ciburuy	07	0.240		
199	27 Ieih	Ciburuy	05	0.576	245	358 Lilis Anah A	Ciburuy	06	0.011		0.289
200	663 Ieih	Ps. Kadu	09	0.011	246	160 Mahmud S	Ciburuy	03	0.210	0.310	
201	101 Ieun	Ciburuy	05	0.090		212 Mahmud S	Ciburuy	03	0.100		
202	191 Icus	Ciburuy	05	0.150	247	450 Mahup	Ciburuy	07	0.190	0.050	
203	259 Ida	Ciburuy	07	0.019	248	676 Maja	Cipurut		0.050		
	400 Ida	Ciburuy	07	0.033	249	71 Mamah	Ciburuy	05	0.077	0.291	
204	643 Idris	Ps. Kadu	09	0.075		208 Mamah	Ciburuy	05	0.084		
	654 Idris	Ps. Kadu	09	0.065		273 Mamah	Ciburuy	05	0.015	0.140	
205	445 Iin	Ciburuy	07	0.098		279 Mamah	Ciburuy	05	0.016		
206	129 Ijum	Ciburuy	06	0.120		471 Mamah	Ciburuy	05	0.100	0.291	
	350 Ijum	Ciburuy	06	0.013	250	349 Mamah Eme	Ciburuy	06	0.034		
207	126 Ikar	Ciburuy	06	0.850	251	406 Mamah Ude	Ciburuy	07	0.098	0.228	
	128 Ikar	Ciburuy	06	0.175	252	75 Maman	Ciburuy	05	0.068		
208	186 Iman	Ciburuy	07	0.300		11 Maman	Ciburuy	05	0.160	0.228	
	551 Iman	Ciburuy	07	0.090	253	39 Mamar	Ciburuy	05	0.161		
209	270 Imih	Ciburuy	07	0.031		195 Mamar	Ciburuy	05	0.010	0.171	
210	123 Imik	Ciburuy	06	0.150	254	81 Mamat	Ciburuy	05	0.065		
	178 Imik	Ciburuy	06	0.085	255	286 Manah	Ciburuy	07	0.016	0.255	
	339 Imik	Ciburuy	06	0.020	256	660 Mansur	Ps. Kadu	09	0.048		
211	327 Inin	Baros		0.174		664 Mansur	Ps. Kadu	09	0.027	0.074	
212	417 Ining Ada	Ciburuy	07	0.140	257	14 Mayis	Ciburuy	05	0.070		
213	531 Irah	Tamansari	08	0.048	258	657 Medi	Ps. Kadu	09	0.032	0.100	
214	119 Irin	Ciburuy	06	0.070	259	215 Mimi	Ciburuy	05	0.100		
215	357 Irin Cicih	Ciburuy	06	0.019	260	413 Mimi Uca	Ciburuy	07	0.100		

**Table II-36 Beneficiaries of Mekarjaya Model Area (4/5)**

No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampung	RW		
261	347 Mimid	Ciburuy	06	0.012	0.097
	168 Mimid	Ciburuy	06	0.085	
262	64 Mimik	Ciburuy	05	0.030	0.042
	203 Mimik	Ciburuy	05	0.012	
263	580 Mimin	Ciburuy	06	0.122	0.382
	95 Mimin	Cirateun	02	0.260	
264	644 Mimin Uyu	Cirateun	06	0.145	0.139
265	344 Miming Tasub	Ciburuy	06	0.040	
266	461 Mooh	Ciburuy	06	0.185	0.139
267	338 Muksih	Ciburuy	06	0.040	
	469 Mursih	Ciburuy	06	0.070	0.139
	332 Mursik	Ciburuy	06	0.029	
268	165 Naih	Ciburuy	07	0.140	0.215
	403 Naih	Ciburuy	07	0.075	
269	574 Naih Ada	Ciburuy	07	0.090	0.113
270	360 Namih B. Oyo	Ciburuy	06	0.022	
271	47 Nana	Ciburuy	05	0.013	0.113
	158 Nana	Ciburuy	05	0.100	
272	508 Nana	Ps. Kadu	09	0.023	0.415
	619 Nana	Ps. Kadu	09	0.392	
273	247 Nana Tati	Ciburuy	07	0.083	0.134
	251 Nana Tati	Ciburuy	07	0.051	
274	298 Nanang	Ciburuy	07	0.021	0.195
275	96 Naning	Cirateun	02	0.090	
276	483 Narib	Ciengang	08	0.120	0.195
277	537 Nde	Ciburuy	07	0.070	
278	550 Neneng	Ciburuy	07	0.105	0.195
	438 Neneng	Ciburuy	07	0.090	
279	401 Neneng Obar	Ciburuy	07	0.084	0.504
	532 Neneng Obar	Ciburuy	07	0.245	
	558 Neneng Obar	Ciburuy	07	0.175	0.504
280	261 Niir	Ciburuy	07	0.022	
281	560 Nono	Cine	08	0.042	0.206
282	364 Nono Adi Pan	Ciburuy	06	0.126	
283	116 Nonok	Ciburuy	07	0.175	0.206
	336 Nonok	Ciburuy	07	0.031	
284	595 Nurhayat	Ps. Kadu	09	0.008	0.051
	593 Nurhayati	Ps. Kadu	09	0.043	
285	254 O. Mamah	Ciburuy	07	0.015	0.052
	256 O. Mamah	Ciburuy	07	0.037	
286	625 Ocin	Ps. Kadu	09	0.023	0.109
	633 Ocin	Ps. Kadu	09	0.045	
	634 Ocin	Ps. Kadu	09	0.041	0.109
287	297 Odah	Ciburuy	07	0.025	
288	142 Odin	Ciburuy	07	0.190	0.463
	274 Odin	Ciburuy	07	0.040	
	572 Odin	Ciburuy	07	0.135	0.463
	573 Odin	Ciburuy	07	0.098	
289	139 Ojeng	Ciburuy	07	0.050	0.631
	288 Ojeng	Ciburuy	07	0.035	
	294 Ojeng	Ciburuy	07	0.032	0.631
	556 Ojeng	Ciburuy	07	0.115	
	561 Ojeng	Ciburuy	07	0.205	0.631
	565 Ojeng	Ciburuy	07	0.195	
290	443 Okay	Ciburuy	07	0.084	0.219
	492 Okay	Ciburuy	07	0.135	
291	669 Omad Wiwin	Baros		0.080	0.244
292	642 Oman	Ciburuy	06	0.150	
	517 Oman	Ciburuy	06	0.094	0.244
293	149 Omar	Ciburuy	05	0.330	
294	62 Omi	Pasirkadu	09	0.165	0.228
295	363 Omin	Ciburuy	06	0.016	
296	243 Omo	Ciburuy	07	0.098	0.228
	526 Omo	Ciburuy	07	0.130	
297	377 Omo Ocih	Ciburuy	06	0.175	0.180
298	405 Omo Ura	Ciburuy	07	0.221	
299	646 Oneng	Ciburuy	05	0.065	

No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampung	RW		
300	626 Oneng	Ps. Kadu	09	0.019	0.069
	639 Oneng	Ps. Kadu	09	0.050	
301	627 Oneng Kanta	Ps. Kadu	09	0.021	0.048
302	615 Oni	Ps. Kadu	09	0.048	
303	58 Onih	Ciburuy	05	0.019	0.083
304	440 Oo	Ciburuy	07	0.083	
305	262 Ooy	Ciburuy	07	0.016	0.030
306	629 Opik	Ps. Kadu	09	0.014	
307	600 Otas	Ps. Kadu	09	0.030	0.030
	613 Otas	Ps. Kadu	09	0.000	
308	82 Oti	Ciburuy	05	0.295	0.323
	529 Oti	Ciburuy	06	0.028	
309	91 Otong	Ciburuy	05	0.235	0.460
	472 Otong	Ciburuy	05	0.040	
	17 Otong	Ciburuy	05	0.060	0.460
	31 Otong	Ciburuy	05	0.125	
310	581 Otong Pendi	Tamansari	08	0.120	0.028
311	497 Oyo	Ciengang	08	0.028	
312	620 Oyoh Suparjc	Cirateun	02	0.159	0.095
313	547 Pandi	Ciburuy	07	0.095	
314	136 Peni	Ciburuy	05	0.140	0.093
315	15 Rahmat	Cirateun	02	0.088	
	23 Rahmat	Cirateun	02	0.005	0.093
316	367 Rakib	Ciburuy	06	0.042	
317	146 Rapii	Ciburuy	07	0.230	0.272
	197 Rapii	Ciburuy	07	0.042	
318	369 Rasib	Ciburuy	06	0.030	0.245
	376 Rasib	Ciburuy	06	0.105	
	143 Rasib	Ciburuy	06	0.110	0.245
319	368 Ratma	Ciburuy	06	0.023	
320	612 Rohaeti	Cirateun	02	0.191	0.069
321	673 Rohanah	Cirateun	02	0.069	
322	61 Rohati	Ciburuy	05	0.055	0.238
	69 Rohati	Ciburuy	05	0.100	
	124 Rohati	Ciburuy	05	0.071	0.238
	394 Rohati	Ciburuy	05	0.012	
323	651 Rohati	Ps. Kadu	09	0.020	0.165
324	678 Rohendi	Cirateun	02	0.165	
325	527 Rohman	Tamansari	08	0.028	0.098
	530 Rohman	Tamansari	08	0.070	
326	548 Rukiah	Ciengang	08	0.095	0.087
327	13 Rukman	Ciburuy	05	0.087	
328	618 Rukmana	Ps. Kadu	09	0.070	0.063
329	622 Ruminah	Ps. Kadu	09	0.024	
	631 Ruminah	Ps. Kadu	09	0.039	0.063
330	463 Rustadi	Ciburuy	06	0.014	
331	365 Rustandi	Ciburuy	06	0.024	0.259
332	465 Saad	Ciburuy	06	0.084	
	504 Saad	Ciburuy	06	0.175	0.259
333	287 Sadi	Ciburuy	07	0.016	
	575 Sadi	Ciburuy	07	0.437	0.453
334	236 Sadli	Ciburuy	05	0.124	
	553 Sadli	Ciburuy	05	0.105	0.229
335	539 Sagli	Ciburuy	05	0.070	
336	582 Sahim	Ciburuy	06	0.129	0.147
	389 Sahim	Ciburuy	06	0.018	
337	511 Said	Ciengang	08	0.014	0.246
338	52 Salih	Ciburuy	05	0.056	
	148 Salih	Ciburuy	05	0.190	0.246
339	151 Saman	Cirateun	02	0.160	
340	169 Samukri	Ciburuy	06	0.195	0.120
341	33 Sari	Ciburuy	05	0.050	
	156 Sari	Ciburuy	05	0.070	0.120
342	386 Sarip	Ciburuy	06	0.020	
	473 Sarip	Ciburuy	06	0.160	0.180
343	378 Sarman	Ciburuy	06	0.020	
	411 Sarman	Ciburuy	07	0.195	0.180
	425 Sarman	Ciburuy	07	0.195	

**Table II-36 Beneficiaries of Mekarjaya Model Area (5/5)**

No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampung	RW		
344	177 Sema	Ciburuy	07	0.123	
345	127 Soma	Ciburuy	07	0.070	
	242 Soma	Ciburuy	07	0.021	
	495 Soma	Ciburuy	07	0.091	
	540 Soma	Ciburuy	07	0.070	0.252
346	407 Soma Uka	Ciburuy	07	0.098	
	434 Soma Uka	Ciburuy	07	0.185	0.283
347	250 Sopandi Mary	Ciburuy	07	0.018	
348	305 Sosono	Ciburuy	07	0.039	
	587 Sotono	Ciburuy	07	0.350	0.389
349	387 Sukardi	Ciburuy	06	0.035	
350	474 Sumarma	Ciengang	08	0.290	
	489 Sumarma	Ciengang	08	0.043	0.333
351	200 Sumarna	Ciburuy	05	0.011	
	204 Sumarna	Ciburuy	05	0.074	0.085
352	592 Supiah	Ps. Kadu	09	0.195	
353	117 Surkinah	Ciburuy	06	0.107	
	361 Surkinah	Ciburuy	06	0.023	0.130
354	26 Suryana	Ciburuy	05	0.559	
	214 Suryana	Ciburuy	05	0.480	1.039
355	83 Suta	Ciburuy	05	0.500	
356	154 Suta S	Ciburuy	05	0.780	
357	194 Sutono	Ciburuy	07	0.470	
	291 Sutono	Ciburuy	07	0.019	
	292 Sutono	Ciburuy	07	0.016	
	308 Sutono	Ciburuy	07	0.053	0.558
358	453 Tarmah	Ciburuy	07	0.088	
359	674 Tarsin	Ps. Kadu	09	0.086	
360	42 Tata	Ciburuy	05	0.073	
361	231 Tatang	Cirateun	02	0.069	
362	672 Tatang Emid	Ps. Kadu	09	0.030	
363	559 Tati Sumarna	Ciengang	08	0.123	
364	89 Teten	Ciburuy	05	0.126	
365	515 Titi B. Eye	Ciengang	08	0.072	
366	232 Titin	Ciburuy	05	0.009	
	433 Titin	Ciburuy	05	0.085	0.094
367	637 Toha	Ps. Kadu	09	0.030	
368	409 Toto Tarmaja	Ciburuy	07	0.150	
369	45 Tyaya	Ciburuy	05	0.070	
370	137 Uat	Ciburuy	06	0.140	
	467 Uat	Ciburuy	06	0.042	0.182
371	512 Uba	Ciengang	08	0.028	
372	227 Uben	Ciengang	08	0.260	
	518 Uben	Ciengang	08	0.072	
	524 Uben	Ciengang	08	0.119	0.451
372	421 Uca Mimi	Ciburuy	07	0.105	
373	36 Uceh	Cirateun	02	0.051	

No.	Name of Beneficiaries	Address		Land area (ha)	Total
		Kampung	RW		
374	190 Udes	Ciburuy	07	0.320	
	422 Udes	Ciburuy	07	0.105	0.425
375	418 Uhe	Ciburuy	07	0.148	
376	150 Uju	Ciburuy	05	0.320	
377	260 Ukar	Ciburuy	07	0.068	
378	38 Ukro	Ciburuy	05	0.022	
	80 Ukro	Ciburuy	05	0.060	
	328 Ukro	Ciburuy	05	0.066	0.148
379	604 Umen	Ps. Kadu	09	0.029	
	614 Umen	Ps. Kadu	09	0.048	
	680 Umen	Ps. Kadu	09	0.120	0.197
380	444 Umir	Ciburuy	07	0.084	
381	325 Uneb	Ciengang	08	0.048	
	329 Uneb	Ciengang	08	0.080	
	487 Uneb	Ciengang	08	0.042	0.171
382	498 Unu	Ciengang	08	0.273	
383	520 Unu B. Suma	Ciengang	08	0.175	
384	57 Uun	Ciburuy	05	0.011	
	309 Uun	Ciburuy	07	0.046	0.058
385	334 Uya	Ciburuy	06	0.029	
	383 Uya	Ciburuy	06	0.023	
	468 Uya	Ciburuy	06	0.050	0.102
386	5 Uye S	Cirateun	02	0.098	
387	590 Uyu Taid	Ciburuy	05	0.630	
388	25 Uyung	Ciburuy	05	0.072	
	40 Uyung	Ciburuy	05	0.096	
	41 Uyung	Ciburuy	05	0.026	
	159 Uyung	Ciburuy	05	0.800	0.994
389	187 Wardi	Ciburuy	07	0.400	
390	362 Warnita	Ciburuy	06	0.043	
391	611 Warya	Ps. Kadu	09	0.155	
	675 Warya	Ps. Kadu	09	0.056	0.211
392	519 Wati	Ciengang	08	0.175	
	173 Wati	Ciengang	08	0.155	0.330
393	155 Wawan	Ciburuy	05	0.340	
394	302 Wiwi	Ciburuy	07	0.550	
	306 Wiwi	Ciburuy	07	0.032	
	314 Wiwi	Ciburuy	07	0.021	0.603
395	43 Yana	Ciburuy	05	0.192	
396	437 Yanti	Ciburuy	07	0.096	
397	431 Yayah	Ciburuy	07	0.007	
398	76 Yeye	Ciburuy	05	0.068	
	211 Yeye	Ciburuy	05	0.024	0.092
399	397 Yoyo	Ciburuy	07	0.131	
400	549 Yuyu	Ciburuy	05	0.095	
	658 Yuyu	Ciburuy	05	0.017	0.111
401	630 Yuyun	Ps. Kadu	09	0.108	
Total				72.922	

Beneficiaries: 401 farmers

Average operating farm size 0.21 ha

Typical operating farm size 0.12 ha

Composition of operating size:

Farm size	No. of h.h.	%
> 0.025 ha	38	9%
0.025 - 0.05 ha	43	11%
0.05 - 0.075 ha	57	14%
0.075 - 0.1 ha	36	9%
0.1 - 0.15 ha	62	15%
0.15 - 0.2 ha	50	12%
0.2 - 0.3 ha	47	12%
0.3 - 0.4 ha	25	6%
0.4 - 0.5 ha	14	3%
0.5 - 0.75 ha	19	5%
0.75 - 1.0 ha	8	2%
1.0 - 1.5 ha	2	0%
Total	401	100%



**Table II-37 Beneficiaries of Tanjungkarya Model Area (1/5)**

No.	Name of Beneficiaries	Address			Land Area			Total	
		Kampung	RT	RW	Block	No. Persil	Area (ha)		
1	1	A. Toto	Paseh	05	02	Cibuntu	82	0.143	
2	27	Abas	Cijusul			Ps. Muncang	49	0.214	
3	44	Aca/Dede	Potong Conto	02	03	Ps. Muncang	49	0.229	
4	56	Acap	Cibuntu			Nangela		0.450	
5	17	Ace/Titing	Cilame			Ps. Muncang	49	0.714	
6	24	Adam	Awiligar	03	06	Cidadali Lebak		0.286	
7	9	Ade	Batu Nanceb			Tanjung	50	0.286	
8	18	Ade A	Awiligar			Awiligar	47	0.186	0.400
47	47	Ade A	Awiligar			Awiligar	47	0.214	
9	25	Ade E.	Cisede	02	07	Cidadali Lebak		0.214	
10	11	Ade Endih	Ciseke			Tanjung	50	0.107	
11	63	Ade Iji	Lame			Ps. Muncang	49	0.429	
12	52	Ade Wahid	Lame			Ps. Muncang	49	0.429	
13	26	Ade Warsa	Bt. Nanceb			Ps. Muncang	49	0.143	
14	14	Aen	Paku Haji	01	05	Ps. Muncang	49	0.257	
15	46	Aep	Paseh			Nangela		0.200	
16	65	Aep/Atik	Bb. Aini			Ps. Muncang	49	0.286	
17	21	Agus	Awiligar			Awiligar	47	0.214	
18	75	Agus/Adin	Rantun			Ps. Muncang	49	0.257	
19	96	Ahim	Cipulus			Cibuntu		0.500	
20	11	Ahmad	Cidadali	02	08	Cidadali Lebak		0.250	
21	35	Ai Patimah	Rantun	01	03	Ps. Muncang	49	0.243	
22	17	Aid	Cidadali	02	08	Cidadali Lebak		0.214	
23	29	Aja	Bj. Sirna	01	03	Ps. Muncang	49	0.229	0.764
36	36	Aja	Bj. Sirna			Cibuntu	82	0.143	
102	102	Aja	Bj. Sirna			Cibuntu		0.250	
34	34	Aja	Bj. Sirna			Cibuntu	70	0.143	
24	22	Ajam	Tanjung			Tanjung	50	0.214	
25	16	Aji	Tanjung			Tanjung	50	0.357	
26	45	Ajin	Tanjung			Cidadali Lebak		0.214	0.429
6	6	Ajin	Tanjung			Tanjung	50	0.214	
27	12	Akis	Awiligar			Awiligar	47	0.357	
28	14	Akub	Cidadali	02	08	Cidadali Lebak		0.214	
29	87	Amah	Cidadali			Cibuntu		0.500	0.643
51	51	Aman	Cidadali	02	08	Cidadali Lebak		0.143	
30	55	Amas	Cibuntu			Nangela		0.350	
31	43	Amin	Awiligar	03	06	Cidadali Lebak		0.214	
32	52	Amin	Cijengkol			Nangela		0.350	1.000
97	97	Amin	Cijugul			Cibuntu		0.650	
33	22	Amir	Cidadali	02	08	Cidadali Lebak		0.179	0.393
29	29	Amir	Cisede	02	07	Cidadali Lebak		0.214	
34	19	Amung	Pangkalan	05	02	Cibuntu		0.500	
35	3	Ana	Paseh	05	02	Cibuntu	80	0.571	1.071
90	90	Ana	Paseh			Cibuntu		0.500	
36	32	Ana	Ps. Muncang	03	04	Ps. Muncang	49	0.086	
37	73	Andang	Pt. Bonto			Ps. Muncang	49	0.114	
38	91	Andi	Paseh			Cibuntu		0.350	
39	31	Andi	Ps. Muncang			Awiligar	47	0.143	
40	74	Angrum	Pt. Bonto			Ps. Muncang	49	0.200	
41	42	Anoh	Samarang Awi			Awiligar	47	0.179	
42	48	Apid	Cidadali	13	08	Ps. Muncang	49	0.143	
43	49	Apid	Majalaya			Awiligar	47	0.286	
44	58	Apip	Cibuntu			Nangela		0.500	
45	15	Apud	Paku Haji			Tanjung	50	0.257	
46	10	Arum	Paku Haji			Tanjung	50	0.257	
47	25	Asah	Bj. Sirna		03	Ps. Muncang	49	0.193	
48	5	Asep	Cidadali	02	08	Cidadali Lebak		0.429	
49	37	Asid	Cisede	02	07	Cidadali Lebak		0.250	
50	16	Atang	Awiligar			Awiligar	47	0.429	
51	36	Atang	Cisede	02	07	Cidadali Lebak		0.214	
52	21	Ateng	Cidadali	01	08	Cidadali Lebak		0.714	
53	36	Ateng	Tanjung	01	04	Ps. Muncang	49	0.229	
54	12	Atikah	Pangkalan	05	02	Cibuntu		0.200	
55	88	Atin	Cibangawa			Cibuntu		0.250	
56	4	Ato	Cijengkol	05	02	Cibuntu	80	0.143	
57	10	Awan	Tanjung			Tanjung		0.250	
58	39	Ayet	Tanjung	01	04	Ps. Muncang	49	0.214	
59	23	Barna	Cibulakan			Cibuntu		0.357	
60	57	Barna	Ps. Muncang	03	04	Ps. Muncang	49	0.200	
61	19	Barna	Cidadali	01	08	Cidadali Lebak		0.714	
62	53	Dadi	Bb. Pt. Conto	03	06	Ps. Muncang	49	0.257	

**Table II-37 Beneficiaries of Tanjungkarya Model Area (2/5)**

No.	Name of Beneficiaries	Address			Land Area			
		Kampung	RT	RW	Block	No. Persil	Area (ha)	Total
63	31 Dayat/Suhada	Cilame			Cibuntu	70	0.179	
64	86 Dede	Samarang Awi			Cibuntu		0.350	
65	30 Didi	Tanjung			Tanjung	50	0.429	
66	33 Didi	Awiligar			Awiligar	47	0.357	
67	19 Didin	Awiligar			Awiligar	47	0.143	
68	18 Diman	Tanjung	01	04	Ps. Muncang	49	0.143	
69	21 Ebes	Bongkor			Ps. Muncang	49	0.179	
	47 Ebes	Bongkor			Cidadali Lebak		0.429	0.607
70	1 Edi	Cidadali	02	08	Cidadali Lebak		0.214	
71	6 Edi Sam	Tanjung			Tanjung		0.150	
72	39 Eje	Cijugul			Awiligar	47	0.214	
73	8 Ekan	Paseh	05	02	Cibuntu		0.214	
74	24 Eli	Babakan			Cibuntu		0.286	
	14 Eli	Babakan			Cibuntu		0.143	0.429
75	10 Elim	Cidadali	02	08	Cidadali Lebak		0.214	
	50 Elim	Cidadali	02	08	Cidadali Lebak		0.571	0.786
76	79 Eman	Cibuntu			Cibuntu		0.450	
77	22 Emen	Ps. Muncang	03	04	Ps. Muncang	49	0.177	
78	51 Emes	Bb. Pt. Conto	04	06	Ps. Muncang	49	0.114	
79	47 Emoh H.	Paseh			Nangela		0.500	
80	61 Empin	Cijengkol			Ps. Muncang	49	0.179	
81	13 Emud	Ps. Muncang	03	04	Ps. Muncang	49	0.286	
82	32 Enang/Salian	Pakuhaji			Cibuntu	70	0.179	
83	92 Encang	Pakohaji			Cibuntu		0.650	
84	20 Encri	Tanjung			Tanjung	50	0.214	
	14 Encri	Tanjung			Tanjung		0.450	0.664
85	52 Endan	Cidadali			Awiligar	47	0.186	
86	2 Endang	Cidadali	02	08	Cidadali Lebak		0.714	
87	50 Endang	Pakohaji			Nangela		0.250	
88	28 Endang	Rantum	02	03	Ps. Muncang	49	0.214	
89	23 Endi	Potong Conto	02	03	Ps. Muncang	49	0.357	
90	44 Endih	Cisere			Awiligar	47	0.179	
91	3 Endin	Tanjung			Tanjung	50	0.257	
92	5 Ending	Awiligar			Awiligar	47	0.357	
93	81 Endun	Cibuntu			Cibuntu		0.750	
94	46 Endun	Potong Conto			Ps. Muncang	49	0.429	
95	29 Engkoh	Citaman			Awiligar	47	0.179	
96	26 Engkos	Tanjung			Awiligar	47	0.143	
97	40 Engkun	Cidadali			Awiligar	47	0.179	
98	40 Eni. S	Pangkalan			Cibuntu	70	0.271	
99	12 Entim	Cidadali	02	08	Cidadali Lebak		0.143	
100	76 Entin	Cijengkol			Cibuntu		0.450	
101	54 Enting	Cidadali	01	08	Cidadali Lebak		0.250	
102	103 Enur	Cibulakan			Cibuntu		0.450	
103	24 Enyang	Potong Conto			Tanjung	50	0.286	
104	2 Epin	Paseh	05	02	Cibuntu	82	0.429	
105	33 Epud	Gerendung			Cibuntu	70	0.357	
106	33 Eras	Cisede	02	07	Cidadali Lebak		0.571	
107	7 Eroh	Cidadali	02	08	Cidadali Lebak		0.500	
108	49 Erom	Cidadali	13	08	Ps. Muncang	49	0.286	
109	25 Ganda	Tanjung			Awiligar	47	0.250	
	23 Ganda	Tanjung			Tanjung	50	0.250	0.500
110	28 H. Acu	Paseh			Cibuntu		0.286	
111	6 H. Aisah	Cidadali	01	02	Cidadali Lebak		1.000	
112	15 H. Midin	Awiligar			Awiligar	47	1.000	
113	17 H. Miptah	Pangkalan			Cibuntu		0.229	
114	45 H. Nurdin	Bongkor			Awiligar	47	0.214	
115	22 H. Odah/Idi				Cibuntu		0.357	
116	25 H. Oto	Mispalah			Cibuntu		0.143	
117	38 H. Sadar	Cilame			Cibuntu	70	0.429	
	39 H. Sadar	Cilame			Cibuntu	70	0.429	0.857
118	78 H. Sadar	Sukajadi			Cibuntu		0.900	
119	27 H. Uas	Pangkalan	05	02	Cibuntu		0.571	
120	4 Halimah	Cidadali	02	08	Cidadali Lebak		0.429	
121	15 Harun	Tanjung			Tanjung		0.500	
122	2 Herman	Awiligar			Awiligar	47	0.171	
123	11 Holisoh	Rh.Mubarok			Cibuntu		0.193	
124	18 Ian	Cidadali	02	08	Cidadali Lebak		0.214	
125	9 Ian R	Cidadali	02	08	Cidadali Lebak		0.214	
126	20 lbam	Tanjung	01	04	Ps. Muncang	49	0.357	
127	12 Ichi	Bt. Nanceb			Tanjung	49	0.257	

**Table II-37 Beneficiaries of Tanjungkarya Model Area (3/5)**

No.	Name of Beneficiaries	Address			Land Area			Total	
		Kampung	RT	RW	Block	No. Persil	Area (ha)		
128	13	Idan	Cidadali	02	08	Cidadali Lebak		0.143	0.807
	34	Idan	Cidadali			Ps. Muncang	49	0.214	
	51	Idan	Cidadali			Nangela		0.450	
129	100	Idang	Cipulus			Cibuntu		0.250	0.429
130	104	Idi	Cibuntu			Cibuntu		0.350	
131	49	Idi Ineh	Pakohaji			Nangela		0.500	
132	4	Idin	Awiligar			Awiligar	47	0.229	
133	37	Iding Syamsudin	Tj. Singar	02	04	Ps. Muncang	49	0.857	
134	27	Ido	Cisede	02	07	Cidadali Lebak		0.143	
135	41	Idid	Bojong	03	01	Cidadali Lebak		0.143	
136	30	Iji	Cidadali	04	08	Cidadali Lebak		0.214	
137	70	Iji	Pt. Bonto			Ps. Muncang	49	0.214	
138	27	Ijin	Potong Conto			Awiligar	47	0.179	
139	49	Iki	Engkol	01	07	Cidadali Lebak		0.143	
140	47	Ilah	Ps. Muncang	02	04	Ps. Muncang	49	0.214	
141	21	Imas	Pangkalan	05	02	Cibuntu		0.286	0.429
	16	Imas	Pangkalan			Cibuntu		0.143	
142	8	Inan	Cidadali	02	08	Cidadali Lebak		0.271	0.357
143	77	Indi Dayat	Sukajadi			Cibuntu		0.850	
144	50	Iran	Tanjung			Awiligar	47	0.143	
	14	Iran	Tanjung			Tanjung	50	0.214	
145	60	Iri	Lame	02	06	Ps. Muncang	49	0.143	0.571
146	3	Iri	Tanjung	01	04	Tanjung	49	0.181	
147	68	Irin	Gadog			Ps. Muncang	49	0.200	
148	59	Irod	Bb. Pt. Conto			Ps. Muncang	49	0.257	
149	10	Iron	Tj. Singar	02	04	Tanjung	49	0.314	
150	46	Iti	Bongkor			Awiligar	47	0.214	
151	32	Iyah	Bongkor			Awiligar	47	0.271	
152	23	Iyah	Makam			Awiligar	47	0.200	
153	55	Iyam	Ps. Muncang	03	04	Ps. Muncang	49	0.179	
154	33	Iyam	Tanjung	01	04	Ps. Muncang	49	0.357	
155	85	Iyam Eje	Tanjung			Cibuntu		0.500	
156	44	Iyo	Awiligar	03	06	Cidadali Lebak		0.143	
157	5	Iyoh	Tanjung			Tanjung	50	0.214	
158	93	Jae	Samarang			Cibuntu		0.600	
159	42	Jaja	Potong Conto	02	03	Ps. Muncang	49	0.143	
160	42	Jajang	Awiligar	03	06	Cidadali Lebak		0.286	0.571
	7	Jajang	Awiligar			Awiligar	47	0.286	
161	9	Jajang R	Pangkalan	05	02	Cibuntu		0.143	
162	89	Jali	Cibangawa			Cibuntu		0.200	
163	76	Jojob	Bj. Sirna	02	03	Ps. Muncang	49	0.229	
164	30	Juhro/Dayat	Gerendung	05	01	Cibuntu	70	0.179	
165	16	Juju	Cijugul			Ps. Muncang	49	0.086	
166	26	Juju	Cisede	02	07	Cidadali Lebak		0.250	
167	66	Karim	Lame	02	06	Ps. Muncang	49	0.179	
168	29	Karsono	Paseh			Cibuntu		0.250	
169	35	Karta	Cisede	02	07	Cidadali Lebak		0.143	
170	50	Kayah	Cidadali	13	08	Ps. Muncang	49	0.171	
171	11	Komadin	Tanjung			Tanjung		0.250	
172	56	Komar	Bb. Pt. Conto		06	Ps. Muncang	49	0.171	
173	8	Komar	Citaman			Tanjung		0.250	
174	20	Komar	Pangkalan	05	02	Cibuntu		0.200	
175	101	Kosim	Cijugul			Cibuntu		0.600	
176	18	Kunyang	Pangkalan			Cibuntu		0.257	
177	20	Lili	Awiligar			Awiligar	47	0.214	
178	84	Lili	Bj. Sirna			Cibuntu		0.200	
179	35	Lilis	Bongkor			Awiligar	47	0.186	
180	16	M. Oyo	Batu Nanceb			Tanjung		0.750	
181	26	Magdi	Mispalah			Cibuntu		0.179	
182	75	Maja	Rantun			Cibuntu		0.400	
183	1	Mama	Tanjung			Tanjung	50	0.214	
184	7	Mamad	Tanjung			Tanjung		0.850	
185	38	Maman	Awiligar	03	06	Cidadali Lebak		0.214	0.500
	6	Maman	Awiligar			Awiligar	47	0.286	
186	26	Maman	Citaman			Tanjung	50	0.257	
187	30	Man	Ps. Muncang	02	04	Ps. Muncang	49	0.179	
188	29	Masro	Citaman			Tanjung	50	0.214	
189	20	Mastur	Cidadali	01	08	Cidadali Lebak		0.571	
190	48	Miji	Awiligar	02	06	Cidadali Lebak		0.214	0.414
	17	Miji	Awiligar			Awiligar	47	0.200	
191	51	Mimi	Cidadali			Awiligar	47	0.257	
192	18	Mkomadin	Tanjung			Tanjung	50	0.257	



**Table II-37 Beneficiaries of Tanjungkarya Model Area (4/5)**

No.	Name of Beneficiaries	Address			Land Area			Total
		Kampung	RT	RW	Block	No. Persil	Area (ha)	
193	11	Moneh			Awiligar	47	0.214	
194	62	Mukdi	Lame	02 06	Ps. Muncang	49	0.207	
195	55	Nana	Awiligar	03 06	Cidadali Lebak		0.214	
196	57	Nandi	Cibuntu		Nangela		0.750	
197	53	Nata	Cidadali	02 08	Cidadali Lebak		0.243	
198	95	Nooh	Rantun		Cibuntu		0.450	
199	13	Nunung	Pangkalan		Cibuntu		0.257	
200	4	Nurjaman	Cijugul	04 02	Tanjung	49	0.243	
201	10	Ny. Horiah	Rh.Mubarok	05 02	Cibuntu		0.143	
202	8	Obor	Lembang	03 05	Tanjung	49	0.179	
203	54	Oboy	Ps. Muncang	03 04	Ps. Muncang	49	0.200	
204	3	Obur	Cidadali	02 08	Cidadali Lebak		0.214	
205	40	Odi	Ciparay		Ps. Muncang	49	0.214	
	25	Odi	Citaman		Tanjung	50	0.429	0.643
206	99	Odin	Cijugul		Cibuntu		0.450	
207	13	Odin	Tanjung		Tanjung	50	0.229	
208	41	Odong	Tanjung	01 04	Ps. Muncang	49	0.229	
209	28	Oeru	Tanjung		Tanjung	50	0.214	
210	94	Ohan	Tanjung		Cibuntu		0.300	
211	6	Oleh	Pangkalan	05 02	Cibuntu	83	0.129	
212	38	Olib	Paku Haji	01 05	Ps. Muncang	49	0.257	
	2	Olib	Paku Haji		Tanjung	50	0.286	0.543
213	34	Oman	Makam		Awiligar	47	0.186	
214	14	Ondi	Awiligar		Awiligar	47	0.200	
	5	Ondi	Awiligar	05 02	Cibuntu	83	0.114	0.314
215	37	Onih	Gerendung		Cibuntu	70	0.214	
216	64	Osid	Bb. Aini		Ps. Muncang		0.229	
217	48	Osin	Ps. Muncang		Awiligar	47	0.250	
218	31	Osin/Aisah	Rantun	04 03	Ps. Muncang	49	0.214	
219	13	Oto	Awiligar		Awiligar	47	0.357	
220	80	Parman	Paseh		Cibuntu		0.350	
221	19	Pudim	Tanjung	01 04	Ps. Muncang	49	0.186	
222	53	Pudin	Tanjung		Nangela		0.500	
223	45	Rendi	Paseh		Nangela		0.250	
224	31	Rima	Tanjung		Tanjung	50	0.214	
225	39	Rohaya	Awiligar	02 06	Cidadali Lebak		0.214	
226	43	Rohmah/Dedi	Potong Conto	02 03	Ps. Muncang	49	0.189	
227	32	Rohman	Cidadali	03 08	Cidadali Lebak		0.143	
228	41	Rohmat	Bongkor		Awiligar	47	0.357	
229	17	Rohya	Tanjung		Tanjung	50	0.243	
230	24	Rokayah	Makam		Awiligar	47	0.229	
231	21	Rosidin	Tanjung		Tanjung	50	0.243	
232	1	Ruhaya	Awiligar		Awiligar	47	0.214	
233	38	Ruma	Tanjung		Awiligar	47	0.257	
234	52	Sama	Cidadali	02 08	Cidadali Lebak		0.143	
235	12	Sanah	Batu Nanceb		Tanjung	50	0.257	
236	7	Sari	Tanjung		Tanjung	50	0.214	
237	8	Satia	Awiligar		Awiligar	47	0.250	
238	40	Sayi D.B	Awiligar	03 06	Cidadali Lebak		0.214	
239	8	Sayid	Awiligar		Tanjung	50	0.286	
240	46	Sayid Haerudin	Awiligar	03 07	Cidadali Lebak		0.214	
241	22	Seli	Awiligar		Awiligar	47	0.429	
242	24	Sodik	Lame		Ps. Muncang	49	0.179	
243	28	Sulaeman	Cisede	02 07	Cidadali Lebak		0.250	
244	4	Sumarna	Tanjung		Tanjung	50	0.243	
245	31	Sumarni	Cidadali	04 08	Cidadali Lebak		0.179	
246	3	Suratman	Awiligar		Awiligar	47	0.171	
247	15	Tatang K.H	Cidadali	02 08	Cidadali Lebak		0.143	
248	23	Titing	Cidadali	01 08	Cidadali Lebak		0.143	
249	44	Tohir	Pakohaji		Nangela		0.350	
250	35	Toip	Cibulakan		Cibuntu	70	0.143	
251	53	Udin	Ps. Muncang		Awiligar	47	0.214	
252	72	Udin	Pt. Bonto		Ps. Muncang	49	0.229	
253	45	Udin/Icoh	Bongkor		Ps. Muncang	49	0.229	
254	37	Udung	Cijugul		Awiligar	47	0.429	
255	7	Udung	Pangkalan		Cibuntu		0.250	
256	30	Udung	Samarang Awi		Awiligar	47	0.571	
257	28	Uha	Lame		Awiligar	47	0.200	
258	71	Ujen	Pt. Bonto		Ps. Muncang	49	0.179	
259	27	Uju	Cijugul		Tanjung	50	0.229	
260	9	Uju	Pakohaji		Tanjung		0.500	
261	19	Uju	Tanjung		Tanjung	50	0.143	

**Table II-37 Beneficiaries of Tanjungkarya Model Area (5/5)**

No.	Name of Beneficiaries	Address			Land Area			Total
		Kampung	RT	RW	Block	No. Persil	Area (ha)	
262	67 Uju	Lame			Ps. Muncang	49	0.114	
263	58 Uju/Cicuh	Tj. Mulya	03	05	Ps. Muncang	49	0.286	
264	9 Ukar	Awiligar			Awiligar	47	0.229	
265	34 Uloh	Cisede	02	07	Cidadali Lebak		0.571	
266	54 Umu	Tanjung			Nangela		0.500	
267	16 Undi	Cidadali	02	08	Cidadali Lebak		0.714	
268	69 Usa	Rantum			Ps. Muncang	49	0.200	
269	15 Usum	Pangkalan			Cibuntu		0.143	
270	10 Ute	Awiligar			Awiligar	47	0.200	
271	36 Ute	Bongkor			Awiligar	47	0.429	
272	98 Ute	Ciparay			Cibuntu		0.700	
	11 Ute	Ciparay			Tanjung	49	0.257	0.957
273	13 Uto K.	Tanjung			Tanjung		0.850	
274	9 Uun/Iyom	Citaman			Tanjung	49	0.114	
275	15 Wawan	Cijugul			Ps. Muncang	49	0.179	
276	48 Yaya	Paseh			Nangela		0.750	
277	43 Yayan	Samarang Awi			Awiligar	47	0.286	
278	5 Yayan	Tanjung	01	04	Tanjung	49	0.214	
279	12 Yoyoh	Tanjung			Tanjung		0.300	
	Total						89.776	

Beneficiaries 280 farmers

Average farm size 0.28 ha

Typical farm size 0.25 ha

Composition of operating size:

Farm size	No. of h.h.	%
> 0.1 ha	2	1%
0.1 - 0.15 ha	33	12%
0.15 - 0.2 ha	32	11%
0.2 - 0.25 ha	71	25%
0.25 - 0.3 ha	45	16%
0.3 - 0.4 ha	24	9%
0.4 - 0.5 ha	23	8%
0.5 - 0.6 ha	20	7%
0.6 - 0.7 ha	7	3%
0.7 - 0.8 ha	11	4%
0.8 - 1.0 ha	8	3%
1.0 - 2.0 ha	3	1%
Total	279	100%

**Table II-38 Beneficiaries of Gekbrong Model Area (1/3)**

No.	Name of beneficiaries	Address		Area (ha)	Land tenure status	Land owner	Estate crop
		Kampong	RT/RW				
1	133	Abas	Kp. Loji	09/02	0.50	Tenant	
2	17	Aceng	Kp. Loji	31/02	0.18	Tenant	Desa land
3	37	Acep	Kp. Loji	29/02	0.25	Own-land	
4	49	Acep Jowo	Kp. Loji	31/02	0.50	Own-land	
5	25	Adang	Kp. Loji	09/02	0.18	Tenant	Desa land
6	69	Ade (A)	Kp. Loji	07/02	0.50	Own-land	
7	96	Ade (B)	Kp. Loji	08/02	0.25	Own-land	
8	126	Ade (C)	Kp. Loji	09/02	0.50	Tenant	
9	135	Ade (D)	Kp. Loji	09/02	0.25	Tenant	
10	110	Ade Juhah	Kp. Loji	31/02	0.50	Own-land	
11	45	Agus	Kp. Loji	31/02	0.50	Tenant	
12	11	Aji	Kp. Loji	07/02	0.18	Tenant	Desa land
13	29	Ajid (A)	Kp. Loji	31/02	0.50	Own-land	
14	42	Ajid (B)	Kp. Loji	31/02	0.25	Own-land	
15	145	Ajum	Kp. Loji	09/02	0.25	Tenant	
16	53	Ali	Kp. Loji	29/02	0.50	Tenant	
17	50	Anang	Kp. Loji	09/02	0.50	Own-land	
18	34	Anda (A)	Kp. Loji	31/02	0.25	Own-land	
19	52	Anda (B)	Kp. Loji	09/02	0.50	Own-land	
20	113	Anwar	Kp. Loji	09/02	0.50	Own-land	
21	143	Apad	Kp. Loji	09/02	0.50	Tenant	
22	91	Apud	Kp. Loji	30/02	0.50	Tenant	
23	82	Asep (A)	Kp. Loji	09/02	0.25	Own-land	
24	129	Asep (B)	Kp. Loji	09/02	0.25	Own-land	
25	87	Asep Hioayat	Kp. Loji	31/02	0.25	Tenant	
26	72	Asep Kunci	Kp. Loji	31/02	0.50	Tenant	
27	104	Ata	Kp. Loji	09/02	0.50	Tenant	
28	88	Ayad	Kp. Loji	31/02	0.25	Own-land	
29	99	Ayo (A)	Kp. Loji	08/02	0.25	Own-land	Tea/Clove
30	58	Ayo (B)	Kp. Loji	09/02	0.25	Own-land	
31	132	Bacep	Kp. Loji	09/02	0.50	Own-land	
32	40	Bubun	Kp. Loji	31/02	0.50	Own-land	
	63	Bubun	Kp. Loji	31/02	0.50	Tenant	
33	48	Cece	Kp. Loji	09/02	0.50	Own-land	
34	107	Cecep	Kp. Loji	09/02	0.25	Tenant	
35	92	Dadang	Kp. Loji	31/02	0.25	Tenant	
36	27	Dadang	Kp. Loji	31/02	0.50	Tenant	H. Durachman Tea
37	138	Darmin	Kp. Loji	09/02	0.25	Tenant	
38	80	Didi	Kp. Loji	08/02	0.50	Tenant	
39	81	Didin (A)	Kp. Loji	08/02	0.25	Tenant	Clove
40	60	Didin (B)	Kp. Loji	09/02	0.50	Tenant	
41	33	Didin (C)	Kp. Loji	31/02	0.25	Own-land	
42	76	Didin (D)	Kp. Loji	31/02	0.50	Own-land	
43	23	Dili	Kp. Loji	09/02	0.18	Tenant	Desa land
44	64	Dudin (A)	Kp. Loji	31/02	0.25	Own-land	
45	100	Dudun (B)	Kp. Loji	08/02	0.50	Own-land	Tea
46	56	Dudun (C)	Kp. Loji	09/02	0.50	Own-land	Tea
	131	Dudun (C)	Kp. Loji	09/02	0.25	Own-land	Tea
	15	Dudun (C)	Kp. Loji	09/02	0.18	Tenant	Desa land
47	79	Emim	Kp. Loji	08/02	0.25	Own-land	
48	39	Enan	Kp. Loji	31/02	0.50	Own-land	
49	14	Engkoh	Kp. Loji	09/02	0.18	Tenant	Desa land
50	57	Engkos (A)	Kp. Loji	09/02	0.25	Tenant	Tea/Clove
51	125	Engkos (B)	Kp. Loji	09/02	0.50	Own-land	
52	105	Enip	Kp. Loji	09/02	0.25	Tenant	
53	144	Enung	Kp. Loji	09/02	0.25	Tenant	
54	20	H. Isak	Kp. Loji	09/02	0.18	Tenant	Desa land
55	31	H. Nawawi	Kp. Loji	31/02	0.50	Own-land	
56	103	H. Ridwan	Kp. Loji	09/02	0.25	Own-land	
	137	H. Ridwan	Kp. Loji	09/02	0.25	Own-land	
57	32	H. Sopyan	Kp. Loji	31/02	0.50	Own-land	
58	86	Hambali	Kp. Loji	09/02	0.50	Tenant	
59	38	Handa	Kp. Loji	31/02	0.50	Tenant	

**Table II-38 Beneficiaries of Gekbrong Model Area (2/3)**

No.	Name of beneficiaries		Address		Area (ha)	Land tenure status	Land owner	Estate crop
			Kampong	RT/RW				
60	111	Hendi	Kp. Loji	09/02	0.50	Tenant		
61	83	Iah	Kp. Loji	09/02	0.25	Own-land		
	119	Iah	Kp. Loji	09/02	0.25	Tenant		
62	75	Iding	Kp. Loji	31/02	0.50	Tenant		
63	71	Iid	Kp. Loji	31/02	0.25	Tenant		
64	21	Iim (A)	Kp. Loji	09/02	0.18	Tenant	Desa land	
65	41	Iim (B)	Kp. Loji	31/02	0.50	Tenant		
66	90	Iyes	Kp. Loji	31/02	0.25	Tenant		
67	18	Jaka	Kp. Loji	31/02	0.18	Tenant	Desa land	
	36	Jaka	Kp. Loji	31/02	0.25	Own-land		
	43	Jaka	Kp. Loji	31/02	0.50	Own-land		
	109	Jaka	Kp. Loji	31/02	0.50	Own-land		
68	73	Jamal	Kp. Loji	31/02	0.50	Tenant		
69	140	Juhdi	Kp. Loji	09/02	0.50	Own-land		
70	10	Juli (A)	Kp. Loji	07/02	0.18	Tenant	Desa land	
71	67	Juri (B)	Kp. Loji	07/02	0.50	Tenant	Desa land	
72	66	Kanta	Kp. Loji	31/02	0.50	Own-land		
	123	Kanta	Kp. Loji	31/02	0.50	Tenant		
	93	Katma	Kp. Loji	31/02	0.50	Tenant		
73	74	Kirman	Kp. Loji	31/02	0.50	Tenant		
74	59	Lili	Kp. Loji	07/02	0.50	Tenant		
75	108	Lili	Kp. Loji	29/02	0.25	Own-land		Tea/Colve
76	26	M. Oneng (A)	Kp. Loji	07/02	0.50	Tenant		
77	47	M. Oneng (B)	Kp. Loji	29/02	0.75	Own-land		
78	124	M. Oneng (C)	Kp. Loji	31/02	0.50	Tenant		
79	12	Mamab	Kp. Loji	29/02	0.18	Tenant	Desa land	
80	70	Mamat (A)	Kp. Loji	09/02	0.25	Own-land		
81	112	Mamat (B)	Kp. Loji	07/02	0.25	Own-land		
82	139	Mamat (C)	Kp. Loji	09/02	0.50	Own-land		
83	89	Ma'mun	Kp. Loji	31/02	0.50	Tenant		
84	65	Mansyur	Kp. Loji	08/02	0.50	Tenant		
85	106	Mindar	Kp. Loji	29/02	0.50	Tenant		
86	141	Miroh	Kp. Loji	29/02	0.50	Tenant		
87	28	Moroh	Kp. Loji	09/02	0.50	Tenant	Juji	Tea
88	134	Munir	Kp. Loji	09/02	0.50	Own-land		
89	102	Odih	Kp. Loji	08/02	0.50	Tenant		
90	97	Odik	Kp. Loji	08/02	0.25	Tenant		
91	78	Oding (A)	Kp. Loji	08/02	0.25	Own-land		
92	120	Oding (B)	Kp. Loji	09/02	0.25	Own-land		
93	62	Oding (C)	Kp. Loji	31/02	0.50	Own-land		
94	147	Oim	Kp. Loji	09/02	0.25	Tenant	Desa land	
95	128	Okih	Kp. Loji	09/02	0.25	Tenant		
96	55	Oling	Kp. Loji	09/02	0.50	Tenant		
	142	Oling	Kp. Loji	09/02	0.50	Tenant		
97	24	Oon	Kp. Loji	09/02	0.18	Tenant	Desa land	
98	115	Oyok	Kp. Loji	08/02	0.50	Own-land		
99	127	Patah	Kp. Loji	09/02	0.50	Own-land		
100	130	Pepe	Kp. Loji	29/02	0.25	Own-land		
101	121	Rahman	Kp. Loji	31/02	0.25	Own-land		
102	85	Roni	Kp. Loji	08/02	0.50	Own-land		
103	19	Sadili	Kp. Loji	31/02	0.18	Tenant	Desa land	
	44	Sadili	Kp. Loji	31/02	0.25	Tenant		
	61	Sadili	Kp. Loji	31/02	0.50	Tenant		
104	77	Santoso	Kp. Loji	08/02	0.50	Own-land		
105	136	Saptaji	Kp. Loji	09/02	0.25	Own-land		
106	22	Sarip	Kp. Loji	09/02	0.18	Tenant	Desa land	
107	9	Solih	Kp. Loji	09/02	0.18	Tenant	Desa land	
108	116	Solih Guru	Kp. Loji	09/02	0.25	Own-land		
109	30	Sumarto	Kp. Loji	31/02	0.50	Own-land		Clove
110	114	Suparman	Kp. Loji	08/02	0.50	Own-land		
111	16	Tupah	Kp. Loji	31/02	0.18	Tenant	Desa land	
112	35	Uceh	Kp. Loji	31/02	0.50	Own-land		

**Table II-38 Beneficiaries of Gekbrong Model Area (3/3)**

No.		Name of beneficiaries	Address		Area (ha)	Land tenure status	Land owner	Estate crop
			Kampong	RT/RW				
113	84	Udeh (A)	Kp. Loji	29/02	0.50	Own-land		
114	46	Udeh (B)	Kp. Loji	31/02	0.50	Own-land		
115	98	Udin	Kp. Loji	08/02	0.25	Tenant		
	101	Udin	Kp. Loji	08/02	0.25	Tenant		
116	146	Uloh	Kp. Loji	07/02	0.25	Own-land		
117	95	Umar	Kp. Loji	08/02	0.50	Tenant		
118	94	Usep	Kp. Loji	31/02	0.50	Tenant		
119	13	Usup (A)	Kp. Loji	29/02	0.18	Tenant	Desa land	
120	51	Usup (B)	Kp. Loji	31/02	0.50	Own-land		
	54	Usup (B)	Kp. Loji	31/02	0.50	Tenant		
121	122	Utom	Kp. Loji	09/02	0.25	Own-land		
122	68	Uyan	Kp. Loji	07/02	0.50	Tenant		
123	118	Yadin	Kp. Loji	31/02	0.25	Own-land		
124	117	Yeyeh	Kp. Loji	29/02	0.50	Own-land		
					52.25			

Total of beneficiaries:	120	farmers		Land tenure status	
Average operating size:	0.42	ha		Own-land:	52
Typical operating size:	0.37	ha		Tenant:	43
Composition of operating size:				Desa land:	18
< 0.25 ha	14	farmers		Owner-cum-tenant:	11
0.25 - 0.5 ha	39	farmers		Total	124
0.5 - 1.0 ha	66	farmers			
1.0 - 1.5 ha	5	farmers			
Total	124	farmers			

**Table II-39 Beneficiaries of Langensari Model Area (1/3)**

No.	Name	Area (ha)	No.	Name	Area (ha)		
1	208	A. Suhendi K	0.213	57	171	E. Kusnadi	0.670
2	217	Aang H	0.098	58	27	Ece	0.042
3	167	Abas	0.285	59	166	Eded Rosida	0.135
4	224	Abu	0.084	60	253	Edi	0.421
5	6	Acah Ratmaya	0.690	61	202	Edi Sulaeman	0.447
6	77	Acip Anduth	0.404	62	45	Eem Yayat	0.077
7	264	Adar Haji	1.228	63	23	Elan Otih	0.879
8	267	Ade Berak	1.103	64	72	Elas Nurhadiah	0.133
9	198	Ade Solihin	0.098	65	197	Emar	0.084
	203	Ade Solihin	0.046		242	Emar	0.057
10	60	Adi	0.210	66	200	Eme	0.071
11	244	Adi Wariah	0.140	67	269	Emeh Asip	0.580
12	251	Adis	0.216	68	86	Emik	0.047
13	104	Aem	0.210	69	248	Emin	0.070
14	240	Agus	0.078		133	Emin	0.168
15	175	Ahman	0.100	70	25	Eming	0.034
16	252	Ai Rukmaya	0.070	71	50	Emkah Ahmad	0.347
17	33	Ain Sanu	0.626	72	220	Empon H	0.140
18	180	Aja	0.049	73	7	Empun	0.064
19	186	Ajam	0.169	74	8	Emur bin Marta	0.756
20	256	Ajang	0.084	75	221	Emus	0.070
21	84	Ajum Soma	0.470	76	210	Enan	0.100
22	196	Alin	0.084	77	148	Enda	0.098
23	76	Aman	0.588	78	183	Endah	0.126
24	212	Amar Hidayat	0.732	79	30	Endang Anah	0.056
25	255	Amat	0.140	80	115	Endang Ena	0.066
26	193	Amin Sopriadi	0.078	81	112	Endang Endah	0.100
27	228	Amud	0.179	82	160	Endang M	0.256
28	226	Anah	0.057		174	Endang M	0.072
29	143	Anah Rosim	0.210	83	261	Enem Onok	0.038
30	111	Anang Hidayat	0.279	84	67	Engkun	0.143
31	161	Anda	0.346	85	262	Enok Oyo	0.182
32	40	Anda Yasih	0.306	86	37	Entar	0.084
33	246	Andi Eja	0.043	87	231	Entay Icin	0.210
34	110	Anjum	0.140	88	51	Epon	0.525
35	230	Arim	0.043	89	140	Euis Dedeh	0.042
36	102	Aris	0.350	90	19	Euis Mukti	0.408
	195	Aris	0.064	91	39	Euis Suhamah	0.280
37	90	Armi Sastra	0.012	92	80	Euis Yati	0.070
38	209	Atang	0.195	93	211	Eutik Masitoh	0.928
39	73	Atang Emar	0.106	94	179	Eutik Sukaesih	0.049
40	227	Atim	0.210	95	118	H. Ade	0.331
41	64	Atmita	0.218	96	131	H. Encang	0.250
42	124	Ayat	0.022		22	H. Endang	0.685
43	181	Cece	0.049	97	245	H. Jasip Enah	0.087
44	157	Cich Kamah	0.071	98	223	H. Ondi Rukmana	0.096
45	9	Cucu	0.081	99	206	H. Rosid	0.400
46	31	Dadang Yusuf	0.098	100	55	H. Rukanda	0.182
47	3	Dalmi	0.939	101	137	H. Saepudin	1.742
48	1	Dana	0.432	102	139	H. Sopandi	0.213
	182	Dana	0.257	103	225	H. Sutarma	2.637
	204	Dana	0.042	104	103	H. Tohar Aripin	0.530
49	2	Dani	0.613	105	14	H. Urkinah	0.189
50	254	Darsa	0.250	106	170	Hana Sutisna	0.261
51	229	Darsih	0.540	107	172	Hj. Imas Supinah	0.580
52	13	Darta	0.484	108	108	Hj. Omoh	0.450
53	190	Dede Hanapi	0.100	109	107	Hj. Uce	0.084
54	187	Dedi Supriadi	0.164	110	12	Ibu Cicih	0.192
55	5	Denis Kurniawan	0.789	111	92	Ibu Sopiah	0.910
56	32	Dita Rohanah	0.525	112	11	Ibu Uju	0.162

**Table II-39 Beneficiaries of Langensari Model Area (2/3)**

No.	Name	Area (ha)	No.	Name	Area (ha)		
113	176	Ibuy	0.140	173	199	Nunung Suhana	0.058
114	257	Icih	0.138	174	168	Ny. Nyoman Hendiant	0.117
115	266	Icih Anwar	0.083	175	34	Nyai Cucu	0.089
116	184	Icih Karmita	0.044	176	194	Ocih	0.091
117	149	Icut	0.098	177	122	Odang	0.022
118	48	Idah	0.140	178	189	Oding Kusnadi	0.371
119	78	Idah	0.070	179	62	Ojang	0.145
120	138	Idih Emeh	0.213	180	145	Ojon	0.067
121	113	Ijah Entoy	0.444	181	69	Okom	0.185
122	36	Ikah	0.266	182	66	Omah	0.093
123	250	Ikin	0.140	183	235	Omah Karya	0.210
124	71	Ilah Anih	0.070	184	150	Oman	0.062
125	42	Ima Sowedah	0.070	185	263	Omih Ardi	0.182
126	49	Imas	0.321	186	128	Omo Sukanda	0.111
127	178	Imik Atan	0.042	187	29	Omoh	0.073
128	268	Imin bin Nedi	1.857		85	Omoh	0.047
129	61	Iming	0.140		87	Omoh	0.047
130	258	Inah	0.138	188	127	Onah Karya	0.035
131	239	Inar	0.126	189	237	Onah Oden	0.136
132	105	Inot	0.042	190	271	Oneng H	0.056
133	56	Iran Tosiran	0.143	191	100	Onih	0.070
134	10	Irna	0.148		236	Onih	0.479
135	97	Itang	0.224	192	249	Oon	0.383
136	18	Ius	0.150	193	219	Oyo	0.140
137	222	Iwin Oman	0.042	194	169	Oyo/ Asip	0.414
138	177	Iyar	0.168	195	191	Pai Rati	0.650
139	91	Iyat Camiah	0.154	196	272	R. Rahmat	0.224
140	234	Jaja	0.405	197	130	Rajiman	0.126
141	164	Jaja Euis	0.210	198	218	Ratmanah Anang	0.140
142	93	Joni Elkimos	0.077	199	52	Rina Ruswina	0.111
143	146	Josi	0.324	200	119	Rita	0.084
144	47	Juariah	0.060	201	153	Rj. Kartiwa	0.755
145	109	Jumhadi Icih	0.322	202	101	Rodiah	0.210
146	125	Kacih Atma	0.238	203	88	Rohaeti	0.154
147	57	Kahma	0.406	204	185	Rohaya	0.035
148	4	Karnah	0.934	205	81	Rohman	0.070
149	20	Karnasih	0.347	206	144	Rosidah	0.025
150	68	Karwita	0.750	207	260	Rudi Suprpto	0.180
151	129	Kiwik	0.289	208	214	Rukandi	0.257
152	162	Kuburan Cina	1.500	209	213	Sana	0.070
153	121	Lukaman Cahyadi	0.304	210	53	Sokip	0.120
154	54	Maman	0.098	211	134	Solim B	0.084
155	26	Marna	0.448	212	207	Sri Bintang P	0.289
156	192	Memed	0.014	213	59	Suandi	0.140
157	156	Memed Asep	0.542	214	147	Subyiyantini Hidayat	0.114
158	216	Moh. Rahmat	0.079	215	89	Suhiyat	0.355
159	163	Momon Mimih	0.156	216	41	Sukari Supriadi	0.173
160	44	Moon	0.168	217	126	Sumira	0.100
161	154	MU. Saepudin	1.278	218	74	Sumpena	0.288
162	165	Mukat	0.140	219	94	Sunandi BA	0.230
163	215	Nana	0.058	220	173	Suryo Nugroho	0.180
164	151	Nana Icih	0.126	221	38	Suyanto	0.583
165	79	Nandang	0.070	222	95	Takma Atma	0.744
166	243	Nani	0.070	223	132	Talim	0.140
167	98	Narim	0.326	224	114	Tartyana Irawan	0.378
168	241	Nedi Mamat	0.056	225	265	Tatang Satiman	0.481
169	116	Nengsih Nani	0.213	226	99	Teme	0.210
170	28	Nesih	0.034	227	158	Titi	0.710
171	24	Nonoh	0.234	228	232	Tito	0.715
172	205	Nopi Wartini	0.021	229	136	Tn. Desa	0.518

**Table II-39 Beneficiaries of Langensari Model Area (3/3)**

No.	Name	Area (ha)	No.	Name	Area (ha)		
230	46	Toto	0.140	242	70	Usa	0.120
231	82	Tumawa	0.154	243	35	Usen Kahma	0.462
232	21	Uca Euis	0.264	244	233	Uting	0.052
233	106	Ucen Imdur Insani	0.177	245	96	Uung	0.140
234	63	Ucu	0.112	246	135	Uwat Ana	0.084
235	123	Udin	0.045	247	65	Uyuh	0.252
	188	Udin	0.460	248	75	Warsih	0.270
	259	Udin	0.126	249	43	Warso	0.060
236	141	Ukas Nacih	0.197	250	120	Wati	0.176
237	152	Ukas Noneng	0.160	251	247	Wawan	0.056
238	117	Ukas Suhiyat	0.062	252	159	Winata SM	0.080
239	270	Ukri	0.688	253	83	Winata Umih	0.470
240	201	Uma Supandi	0.071	254	238	Yaya Mini	0.066
241	155	Upi Marya	0.140	255	142	Yaya Sudarya	0.400
				256	58	Yayah	0.140
				257	16	Yayan Suandi	0.105
				258	15	Yoyo	0.140
				259	17	Yoyoh Amas	0.092
						Total	70.808

Total of beneficiaries:	259	farmers
Average operating size:	0.22	ha
Typical operating size:	0.16	ha

Composition of operating size:

Farm size	No. of h.h.	%
> 0.05 ha	23	9%
0.05 - 0.1 ha	56	22%
0.1 - 0.15 ha	45	17%
0.15 - 0.2 ha	26	10%
0.2 - 0.3 ha	37	14%
0.3 - 0.5 ha	32	12%
0.5 - 0.75 ha	24	9%
0.75 - 1.0 ha	9	3%
1.0 - 2.0 ha	6	2%
2.0 - 3.0 ha	1	0%
Total	259	100%