

1. Project Profile and Japan's ODA Loan



Site location map



Above: Coffee (left), cacao (right)
Below: Production road

1.1. Background

After achieving rice self-sufficiency in 1984, Indonesia transferred the focus of agricultural sector development to maintaining this self-sufficiency in rice production and agricultural diversification. Improving the productivity of small-scale and low-income farmers, extending support towards augmenting farm incomes, and promoting poverty measures in rural areas were all identified as priority issues for the agricultural sector.

1.2. Objectives

The aim of this project was to provide support for the cultivation of cash crops in an attempt to increase productivity and raise farm incomes as a result, and simultaneously, to execute a farm road development project as a means of facilitating the transportation of cash crops, with the ultimate goal of contributing to the nation's development goal of reducing poverty.

1.3. Outputs

The project consisted of the following two programs.

(1) Cash Crop Cultivation Support Program

Provide support to low-income farmers in regions where agrarian production is particularly difficult (Special Areas¹), and specifically for the cultivation of cash crops² (farming equipment, fertilizers, agrochemicals, seeds and part of the labor costs necessary for

¹ Special Areas are areas in which low-income farmers are living to which five standards apply (they are: 1) located in eastern Indonesia, 2) are remote, 3) are at high altitudes, 4) are swampy, 5) are arid).

² Decisions on the crops to be cultivated were made in consideration of natural conditions, such as soil and climate, and social conditions, such as market access. Twelve crops were introduced: rubber, coconuts, coffee, cacao, tea, cashew nuts, sweet sorghum, cotton, candlenuts, Pohon Melinjo, pepper and vanilla, although there was some regional variation.

developing the farmland to be provided free of charge during the first year of cropping in conjunction with the dissemination of technology).

(2) Farm Road Development Program

Develop production and commodity roads inside plantations being farmed by small-scale farmers³.

Figure 1: Regions covered by this project (at appraisal)

Circled figures 1-8 refer to the sub-project sites visited during this field survey.

[Eighteen Provinces covered by Cash Crop Cultivation Support Program]



North Sumatra	Central Sulawesi
West Sumatra	South Sulawesi
West Java	Sulawesi Tenggara
Central Java	Maluku
Yogyakarta	Bali
East Java	West Nusa Tenggara
East Kalimantan	East Nusa Tenggara
West Kalimantan	East Timor
North Sulawesi	Irian Jaya

- ① North Tapanuli, North Sumatra (coffee plantation)
- ② Sanggau, West Kalimantan (cacao plantation)
- ③ Ciamis, West Java (cocoa plantation)
- ④ Kuningan, West Java (Pohon Melinjo plantation)

[Nine Provinces covered by Farm Road Development Program]



Aceh	Bengkulu
North Sumatra	West Java
Riau	West Kalimantan
Jambi	South Kalimantan
South Sumatra	

- ⑤ Farm road for oil palm plantation, North Sumatra PT. PN III
- ⑥ Farm road for rubber plantation, West Kalimantan PT. PN XIII
- ⑦ Farm road for rubber plantation, West Java PT. PN VIII
- ⑧ Farm road for oil palm plantation, West Java PT. PN VIII

1.4. Borrower / Executing Agency

The Republic of Indonesia / Ministry of Agriculture, Cash Crop Bureau

³ Production roads are roads that form the main route for transporting harvested crops from small-scale farm holdings to a plantation’s processing factory (4m road, 2m shoulder, 2m ditch). Collection roads are used for harvesting crops on small-scale farm holdings (3m road, 2m shoulder, 2m ditch).

1.5. Outline of Loan Agreement

Loan Amount	4,065 million yen
Loan Disbursed Amount	3,767 million yen
Exchange of Notes	December 1995
Loan Agreement	December 1995
Terms & Conditions	
Interest Rate	2.5%
Repayment Date	30 years
(Grace Period)	(10 years)
Procurement	General untied
Final Disbursement Date	October 2001

2. Results and Evaluation

2.1. Relevance

At appraisal, supporting the production activities of smallholder farmers and improving on-farm incomes were defined as the goals of Indonesia's sixth five-year national development plan (REPELITA VI). The objectives set forth for this project, namely to improve the agricultural productivity of small-scale and low-income farmers and to increase farm income were consistent with the development policies for the agricultural sector outlined in Indonesia's national development plan and were relevant.

The current agricultural sector policy (Agricultural Development Program 2001-2004) is targeting the promotion of agri-businesses and improvements in the income of farmers, which, given its consistency with this project, has ensured the ongoing relevance of this undertaking to the present day.

2.2. Efficiency

2.1.1. Outputs

The plans for the cash crop cultivation support program were flexibly reviewed to reflect mounting needs, with the result that the number of provinces covered by the program was expanded from 18 to 24 and the initially planned 48,600-hectare area was expanded to 130,432 hectares (including edible crops, plantation rehabilitation, and nursery plantations, in addition to the newly added 88,645-hectare area for cash crop cultivation).

In selecting the areas to participate in this program the following three standards were predominantly applied to the aforementioned Special Areas: (1) that they be located contiguous to cash crop processing facilities; (2) that there be prospects for the cultivation area to be expanded to at least 500 hectares, and that access to the provincial capital be favorable so that it be feasible for organizations related to the Ministry of Agriculture to provide technical guidance; and (3) that excluding the poorest villages targeted for aid under special presidential directive, they be selected from among underdeveloped communities. Specifically: (1) an explanation of the project plans was provided to

each of the villages by representatives from either provincial or district governments; (2) a list of candidate farmers / areas from each village was drawn up (CPCL: Calon Petani Calon Lahan); and (3) then reviewed by the project manager who made the final selection decision. The main criteria for the review in (3) were that the farmers owned land and that they be highly motivated to take on the cultivation of the target cash crop. The areas / farmers selected via this process were supplied with seedlings, fertilizers and pesticides (for the first year), plus the tools and funding necessary for land development.

With regard to the farm road development program, some additions and/or changes to scope were made in the provinces covered by the original plans in consequence of plantation level (Project Management Units [PMU] set up within each estate crop company [PT. PN]) adjustments so that the initially planned length of 1,021km (398km of production roads, 623km of commodity roads) in fact became 1,098km (444km of production roads, 654km of commodity roads) – a virtually identical figure.

2.2.2. Implementation Period

The cash crop cultivation support program was completed in March 2001 in consequence of the aforementioned additions and/or modifications to outputs. By contrast, the farm road development project was completed approximately six months behind the initially planned schedule in March 1998. Although initial plans called for the entire project to be completed in September 1998, outputs were modified and/or added to, which resulted in a final completion date of October 2001. The originally planned outputs were accomplished essentially according to the schedule.

2.2.3. Project Costs

Total project costs were initially budgeted at 4,896 million yen (of which Japan's ODA loan covered 4,065 million yen), but the project was completed for 3,767 million yen. Inflation and the additions to project outputs caused local currency costs to balloon. However, the depreciation of the rupiah against the yen consequent upon the Asian currency crisis meant that total project costs were lower than the original budget.

2.3. Effectiveness

(1) General Comments

1) Cash Crop Cultivation Support Program

The Ministry of Agriculture, the project's chief executing agency, has not been monitoring the yields from individual small-scale plantations with sufficient accuracy since project completion⁴. Accordingly, this report examines project outcomes on the basis of increases in croppable areas produced by this project.

⁴ Until the government was decentralized in 2001 agricultural advisors (extension workers) under central government jurisdiction provided on-farm technical guidance and monitored yields in the area, which data they reported to the central government; however, since decentralization most of these workers have been transferred to prefectural governments, and neither provincial governments nor the central government have any detailed reports from the post-completion period.

A comparison of planned and actual cropping areas for major crops is shown in Table 2. As stated in the section on project efficiency, the expansions to project outputs resulted in substantive increases in the area of land available for crop production. However, as regards yield increases, consideration must also be given to the fact that since seedlings usually require between three to five years from planting to begin yielding stable crops⁵, and that not all plants can be harvested due to natural disasters and/or plant pest. Although the field survey found evidence of farms where unit yields were still not being achieved, it is estimated that appropriate outcomes will start to be produced within a few years and that yields will increase.

Table 1: Acreage of Major Crops (Top 5 crops. unit: 1,000 ha)

Crop	Appraisal (A)	Results (B)	Target Achievement Rate B/A
Cotton	21.0	24.2	115%
Cashew nut	10.0	23.8	238%
Cacao	4.3	15.7	365%
Coffee	3.3	9.8	297%
Coconuts	2.0	7.0	350%

For reference, the extent to which the project's contributions was examined using country-level data obtainable from generally-available statistical yearbooks on transitions in the areas of the various crops under cultivation and the results of the development work undertaken via this project. Table 3 shows the areas of all small-scale plantations being cultivated for cash crops throughout Indonesia between 1995 (pre-implementation) and 2001 (the year of project completion). There was a 20-percent increase in the area of land under cultivation for cacao and cashew nuts during this period.

Table 2: Changes in acreage of cash crop plantations nationwide (unit: 1,000 ha)

Crop	1995	2001	Nationwide increase in acreage (A)	Increase produced by this project (B)	B/A
Cotton	N.A.	N.A.	N.A.	24.2	N.A.
Cashew nut	455.9	553.2	97.3	23.8	24.5%
Cacao	428.9	536.0	107.1	15.7	14.7%
Coffee	N.A.	N.A.	N.A.	9.8	N.A.
Coconut	3584.5	3596.3	11.8	7.0	59.3%

Note 1: Central Bureau of Statistics data. Of the target crops, no data was available for sweet sorghum, cotton or Pohon Melinjo.

Note 2: B/A = areas developed via the project÷ (reductions in acreage between 1995-2001)

The project's consulting service for training and spread of technology, which was continued

⁵ The period following seed planting during which the seeds grow and up to the point that they become harvestable is known as the "build-up period". The length of this period will vary depending on natural / regional conditions, such as soil quality and climate, and the amount of fertilizer / care that is employed.

from Phase I, has led to positive impacts.

2) Farm Road Development Program

The fact that both production and commodity roads are in comparatively favorable condition and shorter travel times as compared to prior to project implementation are widely accepted as being an effect of the project. In addition, the project has also prevented the quality of oil palms from deteriorating. (for details see (2) Individual Case Studies).

(2) Individual Case Studies

During the field survey visits were paid to specific cases from the cash crop cultivation support program and the farm road development program in three provinces, namely: North Sumatra, West Kalimantan and West Java (the plantations visited are shown in the table hereunder).

Table 4: Targets for Individual Case Studies

	Cash Crop Cultivation Support	Farm Road Development
North Sumatra	North Tapanuli coffee plantation	PT. PN III oil palm plantation
West Kalimantan	Sanggau cacao plantation	PT. PN XIII rubber plantation
West Java	Ciamis cacao plantation Kuningan Pohon Melinjo plantation	PT. PN VIII rubber plantation PT. PN VIII oil palm plantation

An outline of each case, the effects that had been generated at the time of evaluation was undertaken and the problems farmers are experiencing in their day-to-day activities are given below for each of the cases from the cash crop cultivation support program and the farm road development program.

1) Cash Crop Cultivation Support Program

○North Tapanuli coffee plantation, North Sumatra

In fiscal 1997, 100 hectares of coffee plantation were developed in North Tapanuli via the implementation of the project's cash crop cultivation support program. In 1994, North Tapanuli had 9,400 hectares of coffee plantation. However, this area was expanded through project-based development, etc., and in 2001 had increased to 10,500 hectares. Production in the district has also grown from 6,700 tons/year (0.71 tons/ha) in 1994 to 7,700 tons/year⁶ (0.73 tons/ha) in 2001. According to local farmers, since the bean price has fallen (the current farm shipment price [the price for skinned, washed and dried beans] is around Rp5,000/kg as compared to Rp8,000-9,000/kg [1997-2001]) profits have not increased.

Figure 2: North Tapanuli coffee plantation and a farmer

⁶ The total annual harvest for North Sumatra is 39,200 tons/year.



A newly introduced Arabica coffee plant



A farmer working the project area

○Sanggau cacao plantation, West Kalimantan

In Sanggau, a total 1,065 hectares of cacao plantation was developed via this project: including 865 hectares developed in 1996/97 and 200 hectares developed in 1997/98, and individual farmers were each supplied with 1 hectare of plantation land and farm inputs (fertilizers, pesticide, etc.) for the first year. As of the end of 2002, the district had 2,300 hectares (annual production: 600 tons, i.e. 0.86 tons/ha), which means that just under half of this area was developed under the auspices of this project.

The most recent district producer price for cacao beans (dried) was Rp4,250 per kilo (district agriculture statistics 2002), demonstrating that market conditions are stringent as compared with a few years ago when the price was Rp10,000 per kilo (district agriculture statistics 1998). In consequence, much of the crop (around 70% of gross yield) is being sold to neighboring Malaysia, which buys the beans at the comparatively favorable price. The price of cacao beans is stagnating and many farmers in the project area are attempting to secure their incomes by cultivating and selling pepper and rubber in addition to cacao.

Figure 3: Sanggau cacao plantation and a farmer



Still unripe cacao beans



A farmer working in the project area

○Ciamis cacao plantation, West Java

In Ciamis, in fiscal 1993/94 87 hectares (Lanca Sub-District (Kecamatan Lanca)) and in fiscal 1994/95 565 hectares (Banjar Sari Sub-District (Kecamatan Banjar Sari)) of land were developed prior to the implementation of this project using state budget funds; this project was used to fund the development of 2,450 hectares of cacao plantation land during the years spanning fiscal 1996/97 and fiscal 1999/00 (including 250 hectares targeted for rehabilitation). Some three to five years have subsequently elapsed, and although harvesting has commenced in some areas, insufficient application of fertilizers, etc., means that there is evidence of variation in the development of the

cacao trees. The mean production target that was set up for cacao plantations in this district was 1.8 tons per hectare by year (2010 target), but at evaluation, production on project cacao plantations was in the region of 1.0 tons per hectare per year, and it is believed that it will take several more years to reach the target.

Since fiscal 2000, the farmers have developed approximately 1,200 hectares of cacao plantation, and the provincial and district governments have acknowledged these efforts to have been induced by the development work that was undertaken via this project.

Figure 4: Ciamis cacao plantation and a farmer



Cacao beans



A farmer working the project area

○Kuningan Pohon Melinjo plantation, West Java

Prior to project implementation, central and regional government funds were used to develop approximately 450 hectares of Pohon Melinjo plantation in Kuningan. This project targeted marginal areas (soil not normally suitable for cultivation) within the district, and funded the development of 220 hectares in fiscal 1996/97, 400 hectares in fiscal 1997/98, and 750 hectares (including 250 hectares targeted for rehabilitation) in fiscal 1998/99 (total: 1,370 ha). Since then land has been developed from the central / regional government budget and the farmers are also developing plantation land independently, and the area of Pohon Melinjo plantation for the entire district has now increased to 2,280 hectares. In this district, Pohon Melinjo was originally being cultivated from seed; however, the grafting technique was introduced via this project leading to the dissemination of efficient methods of cultivation. A long, freak dry spell in 1997, after the saplings were planted, caused damage to tree growth, but some harvesting commenced in fiscal 2002 and yields are expected to increase favorably hereafter.

Melinjo crops are not only delivered, as fruit, to emping production plants (there are three small plants in the area), since the fruit lends itself to processing by the farmers, marketing is comparatively easy⁷ and farmer incomes are expected to increase as a result.

Figure 5: Kuningan Pohon Melinjo plantation and a farmer

⁷ There are signs that Melinjo farmers in Kuningan are not just cultivating, harvesting and selling their crops, but that they have already started emping (a snack made from Melinjo) processing and are making direct sales to the major consuming regions of Cirebon and Indramayu. Emping processing can be done by hand (the fruit is reduced to a pulp, shaped into crackers and then dried in the sun), the techniques involved are well within the grasp of the farmers and it is not necessary to introduce any large equipment. Although some mechanically produced emping is available from food manufactures, many people prefer the crunchiness, texture and flavor of handmade product making it highly marketable. Melinjo sells for Rp2,500/kg unshelled and Rp4,000/kg shelled. The post-production price of emping is Rp22,000/kg. Since 4 kilos of unshelled fruit (Rp10,000) is necessary to make approximately 1 kilo of emping (Rp22,000), the added value is high.



Pohon Melinjo trees



A farmer from the project area

2) Farm Road Development Program

In connection with the farm road development program, visits were paid to four areas: the PT. PN III oil palm plantation in North Sumatra, the PT. PN XIII rubber plantation in West Kalimantan, and the PT. PN VIII rubber and oil palm plantations in West Java, in order to check up on the content and status of the production and commodity roads that had been developed in each area and confirm what effects they were having on the local farmers.

A summary of field survey results for each area is given in Table 10. Generally speaking, road surfaces are in comparatively favorable condition, and access on the plantations and to plants within the region is improving.

Table 4: Summary of field survey results for the farm road development program

Item \ Case	Farm road development at PT. PN III oil palm plantation, North Sumatra	Farm road development at PT. PN XIII oil palm plantation, West Kalimantan	Farm road development at PT. PN VIII rubber plantation, West Java	Farm road development at PT. PN VIII oil palm plantation, West Java
Details of development	- Production: 16.0 km - Commodity: 4.0 km	- Production / commodity total: 50.5 km	- Production: 21.00 km - Commodity: 27.20 km	- Production: 50.60 km - Commodity: 46.25 km
Current road conditions and effect onset status	- The surface of the developed section is in comparatively favorable condition. - Access times to the trunk road have decreased (particularly during the wet season).	- The surface of the developed section is in comparatively favorable condition. - Access to the trunk road has improved and truck transportation has become more expedient.	- Despite the time-saving effects, insufficient road maintenance is being undertaken.	- Despite the time-saving effects, insufficient road maintenance is being undertaken.

Note: information was sourced from the results of the field survey

The following sections concern the survey results for each area.

o Farm road development at North Sumatra Estate Crop Company III (PT. PN III, Huta Padang)

Comprising an oil palm production area⁸ and an oil palm production plant, the area is a PIR (Proyek Inti Rakyat: Smallholders Nuclear Estate Project)⁹ oil palm production unit; this project involved

⁸ 1,234ha, 620 dwellings (average 2ha per dwelling) as of the end of fiscal 2002.

⁹ A state-owned or private-sector plantation company develops a cash crop processing plant and its own plantations,

improvements to the production road (16km) and the commodity road (4km) within the oil palm production area. Maintaining and improving efficient distribution between individual producers and the oil palm plant is a prerequisite for PIR management and the improvements to production / commodity roads executed via this project are acknowledged to have contributed to improving this factor.

Figure 6: Production and commodity roads in Huta Padang



A production road feeding into a trunk road

A commodity road feeding into a production road

Examples of the time reduction effects produced by the road improvements are as follows. Prior to the improvements, it took 1 hour in the dry season and 2 hours in the wet season to travel the 2-kilometer section from the trunk road to Pisang village; these times are now around 30 minutes and 1 hour, respectively. Similarly, prior to the road improvements, it took 2 hours in the dry season and 3-4 hours in the rainy season to travel the 3.2-kilometer section from the trunk road to Raya Drok village; these times are now 1 hour and 1-2 hours, respectively.

○ **Farm road development at West Kalimantan Estate Crop Company XIII (PT. PN XIII)**

Under this project, production and commodity roads were developed in two estate crop areas (namely, the rubber plantations in the districts of Sanggau District (Kabupaten Sanggau) and Sintang District (Kabupaten Sintang) under PT. PN XIII jurisdiction.

On the Sintang District (Kabupaten Sintang) estate, rehabilitation / improvements were executed on 50.5 kilometers of production / commodity roads in line with the original plans. Between 1996 and 1997, project funds were used to widen and macadamize the sections (unpaved) within the plantation that had originally been developed by the company. Subsequently, in 2000, the section feeding onto the prefectural highway was resurfaced using Sintang District (Kabupaten Sintang) district government budget funds.

Figure 7: Production and commodity roads on the Sintang District (Kabupaten Sintang) rubber plantation

whilst the government develops several thousand hectares of plantation land owned by small-scale farmers in peripheral areas.



Loading crops on a production road



A general store that has opened on a production road

According to raw rubber (produced in the area) contractors dealing on this section, trucks were not able to pass along the section prior to the surface rehabilitation work and the product formerly had to be transported on foot (taking approximately 1-1.5 hours to travel a 4-km distance). The road was resurfaced by the district government in 2000 resulting in a major reduction in travel time, which is currently just 15 minutes one way. The owner of a general store on the production road opened his store in 1997, the year following the rehabilitation work that enabled trucks to traverse the section. It used to be difficult to obtain daily supplies and the owner is proud of the fact that his store has made the lives of local residents easier.

○Farm road development at West Java Estate Crop Company VIII (PT. PN VIII)

Under this project, improvements were made to production / commodity roads (the work was executed in fiscal 1996/97 on 71.60km of production road and 73.45km of commodity road) in two areas in Banten (now West Java). Farm road development was executed in two areas in the province: Sang Hyang Damar Area in Pandegelang (rubber plantation) and KRAP/KRAL in Lebak (oil palm plantation). Summaries for each area are given below.

- Sang Hyang Damar Area, Pandegelang (a rubber plantation now approaching its twentieth anniversary since development [production peaks at around 18 years]): 21.00km of production road, 27.20km of commodity road.

Figure 8: Production and commodity roads at the Sang Hyang Damar Area rubber plantation



Production road



Commodity road

- KRAP/KRAL, Lebak (an oil palm plantation now approaching its twentieth anniversary since development [production peaks at around 25 years]): 50.60km of production road, 46.25km of

commodity road.

Figure 9: Production and commodity roads at the KRAP/KRAL oil palm plantation



Production road

Commodity road

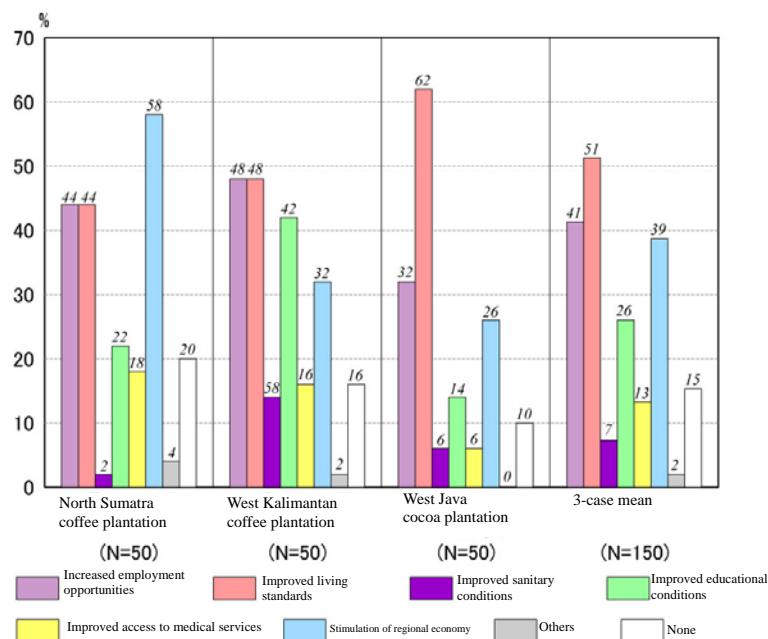
2.4. Impact

(1) Economic Impacts

With regard to the cash crop cultivation support program, farmers have only recently started harvesting their post-project crops and it is thus too early to positively confirm what impact the project has had on regional economies and in improving the living standards of farmers. However, according to the results of the opinion survey¹⁰ that was undertaken in three areas during this survey, beneficiaries have stated that the project has (1) increased job opportunities (41%), (2) increased incomes (51%), and (3) stimulated the region's economy (39%).

**Figure 10: Project-induced economic impacts as confirmed by farmers
(compiled from multiple answers)**

¹⁰ The survey covered 50 farmers in each of the following three areas: North Tapanuli coffee plantation, North Sumatra; Sanggau cocoa plantation, West Kalimantan; Ciamis cocoa plantation, West Java. The farmers were asked about current harvests and economic impacts, any problems they are currently facing and any requests they had to make of the government.



Source: Beneficiaries' Survey

Otherwise, respondents pointed to the fact that improvements in day-to-day travel to areas outside the estates had facilitated access to public facilities such as schools, hospitals and markets, etc. By contrast, in some cases the improvements in access to outside areas have led to crops being shipped to private-sector processing plants, which offer high transaction prices, and not to the processing plants on the plantations, and it is believed that this is contributing to the increases in on-farm income. In the case of the Sangau PT. PN XII rubber plantation in West Kalimantan, large volumes of crop are now being shipped to a plant outside the plantation and not to the processing plant on site.

(2) Environmental Impacts

Since all work undertaken for the cash crop cultivation support program was on a small scale it did not have any conspicuous impact on the environment. Rather, the program is evaluated as having contributed to conserving / stabilizing the ground in target areas because crops were planted on wild land, including steeply sloping areas.

Likewise, the farm road development program involved improvements to existing production and commodity roads (earth roads were upgraded to gravel surfacing). There is some uncertainty regarding the acquisition of land, etc. that was undertaken in connection with this program, but no resident relocation was involved in any of the cases and there have been no reports of any problems.

2.5. Sustainability

(1) Operation and maintenance system, technical capacity and financial status

1) Cash Crop Cultivation Support Program

(Common points)

The agricultural guidance system formerly operated by the central government has been transferred to the regional governments in line with decentralization. Since project completion, cash crop plantations are being operated and maintained by the farmers. Provincial and district governments have set up systems to plan and coordinate these activities, including support for the technical aspects.

(The following are all case-based issues)

North Tapanuli coffee plantation, North Sumatra: The government (bureau of cash crops) has been providing a number of services on an annual basis since the project was completed, including seed distribution, the provision of technical training (offered to ten farmers per year), and seminars (at irregular intervals). Prior to decentralization, the district government had a budget of approximately Rp500 million per annum, but in fiscal 2003, post decentralization, this had fallen to less than half its former level, to around Rp200 million, and it is becoming difficult to make budgetary ends meet, including the services for farmers. On the other hand, a farmers' association - ASPEKTA (North Tapanuli coffee farmer association: *Asosiasi Petani Kopi Tapanuli*; membership approx. 500) was established in 2001, and it is currently working on improving coffee cultivation techniques, the trial production of end products, etc¹¹. This association acts as an intermediary between farmers and the district government and is making efforts to develop coffee cultivation / processing businesses.

Although there is little to differentiate between the services and activities of the district government's cash crop bureau and those of ASPEKTA they are exchanging information and interacting with each other during technical training sessions and seminars.

Sanggau cacao plantation, West Kalimantan: Using funds from the national budget, international aid organizations and the provincial government budget (APBD Tk. I), the provincial government formulates plans and programs relating to the development of estate plantations, supervises projects, provides technical training to provincial and district government staff, and coordinates the various related organizations, etc. The district government uses funds from its budget (APBD Tk. II) to formulate comprehensive plans at the district level, implement projects, and undertake maintenance-related operations post completion. Since this project was completed the maintenance of the cacao plantation has been undertaken by the farmers. Regarding governmental roles before and after the transfer of authority to the regions, whilst everything from planning through implementation and guidance was undertaken via a central government before decentralization, the regional government now plays a major role, and the formulation of plans / programs, their implementation and the provision of technical guidance post-completion are, in concrete terms, being executed by the district government (the advice / coordination of the provincial government is sought in drawing up plans / programs). The district has ten technical advisors who are responsible for all 22 boroughs within Sanggau. In fiscal 2003, the district estate crop bureau was allocated Rp150 million from the district government budget (APBD Tk. II) and Rp400 million from the

¹¹ Specific ASPEKTA activities are as follows: (1) farmer group formation / reinforcement (around 30 households per group), (2) technical training for farmers (outside district training, etc.), (3) dissemination of know-how / skills relating to countermeasures for plant pest, (4) marketing of produce (e.g. production of organically grown coffee), (5) end product processing (some trial production is in progress).

central government budget (APBN).

Ciamis cacao plantation, West Java: Since project completion support activities have been undertaken at the individual district level and not by the provincial government directly. Until authority was transferred to the regions in 2001, plans, funding and personnel flowed from the central government to the provincial government and then to the district government; however, the provincial government now acts as coordinator between central and regional governments, and provides technical guidance and plan coordination functions to the district government.

The task of providing technical guidance to the farmers falls to estate advisors (PPK) and agriculture dissemination workers (PPL) affiliated with the Ciamis District Bureau of Agriculture's planning and dissemination department. At this time, there are 30 PPK (one for each of the district's 30 boroughs) and 182 PPL (each of which is responsible for two of the district's 368 villages). These workers are respectively charged with borough / village level activities, working under a system of mutual cooperation to visit and provide guidance to the villages.

Kuningan Pohon Melinjo plantation, West Java: (The role of the provincial government is identical to that described above for Ciamis.) In 2002, the district used funds from the district government budget (APBD Tk. II) to establish an approximately 2-hectare nursery plantation in Ciomas. The aim was to supply estate farmers with cheap, high quality saplings, and the nursery is cultivating the saplings of key district crops such as Pohon Melinjo, coffee and cloves. The saplings sold by the nursery are some 40 percent cheaper than the going market price¹². This idea is unique to Kuningan and has not been observed in other districts; the district has plans to establish another similar nursery plantation during fiscal 2003. Technical advice to the farmers is given by a total of 35 agricultural advisors (PPL), who cover the district's 29 boroughs providing. These advisors were formerly under central government (ministry of agriculture) jurisdiction but were transferred to the regional government in line with decentralization. Since there are 373 villages in the district, each PPL is responsible for more than ten villages on average, which makes it difficult for them to provide sufficient advice. Accordingly, in addition to the technical advisors assigned to the forestry and agriculture bureaus in each borough, where necessary, the cooperation of technical advisors (on average 5 per borough) from the family planning bureau, health bureau, etc., is enlisted in providing advice on farming techniques, lifestyle and so forth to the farmers.

2) Farm Road Development Program

(Common points)

The production and commodity roads are being maintained by village cooperatives (KUD: Koperasi Desa Unit) constituted of farmers from within the area via traditional mutual assistance activities (Gotong-Royong) and the collection of repair funds on a regular / needs-based basis. However, case-by-case differences were observed in the maintenance activities being undertaken.

(The following are all case-based issues)

¹² To receive saplings from this nursery plantation farmers must meet the following three criteria: (1) belong to a farmers' group, (2) live in an area targeted for poverty relief (which overlap with marginal areas), and (3) be highly motivated to improve productivity.

North Sumatra Estate Crop Company III (PT. PN III, Huta Padang): The PIR region is comprised of (1) an oil palm production plant situated in close proximity to the trunk roads (national / provincial roads), (2) a main road (district road) some several kilometers in length that connects the plant to the estate area, and (3) the estate area (oil palm cultivation area), with the improvements executed under this project covering the production / commodity roads within (3): the estate area. Plant (1) is under the direct management of PT. PN III, whilst (3) is managed by the farmers and the village cooperative (KUD). Accordingly, maintenance works on the production / commodity roads located in estate area (3) are undertaken by the village cooperative. Also, although the main road (2) that links (1) and (3) has (in the case of this area) district road status, due to the fiscal difficulties of Asahan district, maintenance and repairs are in fact being undertaken under cooperative arrangements between the estate crop company and the village collective. In fiscal 2001/02, for example, when damage was sustained to a bridge on the main road near the estate area making it difficult for vehicles to cross, the bridge was rehabilitated using PT. PN III and the KUD funds, each putting up 50 percent of Rp5 million, the total cost of the repairs.

West Kalimantan Estate Crop Company XIII (PT. PN XIII): Road maintenance is broadly divided into routine maintenance, periodic maintenance or needs-based rehabilitation. The former is undertaken via the mutual assistance activities (Gotong-Royong) of the farmers (group), the latter by the estate crop company. Of the roads rehabilitated / improved through this project, in the 6-7 months since project completion even those section not paved by the Regency government have been paved and are in robust condition.

West Java Estate Crop Company VIII (PT. PN. VIII): In principle, since project completion road maintenance work is supposed to be being undertaken by the former group or village collectives (KUD). There was evidence of deterioration on the roads in the area, including uneven paving, and it is hoped that local residents will take an active part in road maintenance works.

(2) Sustainability

The local government's technical guidance system will need to be improved / strengthened (including consolidation of the financial base as a means of enhancing human resources) for the sustainability of the cash crop cultivation support program. Further, in order to ease fluctuations in prices consequent upon the international market conditions, there is evidence that efforts are being made to stabilize income, with farmers undertaking a degree of processing to increase the added value of produce and not merely shipping the crops to market in virgin form. The interest that is being shown in the trial production of end-product coffee among farmers in North Sumatra and in the manufacture of emping in West Java, demonstrates activity and awareness of the need to increase added value, and is considered to be an important key to enhancing the sustainability of economic activities being undertaken on the cash crop plantations that were developed under the auspices of this project. According to interviews with beneficiaries in West Java, transactions in this area continue to be conducted through traders and the margin taken by the traders is holding back any increases in the incomes of the farmers.

With the farm road development program, the roles of local governments, the estate crop companies and the village cooperatives in undertaking maintenance work also need to be clarified.

3. Feedback

3.1. Lessons Learned

None.

3.2. Recommendations

(To the executing agency)

A system needs to be constructed so that the results of analyses of individual success stories and conditions in product markets can be accurately conveyed to the farmers via the regional governments.

In this project, attempts were made to improve the incomes and access to markets of farmers, the majority of whom live in areas difficult to cultivate, and the germs of self-sufficiency have been recognized. In order to promote, it is hoped that a system be constructed to enable the results of analyses of individual success cases, information on commodities markets and so forth to be shared between central and regional governments and communicated, to the farmers by the regional governments.

Comparison of Original and Actual Scope

Item	Planned		Actual	
1. Outputs				
Cash Crop Cultivation Support *Areas by crop are as follows				
Special Aceh	-		1,000 ha	(- ha)
North Sumatra	2,000 ha		4,501 ha	(3,200 ha)
West Sumatra	1,000 ha		4,997 ha	(2,750 ha)
Bengkulu	-		1,000 ha	(- ha)
Jambi	-		1,000 ha	(- ha)
Riau	-		1,000 ha	(- ha)
South Sumatra	-		1,000 ha	(- ha)
West Java	600 ha		5,324 ha	(3,320 ha)
Central Java	1,800 ha		4,753 ha	(2,775 ha)
Special Yogyakarta	600 ha		3,530 ha	(2,002 ha)
East Java	1,800 ha		6,455 ha	(4,330 ha)
East Kalimantan	1,300 ha		4,004 ha	(2,300 ha)
West Kalimantan	1,000 ha		3,367 ha	(2,115 ha)
South Kalimantan	-		1,000 ha	(- ha)
North Sulawesi	1,500 ha		6,390 ha	(4,365 ha)
Central Sulawesi	3,000 ha		9,852 ha	(6,650 ha)
South Sulawesi	5,700 ha		12,954 ha	(11,200 ha)
Southeast Sulawesi	4,500 ha		6,957 ha	(5,850 ha)
Maluku	1,800 ha		3,406 ha	(2,200 ha)
Bali	1,500 ha		5,244 ha	(4,043 ha)
West Nusa Tenggara	7,900 ha		15,079 ha	(12,300 ha)
East Nusa Tenggara	7,000 ha		14,661 ha	(9,995 ha)
East Timor	3,600 ha		6,601 ha	(5,500 ha)
Irian Jaya	2,000 ha		6,357 ha	(3,750 ha)
<i>Total</i>	<i>48,600 ha</i>		<i>130,432 ha</i>	<i>(88,645 ha)</i>
			* Figures for new developments are bracketed	
Farm Road Development	[Production roads]	[Collection roads]	[Production roads]	[Collection roads]
Special Aceh (oil palm, rubber)	54.60 km	123.75 km	As at left	129.13 km
North Sumatra (oil palm, tea)	21.30 km	76.00 km	23.96 km	79.37 km
Riau (oil palm, rubber)	86.56 km	128.74 km	As at left	128.76 km
Jambi (rubber)	22.40 km	33.14 km	41.47 km	0 km
South Sumatra (rubber)	35.00 km	80.00 km	43.55 km	As at left
Bengkulu (oil palm, rubber)	57.93 km	77.00 km	53.00 km	67.00 km
West Java (oil palm, rubber)	50.30 km	24.45 km	71.60 km	89.45 km
West Kalimantan (rubber)	46.50 km	42.77 km	As at left	42.82 km
South Kalimantan (rubber)	23.20 km	37.20 km	As at left	As at left
<i>Total</i>	<i>397.79 km</i>	<i>623.05 km</i>	<i>444.44 km</i>	<i>653.73 km</i>
Consulting services				
Professional A	12 M/M		35 M/M	
Professional B	42 M/M		130 M/M	
<i>Total</i>	<i>54 M/M</i>		<i>165 M/M</i>	
2. Project period				
L/A conclusion	October 1995		December 1995	
Consultant selection	July 1995 - June 1996		-	
Consulting services	July 1996 - September 1998		September 1997 - September 2001	
Cash crop cultivation support	February 1996 - March 1997		July 1996 - March 2001	
Farm road infrastructure	February 1996 - September 1997		July 1996 - March 1998	
Completion	September 1998		October 2001	
3. Project costs				
Foreign currency	41 million yen		175 million yen	
Local currency	4,855 million yen (Rp107,896 million)		3,592 million yen	
Total	4,896 million yen		3,767 million yen	
ODA loan portion	4,065 million yen		3,767 million yen	
Exchange rate	Rp1 = 0.045 yen (1995 time point)			

Note: Scope confirmed in reference to Socio-Economic Impact Evaluation (Aug, 2001).

Development Results for Individual Cash Crops

Crop	Developed area ^{*1}
Rubber	5,990 ha
Coconuts	7,010 ha
Coffee	9,816 ha
Cacao	15,680 ha
Tea	450 ha
Cashew nuts	23,845 ha
Sweet sorghum	1,300 ha
Cotton	24,195 ha
Candlenut	1,300 ha
Nutmeg	50 ha
Pohon Melinjo	2,970 ha
Vanilla	200 ha
Pepper	100 ha
Other ^{*2}	37,526 ha
Total	130,432 ha

*1: Including rehabilitation

*2: Individual nursery plantation crops and areas being cultivated for edible crops

Third Party Evaluator's Opinion on Agricultural Development Project (2)

Mr. Bambang Ismawan
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Bina Swadaya

As the third party evaluator, I will focus my opinions in three points, i.e., criteria on efficiency, impact and sustainability.

Efficiency

This project was implemented in changing political situation, a transformation from centralization to decentralization. In spite of that, the project could be implemented well, moreover, it could achieve more than the target, it's indicate a high efficiency. Management transition to the local government could run well. Yet, it should be acknowledged that many deviations of the planning and implementation indicates the weak planning, besides less maximum capacity to absorb the budget.

Impact

The project implemented on cash crop cultivation support program is reported "...to early to positively confirm what impact the project has had on regional economies and in improving the living standards of farmers". Yet, the results of opinion survey are (1) increased job opportunities (41%), (2) increased income (51%), and (3) stimulated the region's economy (39%).

Observing precisely on macro situation after the crisis, the increasing price of agriculture product is because of the intensifying export and devaluation of rupiah (IDR). As a result, agribusiness products are more revived. Therefore, the opinion survey may not necessarily be the impact of the project; rather it is pushed by macro situation. The project distribution is too wide (much wider than its plan, from 18 provinces to 24 provinces and from 48,600 hectare to 130,432 hectare), while the fund absorbed decrease. It can be depicted that at local level this project is small and the economic impact at regional level is also small.

Sustainability

There is a mutual effect of impact and sustainability. If the impact is so positive to the people, the project sustainability is more assured. Concretely, if the farmers feel that they get benefits of this project, they will sustain it. Based on this concept, a discourse to the farmers is required in order that they are aware of the significance of the project to their needs. In this case, the strengthening and functioning of farmers' association that is effective at local basis is urgently needed.

The project objective is "to provide support for the cultivation of cash crops ... and to execute a farm road development project as a means of facilitating the transportation of cash crops...", related to this, to promote local government's availability (in decentralization era) to continue the project is essential, as the recent political transformation, (local government undergoes changing attitude of fighting more on a project that is quickly yielding than empowering the farmers.

The program sustainability is so determined by the involvement of the stakeholders. Therefore the statement "...with the farm road development program, the roles of local government, the estate crop companies and the village cooperatives in undertaking maintenance work also need to be clarified" really needs to be realized.