

A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

PD-1114-045

IDENTIFICATION DATA

A. REPORTING A.I.D. UNIT: <u>USAID/Indonesia</u> (Mission or AID/W Office) (ES# _____)	B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN? yes <input checked="" type="checkbox"/> slipped <input type="checkbox"/> ad hoc <input type="checkbox"/> Eval. Plan Submission Date: FY <u>88</u> Q <u>1</u>	C. EVALUATION TIMING Interim <input checked="" type="checkbox"/> final <input type="checkbox"/> ex post <input type="checkbox"/> other <input type="checkbox"/> 1st yr = 5/20/89			
D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; If not applicable, list title and date of the evaluation report)					
Project #	Project/Program Title (or title & date of evaluation report)	First PROAG r equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
497-0264	- Provincial Area Development Program I	FY78	4/88	14,330	14,330
497-0276	- Provincial Area Development Program (PDP) II	FY79	12/89	39,250	39,250

ACTIONS

E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR	Name of officer responsible for Action	Date Action to be Completed
Action(s) Required		
1. Presentation to GOI, USAID	M. Brown	8/86
2. Overall evaluation of PDP I and II will be conducted to include analyses of SRI fundings and an assessment of institutional aspects of PDP I and II.	M. Brown	11/87
3. Follow-up beneficiary survey will be conducted in mid-1989 to cover the final years of PDP.	PDP Project Officer	9/89

(Attach extra sheet if necessary)

APPROVALS

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: mo <u>8</u> day _____ yr <u>86</u>			
G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:			
	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer
Signature	<i>Margaret Brown</i>	N/A	<i>Timothy Mahoney</i>
Typed Name	Margaret Brown	N/A	Timothy Mahoney
Date:	<u>28 April 89</u>	Date: _____	Date: <u>29/APR</u>
			Mission or AID/W Office Director
			<i>David Merrill</i>
			David Merrill
			Date: _____

a

H. EVALUATION ABSTRACT (do not exceed the space provided)

The Provincial Area Development Program (PDP) promotes decentralized regional and rural development through a series of relatively small-scale projects planned and implemented at the province, district, subdistrict, and village levels. Typical projects include food crops, estate crops, livestock, fisheries and cottage industries. Its primary beneficiaries are the rural poor.

This evaluation, conducted by Survey Research Indonesia (SRI), attempted to ascertain who benefits from PDP, the amount by which they benefit, and the sustainability of the program's benefits. To determine this, SRI surveyed 27% of all eligible projects (i.e., those which directly benefited recipients) and 2% of all beneficiaries, and interviewed project officials, village heads and non-beneficiaries for the purposes of comparison.

A demographic profile of project beneficiaries revealed that 85% are self employed, 69% are literate in Bahasa Indonesia, 51% are age 40 or older, and 92% are male.

Recognizing that poverty is relative, SRI used several indicators to establish whether PDP is targeting the poorer people in a village. They found that 67% of project beneficiaries appear to be appropriately targeted, 15% could be classified as borderline, and 17% of selected beneficiaries are outside the primary target group. Because indirect beneficiaries were not counted, however, the total benefits of the project may be under-claimed.

At the end of the first year or first harvest of a project activity, the average incremental gain in profits for new and existing beneficiaries together was Rp. 59,000. Overall, the data show that the gains achieved in the first year have generally been sustained until the present time. A cost-benefit ratio (the average annual net gain derived from one unit of direct cost) was calculated to be .69 for the project.

Using net gains over time as a measure of PDP projects' sustainability, it was found that only 10% of PDP project activities have been discontinued with a further 3% expected to be brought to an end. Using beneficiaries' anticipated income and opinions as a measure, it was found that 25% of selected beneficiaries have quit or expect to quit their project activities soon. Using current project status at the beneficiary level, expected status and annual net gain as measures, 45% of beneficiaries are classified as working in high or medium sustainable activities, 24% were in the group "perhaps sustainable," and 31% are in the unsustainable category.

ABSTRACT

I. EVALUATION COSTS

1. Evaluation Team Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
Survey Research Indonesia		373 days	\$169,020	PDP II Project
2. Mission/Office Professional Staff Person-Days (estimate)		45		
		3. Borrower/Grantee Professional Staff Person-Days (estimate)	2	
				4. PSC assistance: 10

COSTS

b

A.I.D. EVALUATION SUMMARY PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)

Address the following items:

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned.

Mission or Office: USAID/Indonesia

Date this summary prepared: April 24, 1988

Title and Date of Full Evaluation Report: Provincial Area Development Evaluation Study, 1986.

Purpose of the Activity Evaluated

The Provincial Area Development Program (PDP) promotes integrated regional and rural development through a series of relatively small-scale projects in food crops, fisheries, livestock, and cottage industries initiated at the province, district, subdistrict, and village levels. The project has three primary objectives: 1) to improve the capability of local governments to undertake rural development activities that improve the productive capacity of the rural poor, 2) to improve the capability of the central government to support local governments in planning, implementing and evaluating activities that improve the productive capacity of the rural poor, and 3) to improve the incomes of the rural poor within the project areas through implementing small sub-project activities.

Purpose of Evaluation and Methodology Used

This evaluation was undertaken to provide a statistically reliable assessment that yielded valid cross-sectoral, provincial and other comparisons. At present USAID's PDP operates in 44 districts in the provinces of Aceh, Bengkulu, West Java, Central Java, East Java, South Kalimantan, Nusa Tenggara Barat and Nusa Tenggara Timur. It assists approximately 400 projects per year in such areas as village credit schemes, institutional strengthening projects, basic crops/agriculture, estate crops, livestock, fisheries, irrigation, small industry and enterprise development, and a mixture of activities. Thus, to attain adequate comparisons, the evaluation sought to answer three questions: Who benefits from PDP?, By how much do they benefit?, and How sustainable are the benefits?

The evaluation was conducted by Survey Research Indonesia between March and September 1986. All PDP provinces were covered in the survey and the beneficiaries were selected by random sampling methods. All projects with a productive, revolving or infrastructural content begun between 1978 and 1985/86 were eligible. The survey covered 247 projects (27% of all eligible) and a total of 4,517 beneficiary interviews (2% of all beneficiaries) were conducted. Additional interviews were held with project officials, village heads, and non-beneficiaries for the purposes of comparison. Fieldwork was conducted in April and May 1986.

SUMMARY

C

Findings and Conclusions

Who Benefits from PDP? The PDP program targets poorer locations (districts and villages) and the poorer people within those locations (beneficiaries). A demographic profile of current beneficiaries reveals that 85% are self employed, 69% are literate in Bahasa Indonesia, 51% are age 40 or older and 92% are male. To establish whether the poorer people in a village are being targeted by the program, three indicators of poverty were identified. 1) Whether a beneficiary worked on an activity that later became a project activity or whether the activity was a new project. Before they were assisted by PDP, 31% of the beneficiaries interviewed were already engaged in a project activity. 2) For existing project activities, whether the volume of pre-project profit was high, medium or low. 3) Current possession of household items. These last two indicators were related interactively to produce a relative poverty ranking of beneficiaries. The groupings used recognized that poverty is relative (e.g., the use of possessions as a discriminator of poverty may be misleading, especially when attempting cross-provincial comparisons). The results of this segmentation were ranked from those with the lowest level of targetting achievement to those with the highest. It is estimated that 17% of the selected beneficiaries are outside the primary target group, another 15% could be classified as borderline, and 67% would appear to be acceptably targeted.

Three conclusions on beneficiaries are drawn. First, although targetting is largely successful, it has not always been geared solely to the poorest groups. In addition to poverty, experience and willingness to participate have been cited as important determinants in the selection of beneficiaries for a project. Second, the conclusions regarding targetting are based exclusively on direct beneficiaries. In some sectors, particularly irrigation and small industry, the project generates secondary beneficiaries through indirect employment. These indirect beneficiaries are more likely to be from a poorer category than direct beneficiaries. Thus, the targetting achievement concept may under-claim the total benefit. Last, an analysis of results by sector reveals that projects in irrigation and small industry are the least successful at targetting the poor, while livestock projects are the most successful (82%).

By How Much Do They Benefit? Thirty one percent of project beneficiaries were already working on project activities when PDP assistance was provided and 69% were new to the activity. In the former case, pre-project average profit was Rp. 153,000 and for new projects this value was zero. For new beneficiaries, the project impact at first harvest or the end of the first year was net profit of Rp. 57,000. For existing activity beneficiaries, their net profits rose from Rp. 153,000 to Rp. 216,000, or a gain of Rp. 63,000. For new and existing beneficiaries together, the shift in profits was an incremental gain of Rp. 59,000 (including 25% who had no gain). Overall, the data show that the gains achieved in the first year have generally been sustained until the present time.

In terms of the percentage of beneficiaries who receive positive net gain (the balance between new net profit and that previously earned) from a project, irrigation has the highest gain (93%) and fish the lowest (60%). The mean benefit derived shows considerable disparity, ranging from Rp. 178,000 for small industry projects to Rp. 39,000 for food crops.

A benefit-cost ratio was calculated by estimating the total annual gain from PDP projects and dividing it by the total project budget value (DIP) spending to date (excluding overhead). The result is the average annual net gain derived from one unit of direct cost, yielding a cost-benefit ratio of .69 overall.

How Sustainable Are the Benefits? A comparison of net gains over time was used to measure the sustainability of PDP projects. Overall, only 10% of the PDP project activities have been discontinued, with a further 3% expected to be brought to an end. Thus, one in eight of the projects is effectively non-sustainable. The highest rate of attrition is in estate crops, followed by small industry and fish projects. Analysis showed that these types of projects are subject to failure due to crop failure or fish mortality rather than for economic reasons and that benefits from estate crops may take longer to achieve due to long maturation rates.

Although the total failure rate has declined over the period 1978-1985, there has been only a small difference in the level of immediate failure. There are strong indications that the smaller the project value, the greater the chance of failure (16% compared to 5%). It is possible that because larger projects have more rigorous controls, they may be more sustainable.

Twenty five percent of selected beneficiaries have quit or expect to quit their project activities soon. This rate of project non-sustainability is highest for fish projects (55%); one-third of livestock beneficiaries also drop out. Projects with a high net gain (Rp. 50,000 or more per year) have a failure rate of only 6%, while those with little or negative gain have failed at a rate of 68%. Overall, the sustainability of project activities is high for an estimated 77% of the total beneficiary population.

Three factors were used to determine a project's sustainability: current project status at the beneficiary level, expected status, and annual net gain. Using these factors, 45% of beneficiaries are classified as working in high or medium sustainable activities, 24% were in the group "perhaps sustainable," and 31% are in the unsustainable category. Irrigation projects were found to have the highest sustainability rate (95%), while the unsustainable level is critically high for fishing (59%) and fairly high for livestock (43%) projects.

Recommendations

The team was not directed to make recommendations. A subsequent analysis will use this evaluation as one of the bases for recommendations regarding the future of PDP.

ATTACHMENTS

K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)

Provincial Area Development Program (PDP) Evaluation Study 1986: Report of Findings. Prepared by Survey Research Indonesia.

MISSION COMMENTS ON FULL REPORT

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

XD - AAA - 045 - A

ISN - 57324

PROVINCIAL AREA DEVELOPMENT PROGRAM (PDP)
EVALUATION STUDY

REPORT OF FINDINGS

Prepared for:

BANGDA

and

USAID/INDONESIA

Prepared by:

SURVEY RESEARCH INDONESIA

8

1.1 BACKGROUND

In 1978, the Government of Indonesia (GOI) began the Provincial Area Development Program (PDP) in Aceh and Central Java provinces. With the two ultimate objectives of improving the standard of living of the rural poor and strengthening the capabilities of local development agencies, PDP promotes integrated regional and rural development through a series of relatively small-scale projects. These projects are initiated and carried out at the district (kabupaten), subdistrict (kecamatan) and village (desa) levels.

Today, area development programs are operating in twelve of Indonesia's provinces assisted by the Canadian International Development agency (which began providing assistance in 1984 with projects in South Sulawesi and Southeast Sulawesi), the German Technical Assistance Agency (whose projects in West Sumatra began in 1980 and East Kalimantan in 1982), the International Bank for Reconstruction and Development (the World Bank, which has provided loan funding to projects in Yogyakarta Province since 1979), the Royal Netherlands Agency for International Cooperation (with projects in Aceh Province since 1983), and the United States Agency for International Development (USAID).

USAID began its support to PDP activities in Aceh and Central Java in 1978 with a four-year program called PDP I. In 1979 the four-year PDP IIA was introduced with the expansion of the program to Bengkulu, East Java, South Kalimantan, and Nusa Tenggara Timur. Two more provinces were added in 1980 (West Java and Nusa Tenggara Barat) with the implementation of the four-year PDP IIB. The original (Phase I) PDP I and II activities have since been funded to extend for an additional four years (Phase II) until 1988 and 1989, respectively. Currently, AID supports program activities in 44 kabupaten, as shown below.

<u>Province</u>	<u>District (Kabupaten)</u>	
	<u>Activities Began During Phase I</u>	<u>Activities Began During Phase II</u>
Aceh Tenggara*	Aceh Barat* Aceh Besar*	Aceh Selatan Aceh
Bengkulu	Bengkulu Selatan* Bengkulu Utara*	Rejang Lebong
Jawa Barat (West Java)	Lebak* Pandeglang* Serang*	Cianjur Garut Sukabumi
Jawa Tengah (Central Java)	Demak* Kudus* Jepara* Pati* Rembang*	Blora* Grobogan*
Jawa Timur (East Java)	Bangkalan* Pamekasan* Sampang* Sumenep*	Blitar* Pecitan* Treggalek* Tulung Agung
Kalimantan Selatan (South Kalimantan)	Hulu Sungai Selatan* Hulu Sungai Tengah* Hulu Sungai Utara*	Banjar Tapin
Nusa Tenggara Barat (NTB - West Nusa Tenggara)	Lombok Tengah* Lombok Timur* Sumbawa*	Bima Dompu Lombok Barat
Nusa Tenggara Timur (NTT - East Nusa Tenggara)	Alor* Belu* Timor Tengah Utara*	Flores Timur Timor Tengah Selatan

* Subprojects in these kabupaten are included in the current evaluation. "Subproject" is an AID term used to distinguish between PDP as a whole project and the individual activities implemented at/by the local government.

AID's PDP has three primary objectives:

1. To improve the capability of local governments to undertake rural development activities that improve the productive capacity of the rural poor.

PDP encourages bottom-up planning, involving rural communities in shaping their own future development by contributing to the formulation of projects that are directly applicable to their perceived needs. In general, this planning process works as follows. The district-level planning (BAPPEDA) and technical (Dinas) agencies visit villages and ask village chiefs (kepala desa) and/or village institutions (LKMD) what they perceive as their needs. These ideas are then discussed with the subdistrict head (camat), and if accepted, they are forwarded to the district BAPPEDA. The BAPPEDA meets with the technical agencies to review all the ideas submitted, and together, they select those appropriate for PDP using input they have received from the village and sub-district levels. These plans are reviewed by the provincial BAPPEDA, who uses them to formulate an annual assistance plan for the province to support and complement the districts' efforts. The provincial plan, along with the district project proposals, are then submitted to the central (pusat) level for review and approval.

Once a project has been agreed upon, the provincial BAPPEDA issues a document called a Daftar Isian Proyek (DIP) for each approved project. The DIP includes statements on the amount of money to be spent, and the project's purpose, activities, locations, implementation schedule, and the government agency and official responsible for managing the project (Pimpro). The kepala desa is notified, and in most cases, he chooses the recipients for the types of projects his village will receive, taking a variety of factors into account, including the recipients' relative financial status, ability, and enthusiasm for participating in the project.

Generally, projects are budgeted to be conducted during a one-year period, but can be phased to continue for another year. For example, a project could provide seeds to plant for goat fodder during the first year, and continue through a follow-up project for a second year, when the recipient receives goats to raise. Also, a project may be spread over a number of kecamatan or desa or may be limited to only a few. The number of beneficiaries also varies from project to project.

USAID provides technical assistance to strengthen the provincial (Tingkat I or TK.I) and kabupaten (Tingkat II or TK.II) BAPPEDA (in Central Java, this support is extended to kecamatan-level government as well), and funds to implement the projects. Because a primary focus of the program is the decentralization of decision making, AID's assistance has also included training to improve these coordinating bodies' capabilities in project planning and management, including monitoring and evaluation. During the second phase of PDP, the planning system has been greatly improved, involving systematic preparation of both multi-year and annual planning documents, and an increased emphasis on the devolution of responsibility for planning to the kabupaten level.

2. To improve the capability of the central government to support local governments in planning, implementing, and evaluating activities that improve the productive capacity of the rural poor.

PDP operates under the direction of the Ministry of Home Affairs, Directorate General for Regional Development (BANGDA). BANGDA supports, coordinates, and directs all PDP projects. It also acts as the program facilitator by setting national policy on regional/rural development, and channels funds from donors and the GOI to the provinces.

AID's assistance to the central government consists of technical assistance in planning, management, training and rural credit, as well as the provision of long-(Master's degrees) and short-term training to increase the GOI's capabilities to support the provincial programs. This

support is provided primarily to BANGDA, the Ministry of Finance, and BAPPENAS (the state planning agency). The latter two agencies, together with BANGDA, form the technical committee for USAID's PDP. This committee's responsibilities include reviewing and approving provincial planning documents and budgets, and monitoring project implementation

3. To improve the incomes of the rural poor within the project areas through implementing small sub-project activities.

These recipients of the direct benefits of the program include subsistence farmers, agricultural laborers, fishermen and other relatively poor rural residents. Because the program is aimed selectively at poorer families, projects are targeted to the poorer kecamatan and desa, and then to the poorer residents within these selected areas.

AID's assistance to these recipients and their sub-projects includes providing funds to implement sub-project activities, training extension workers and farmers, providing physical inputs (livestock, seeds, equipment, etc.), and organizing demplots, trials, and other experiments.

Through the 1984/85 financial year, USAID has provided assistance to approximately 2000 sub-projects in the eight provinces it assists. Of these, about 1000 are intended to directly benefit the rural poor (about 250 are surveyed in this assessment). A great variety of project types have been implemented, and the mix of project types vary from province to province. In addition to village credit schemes, social benefit programs, and institutional strengthening projects (e.g., upgrading the productivity of village cadres and institutions), which are excluded from this evaluation because of the difficulty in surveying beneficiary impact, PDP activities include:

- o Basic Crop/Agriculture Projects - improvements to seeds, fertilizers, pesticides, equipment, crop diversification, secondary food crops, home gardens, farming systems, soil conservation, agro-forestry, terracing, etc.
- o Estate Crops Projects - improvements or setting up of small holdings for such crops as coffee, tea, and cloves (i.e., small tree crops).
- o Livestock Projects - provision of sheep, goats, cattle or poultry involving the return of offspring, but sometimes involving improvements of breeding stock or fattening projects.
- o Fisheries Projects - provision of ponds and fish (fingerlings) for fresh water fish projects and the provision of equipment such as engines, boats and nets for sea fishing projects.
- o Irrigation Projects - provision of main dams, etc. for simple village irrigation schemes aimed at second or third crops (usually rice) in the dry season (the farmers dig the channels).
- o Small Industry and Enterprise Development - improvements in the equipment for cottage industries such as batik, rotan, and bricks, and the development of service activities such as welding.
- o Central Java Multi-Sector - in this province, some projects are organized at, and implemented by, the kecamatan level and can be a mixture of the above activities.

The GOI and USAID have agreed to contribute a total of \$82 million in funding to PDP projects to date (USAID Loan of \$36.08 million, USAID Grant of \$17.5 million). Between 1973 and 1985, AID has provided approximately 1000 persons months of long-term technical assistance to the involved provinces and BANGDA in the planning, management, and technical fields. Since 1984, increasing emphasis has been placed on using qualified Indonesian consultants, particularly in technical fields.

1.2 OBJECTIVES

The primary focus of the survey was to address itself to three precise needs:

- o Who benefits from PDP?
- o By how much do they benefit (get gain)?
- o How sustainable are the benefits?

All PDP provinces were covered in the survey and the beneficiaries were selected by random sampling methods. All subprojects with a productive, revolving or infrastructural content initiated between 1978/79 and 1984/85 were eligible.

Two hundred forty seven subprojects were covered (27% of all eligible) and a total of 4,517 beneficiary interviews (2.0% of all beneficiaries) were conducted. Additional interviews were held with Pimpros, kepala desa and non-beneficiaries; these were used for comparative purposes. Fieldwork was conducted between April 7 and May 31, 1986. A detailed description of the survey objectives and methodology can be found in the technical appendix of the SRI report.

SECTION 2 - PROJECT TARGETTING

- 2.1 Defining The Objective
- 2.2 Targetting The Desa
- 2.3 Beneficiary Selection Responsibility
- 2.4 Beneficiary Selection Criteria
- 2.5 Profile of Beneficiaries
- 2.6 Possessions as Indicators
- 2.7 Utilization of Project Output
- 2.8 Income Status at Selection
- 2.9 Pre-Project Profit as An Indicator
- 2.10 Conclusions

2. PROJECT TARGETTING

2.1 Defining The Objective

One of the three major objectives of the PDP program is to give additional income to those most in need. Thus, the program is supposed to be targeted at the poorer locations (kabupaten, desa) and the poorer people within those locations (beneficiaries). In attempting to determine the extent to which this objective has been achieved, this section reviews the policies and procedures used to select desa and beneficiaries for the project. Kabupaten selection was not evaluated because the survey covered only PDP areas and there was thus no basis for comparing PDP and non-PDP kabupaten.

Similarly, assessing the procedures used to select desa for the PDP program was limited to an evaluation of the status of selected desa without comparative information for non-selected desa. The procedures for desa selection were explored during in-depth interviews with BAPPEDA I and II. Also interviews were held with the kepala desa to determine the facilities available in the village and thus give some indication of the status of PDP villages. This information was useful in helping to establish whether poverty is the sole criterion in desa selection or whether other elements, such as suitability are equally important.

The key element of targeting is that of beneficiary selection, it is also the element which is the most subjective. The procedures and established rules pertaining to beneficiary selection were assessed using interviews with Pimpros and village officials. However, the most critical examination of the success of the selection method must derive from the beneficiaries themselves in terms of their economic status. Thus, to determine whether, on balance, the actual economic status of the beneficiaries the same as is that conceptually desired (i.e., poor), demographic profiles were prepared.

2.2 Targeting The Desa

In general, kecamatan and desa selection for PDP are the responsibility of the BAPPEDA and the relevant sectoral service officers. The extent to which local officials (Camat, kepala desa) become involved varies. Because there was no quantified evidence available to assess the appropriateness of desa selection, we relied on interviews with senior officials. These interviews gave a qualitative indication of whether the program's targeting objective is being met. Almost all the BAPPEDA staff interviewed specified low income per capital as a criterion for selection. Some specified the relative remoteness of a desa while others stressed accessibility (to facilitate implementation and monitoring). Another criterion given was that a kecamatan or desa needs the potential to develop; this judgment could be based on either the location's physical constraints or availability of human resources.

Interviews with the kepala desa revealed that 25% of the selected villages had electricity. With respect to the former, West and East Java villages were the most poorly served. Tap water is a rare phenomenon and is most widespread in NTB and NTT. Almost all villages, apart from those in NTT, had access to television, although there is considerable variation in the average number per village. The average of 25 TV sets per village represents a 4% incidence among all households. Thus, the 3% TV incidence level among beneficiaries (see Section 2.6) indicates that they have on average the same financial status as non-beneficiaries.

VILLAGE STATUS

	Total	Aceh	Beng- kulu	West Java	Central Java	East Java	South Kali- mantan	NTB	NTT
	%	%	%	%	%	%	%	%	%
Electricity	25	26	30	14	24	11	40	59	21
Generator	32	35	43	50	28	33	25	17	25
Tap Water	8	-	10	5	3	11	12	23	28
Improved road	58	34	85	72	47	57	71	89	69
TV in village	92	88	93	90	100	93	100	98	23
Ave.No. of TV sets per village	25	7	17	18	45	23	12	26	2

Ref.: Table K.1-4, 8-9

2.3 Beneficiary Selection Responsibility

Results from the survey of Pimpros show that the kepala desa is the key figure in the beneficiary selection process, however, it would appear that the choice is rarely his alone: the selection of the beneficiaries is, for the most part (81%), the collective responsibility of the kepala desa working closely with village officials, Dinas and other representatives.

The kepala desa is mainly involved with the appropriate Dinas for fish and small industry projects. Multi-sector projects (kecamatan organized) are primarily the responsibility of the kepala desa and LKMD/LMD officials

SELECTION OF BENEFICIARIES BY SECTOR (PIMPRO OPINION)

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %	Multi Sector %
<u>Kepala desa</u>								
- With LKMD/LMD	29	16	14	34	10	4	17	80
- With Dinas	25	22	28	23	48	23	32	8
- With others*	27	25	42	32	29	26	35	8
- Alone	2	1	5	2	-	7	11	-
Others res- ponsible	14	30	10	4	6	39	4	4

Ref.: Table P.8

The category kepala desa with others generally means a very mixed situation which involves LKMD/LMD, Dinas and others.

Selection procedures vary quite considerably by province, although again, the kepala desa is the common figure - less so in South Kalimantan and Aceh. In Central Java, the kepala desa work most closely with the local LKMD and LMD officials. Dinas are prominent with the kepala desa in Bengkulu and West Java.

BENEFICIARY SELECTION BY PROVINCE (PIMPRO OPINION)

	Aceh	Beng- kulu	West Java	Central Java	East Java	South Kali- mantan	NTB	NTT
	%	%	%	%	%	%	%	%
<u>Kepala desa</u>								
- With LKMD/LMD	4	11	16	61	11	29	18	7
- With Dinas	12	55	63	15	34	10	27	29
- With others	54	16	15	10	48	0	38	42
- Alone	3	-	-	-	1	11	6	4
Others responsible	26	18	5	8	6	38	11	-

Ref.: Table P.8

One factor that apparently has some influence on the responsibility for selecting beneficiaries is the type of project. PDP classifies projects into revolving and productive. For revolving projects (usually distribution of livestock), the main selection responsibility lies with the kepala desa and local LKMD/LMD officials. Productive projects rely more on the kepala desa with the appropriate Dinas or a combination of Dinas and other officials.

SELECTION OF BENEFICIARIES REVOLVING AND PRODUCTIVE PROJECTS
(PIMPRO OPINION)

	<u>Revolving</u> %	<u>Productive</u> %
<u>Kepala desa</u>		
- With LKMD/LMD	57	14
- With Dinas	16	34
- With others	17	33
- Alone	1	2
Others responsible	5	13

Ref.: Table P.8

Comparisons of opinions solicited from Pimpros, kepala desa and non-beneficiaries on the responsibility issues show a number of differences. The Pimpro has different ideas concerning the role of Dinas (25%) compared to the kepala desa's own response (6%). It would appear from kepala desa responses that the local LKMD/LMD are more involved than Pimpros think. This, of course, can mean that there is a greater risk of favoritism than when the Dinas are involved because it is likely that the kepala desa exert greater authority among village officials than those outside. Regardless of the degree of consensus of opinion that is achieved in the selection process or the extent of different officials participation in it, appears that the kepala desa is asked to fill a quota rather than to give a complete list of all those eligible from which an independent or random selection could be made. Thus, bias in beneficiary selection is not precluded.

SELECTION OF BENEFICIARIES - COMPARISON

	<u>Pimpro Opinion</u> %	<u>Kepala Desa Opinion</u> %	<u>Non Beneficiary Opinion</u> %
<u>Kepala desa</u>			
- With LKMD/LMD	29	38	45
- With Dinas	25	6	2
- With others ²⁷	29	23	
- Alone	7	12	15
Others responsible	14	10	11

Ref.: Table P.8

According to 73% of the Pimpros interviewed, poverty is the major consideration in selecting beneficiaries, which corresponds with official policy. However, a number of Pimpros hold views which indicate that other selection criteria are important. One view is that limiting projects exclusively to the poor can have a negative effect. This is apparently based on the perception that the poor need the stimulus of peer involvement; otherwise, they will tend to consume the aid directly rather than use it as a basis for development. Another view is that while the poor are the first focus, the final selection requires other considerations such as ability, willingness and experience. These latter criteria, which are subjective could attract some criticism of selection procedure because none of them is an easily measured dimension.

It appears that the relative strengths of these criteria change quite dramatically across provinces. However, this may be a reflection of differences in the types of projects rather than policy differences. On this basis, provinces that appear to put more stress on poverty as a selection criteria are Central and East Java and NTT.

SELECTION OF BENEFICIARIES - PIMPRO OPINION

	Total %	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
Poor families	73	57	44	73	85	84	57	71	80
Experience	51	37	34	50	76	42	50	25	33
Willingness	57	59	42	43	76	39	78	41	18
Own land	18	27	-	33	9	19	23	41	-
Family Planning	6	-	-	-	6	24	-	-	11

Ref.: Table P.9

Analysis by project initiation year shows a definite increase in emphasis on poverty as a selection criterion (moving from 65% to 82%). However, this apparent shift may be due, at least in part, to the growth in kecamatan projects (in Central Java) which almost always require the three conditions of poverty, experience and willingness for participants.

BENEFICIARY SELECTION CRITERIA - PIMPRO OPINION

	<u>Initiation Year</u>			<u>Administration</u>		
	<u>1978- 1981</u> %	<u>1981- 1983</u> %	<u>1983- 1985</u> %	<u>Pro- vince</u> %	<u>Kabu- paten</u> %	<u>Keca- matan</u> %
Poor families	65	70	82	68	67	97
Experience	55	45	53	30	45	86
Willingness	64	52	56	46	51	84
Own land	21	16	16	37	20	-
Family Planning	6	6	6	-	8	-

Ref.: Table P.9

An important relationship between criteria is that of poverty and experience. Selection criteria for small industry projects for example, place strong emphasis (85%) on experience and much less (43%) on poverty. By implication, these projects are intended to up-grade rather than create small industry facilities and are thus theoretically the most vulnerable in failing to achieve the prime objective of benefitting the poorest families.

BENEFICIARY SELECTION CRITERIA - PIMPRO OPINION

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
Poor families	73	69	84	76	65	55	44
Experience	51	39	20	56	46	10	85

Ref.: Table P.9

The views of the Pimpros, kepala desa and non-beneficiaries regarding the selection criteria used are extremely close. This re-affirms the view that poverty is a key, but not the sole, criterion in the selection process.

BENEFICIARY SELECTION CRITERIA - COMPARISONS

	<u>Pimpro Opinion</u>	<u>Kepala Desa Opinion</u>	<u>Non Beneficiary Opinion</u>
	%	%	%
Poor families	73	62	63
Experience	51	42	46
Willingness	57	63	68
Own land	18	12	6
Family Planning	6	3	-

Ref.: Table P.9

2.5 Profile of Beneficiaries

Ideally, it would have been preferable to construct a profile of the beneficiaries at the time of their selection (some qualitative impressions of beneficiaries vs. non-beneficiaries' incomes at the time of selection are given in section 2.8). Instead, it was necessary to interview current beneficiaries, whose current situation necessarily incorporates the interactions of the program and other events in their profile. Nevertheless, the current situation is reflective of the characteristics of the beneficiary groups as a whole. Because the data collected for some variables cover the period 1978-1985, they are useful in identifying any measurable differences overtime in the general profile.

Most beneficiaries, both currently and before the project, are self-employed. Thus, there has been no shift in employment status as a result of the program. With the exception of small industry (68%), (93%) of program are male beneficiaries. Slightly more than half are over 40, indicating a preference for well-established families. Variation in this age profile is most prominent for small industry.

DEMOGRAPHIC PROFILE - BENEFICIARIES

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
Self-employed-pre	85	93	88	75	83	95	85
Self-employed-now	86	93	86	76	86	97	90

Literate in Bahasa Indonesia	66	71	61	62	67	75	77

39 or younger	44	44	37	43	49	43	67
40 or older	56	55	64	57	51	57	32

Male	93	96	95	89	98	98	68

Average Household size	5.4	5.6	5.3	5.2	5.4	5.7	5.6
Average years education	4.1	4.2	4.1	3.6	4.8	4.4	5.1

Ref.: Table B. 40-45

An analysis of beneficiaries by province highlights some variation in the demographic profile although, again, part of the explanation for these differences may lie in the sectoral differences among the provinces. The employment status of beneficiaries in Central Java is considerably different from other provinces: only two-thirds of the beneficiaries are self-employed as opposed to 79-99% in other areas. Other sources indicated that employment by others was an important selection variable in this.

DEMOGRAPHIC PROFILE - BENEFICIARIES

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
Self-employed-pre	98	91	85	65	91	90	92	97
Self-employed-now	99	93	86	67	93	79	91	98

Literate in Bahasa Indonesia	81	83	84	58	55	90	63	70

39 or younger	51	55	47	41	37	41	50	46
40 or older	49	45	53	59	63	59	49	54

Male	86	96	93	87	96	98	97	100

Average Household size	5.7	5.8	5.8	5.0	5.2	4.8	5.9	5.6
Average years education	5.3	4.5	4.4	3.6	3.3	4.7	4.3	4.1

Ref.: Table B. 40-45

The demographic profile appears to be changing, albeit almost imperceptibly. Since 1978, literacy levels appears to have increased (63% to 69%). Perhaps more noticeably, the age profile has shifted quite definitely from 63% over the age of 40 to 51%. This may indicate that selection is now more concerned with ability than the status of the beneficiary within the village community.

An analysis of household data by province indicates that level of possessions is not entirely a reliable measure for targeting the poor because of the wide differences among the provinces. Clearly, poverty is relative: a person who is considered poor in Aceh, for example, may be considered relatively well off in NTT. In effect, there may be scope for investigating the allocation of index weights to each province so that a measure of relative success with targeting could be attained. This is a possibility for secondary analysis.

OWNERSHIP OF HOUSEHOLD ITEMS - CURRENT

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
<u>High prestige items</u>								
- TV	23	7	5	6	8	10	6	-
- Motorcycle	24	5	4	6	8	10	5	1
- Sewing machine	36	17	15	5	9	15	9	6
- Electricity	36	14	6	8	10	27	19	1
- Kerosene stove	20	4	19	7	29	3	11	-
- Wall clock	18	24	15	13	21	20	8	2

Ref.: Table B. 31

Thus, the use of total possessions as a discriminator will tend to show that provinces such as Aceh and Bengkulu, which have higher incidence levels appears to be less successful in targeting than elsewhere. This may not strictly be the case. The table below shows the numeric distribution of items. Overall it would indicate that at least 12% of beneficiaries may fall outside the intended scope of the program.

NUMBER OF HOUSEHOLD ITEMS OWNED - CURRENT

	Total %	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
11 + items	12	23	9	17	9	17	12	7	3
7-10 items	33	35	38	34	33	42	47	22	17
0-6 items	56	42	52	50	58	41	41	71	80

Ref.: Table B. 34

Looking specifically at those beneficiaries with 11 or more items it appears that recent projects have been more poverty oriented with only 9% in this range. Curiously, analysis by size of project (DIP value) indicates that the lower the value of DIP, the higher the average previous level of beneficiaries. It is possible that smaller projects are less well monitored and hence more open to abuse. An alternative may be that, for overriding political reasons, the key target group may not necessarily be the poor.

% Of
Sub-Sample With
11 + Household Items
%

Total	12

1978 - 1981	12
1981 - 1983	15
1983 - 1985	9

Net gain high	10
medium	11
small	16

DIP value Rp 10 M	17
Rp 10 - 20 M	12
Rp 20 - 50 M	10
Rp 50 + M	6

Ref.: Table B. 34

Categorisation of the household items according to their possession of prestige items (See table following 2.6.3), shows that one in three (32%) beneficiaries have at least one. This indicates that a more stringent definition (for example at least two) would be needed to discriminate the "rich" from the "poor". NTT is a clearly an area where such items are in short supply.

CATEGORISATION OF OWNERSHIP

	Total	Aceh	Beng- kulu	West Java	Central Java	East Java	South Kali- mantan	NTB	NTT
	%	%	%	%	%	%	%	%	%
Owens at least one high prestige item	32	56	37	33	24	45	41	30	7
No prestige item but least one modest pres- tidge item	53	39	51	50	55	39	50	30	86
Neither high or modest items but at least one low pres- tidge item	15	5	40	17	20	16	8	40	6

Ref.: Table B. 64

2.7 Utilization of Project Output As An Indicator

It is reasonable to assume that those who are at the lowest end of the economic scale are more likely to utilize additional yield or income derived from the project in the form of more food to eat. Bearing this assumption in mind, two questions were asked about the impact of the project and beneficiaries' immediate aspirations. The assumption was that those who use additional yield or income for food consumption are clearly correctly targeted.

As an indicator of targetting, the question on output allocation is only relevant to the food crop and irrigation sector. As can be seen below, 53% of food crop beneficiaries utilize the increased yield wholly or partly for additional home consumption. A high percentage (63%) of irrigation beneficiaries also consume the output.

UTILIZATION OF YIELD

	<u>Food Crops</u> %	<u>Irrigation</u> %
More to eat	41	52
More to eat/sell	12	11

More to sell	24	25
No impact	19	9

Ref.: Table B. 19

However, when asked what they would want to do with additional income, only 28% indicated that their first priority would be more food. These beneficiaries are clearly those in most need, although they are not necessarily the only ones. This response was given more often by beneficiaries from Central and East Java and NTB. Other clear regional differences emerge by province, indicating different attitudes or different socio-economic status. Saving for education is a priority for those in Bengkulu and NTT.

IMMEDIATE ASPIRATION WITH INCREASED INCOME

	Total	Aceh	Beng- kulu	West Java	Central Java	East Java	South Kali- mantan	NTB	NTT
	%	%	%	%	%	%	%	%	%
More food	28	21	13	21	38	38	6	43	10
Invest in farm	15	9	8	25	18	20	34	24	3
Improve house	21	30	24	17	23	7	24	8	33
More possessions	7	14	3	7	3	13	14	3	2
Education for children	23	21	47	24	16	12	12	18	49
More savings	4	2	2	4	2	10	3	2	-

Ref.: Table B. 38

Further analysis of the aspiration question shows that the intention to spend additional income on food is higher among beneficiaries of revolving or distribution projects rather than productive projects. As before, this would indicate that distribution projects are more successful in targetting the poor.

2.8 Income Status At Selection

Because the kepala desa are heavily involved in the beneficiary selection process, it was assumed that they would be able to assess the relative situation of beneficiaries versus non-beneficiaries at the time of selection. As indicated below, a high proportion (38%) believe there is no difference between these two groups. However, this could imply that most villagers are poor and only a fortunate few have been selected.

BENEFICIARY STATUS AT SELECTION - KEPALA DESA

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %	Multi Sector %
Much worse off	5	4	1	3	7	6	-	10
Slightly worse off	50	45	27	59	38	20	36	76
No difference	38	44	61	31	46	64	49	12
Better off	7	6	4	7	9	10	12	2

Ref.: Table K.21

Targetting the poor on the basis that beneficiaries were worse off than non-beneficiaries appears to have been most effective in Central Java (82%), NTT (60%) and East Java (57%). However, much of the difference among provinces may be attributable to sector differences. South Kalimantan appears to have lower targetting of the poor although, again, this may be attributable to the fact that both beneficiaries and non-beneficiaries are of equal financial status and, hence, no difference is apparent.

BENEFICIARY STATUS AT SELECTION - KEPALA DESA

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
Much worse off	2	-	9	7	5	-	5	-
Slightly worse off	36	24	41	75	52	7	28	60
No difference	42	68	48	13	39	73	67	38
Better off	20	3	1	5	3	16	-	2

Ref.: Table K. 21

2.9 Pre-Project Profit As An Indicator

Although no precise details were obtained on the beneficiaries, pre-project total earning capacity, data were collected to estimate the profit generated on activities that were later incorporated into the project. A high proportion of beneficiaries were new to the project activities and hence their profit prior to it on that activity was nil. For the remainder, however, the net profit prior to the project is extremely salient to the targeting issue and important variations can be identified. These earnings are described in more detail in Section 3.

Approximately one third (31%) of beneficiaries were already engaged on a project activity before PDP; of these, almost half (46%) were earning Rp. 60,000+ per year on the activity. The overall average pre-project profit for existing beneficiaries was Rp. 153,000 per year.

Looking at the pre-profit earning of existing beneficiaries shows some high levels. Those in small industry activities pre-project were already earning an annual average of Rp. 509,000. Such averages hardly qualify them for the poverty criterion, especially when the project activity may not have been their sole income source. Similarly, those in fishing (probably sea fishing) had high existing earnings prior to the project.

PRE-PROJECT NET PROFIT FROM PROJECT ACTIVITY

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
Overall mean net profit (in Rp. 000)	59	41	17	7	87	171	275

% of all beneficiaries already engaged in project activity	31	44	28	12	23	89	54

Mean profit for ex- isting benefi- ficiaries (in Rp. 000)	153	93	61	58	378	192	509

Ref.: Table 53

A similar examination of existing beneficiaries by province also reveals some extreme pre-project average earnings, with NTB and Aceh prominent. In the former case, however, only 23% of beneficiaries were already employed in the activity compared with 47% in Aceh.

PRE-PROJECT NET PROFIT FROM PROJECT ACTIVITY

	Aceh	Beng- kulu	West Java	Cent- ral Java	East Java	South Kali- mantan	NTB	NTT
	%	%	%	%	%	%	%	%
Overall mean net profit (in Rp. 000)	144	166	39	28	14	76	83	73

% of all beneficiaries already engaged in project activity	47	64	35	14	28	36	23	46

Mean profit for ex- isting benefi- ficiaries (in Rp. 000)	306	181	111	200	20	211	361	159

Ref.: Table B. 53

2.10 Conclusion

Beneficiaries targeting has not always been geared solely to the poorest groups. For kepala desa, Pimpros, and other officials, poverty is the key, but not the sole, criterion in the selection process. Other factors, such as experience and willingness to participate, have also been cited as important determinants in a beneficiary's selection for a projects.

The demographic profile developed for current beneficiaries reveals that 85% are self employed, 69% are literate in Bahasa Indonesia, 51% are age 40 or older, and 92% are male. To establish whether the poorer people in a village are being targetted by the program, three indicators of poverty were identified.

- o Whether a beneficiary worked on an activity that later became a project activity or whether the activity was a new project. Thirty-one percent of the beneficiaries interviewed were already engaged in a project activity before they were assisted by PDP. This discriminator is particularly important in certain sectors. For example, a cattle distribution recipient who previously owned cattle is likely to be outside the primary target group (the poor) as are some small industry and fisheries recipients.
- o For existing project activities, whether the volume of pre-project profit was high, medium or low.
- o Current possession of household items.

It is possible to relate these indicators interactively to produce a relative ranking of beneficiaries. The groupings used are subjective and recognize that poverty is relative (for example, the use of possessions as a discriminator of poverty may be misleading, especially when attempting cross-provincial comparisons). The results of a special analysis, shown below, used the following sub-classifications.

High pre-project profit	Rp. 200,000+
Medium pre-project profit	Rp. 60 - 199,000
Low pre-project net profit	Rp. 0 - 59,000
High number of possessions	11 - 17
Medium number of possessions	7 - 10
Low number of possessions	0 - 6

The results of this segmentation have been ranked from those with the lowest level of targetting achievement to those with the highest. It is estimated that 17% of the selected beneficiaries are outside the primary target group. A further 15% could be classified as borderline cases, and two-thirds (67%) would appear to be acceptably targetted.

TARGETING SUMMARY - OVERALL

<u>Project Status</u>	<u>Project</u>		<u>Total</u> §
	<u>Pre-Profit</u>	<u>Possessions</u>	
Existing	High	Low	6
Existing	Medium	High	1
Existing	Medium	Medium	4
New	-	High	6

Total low target achievement			17

Existing	Medium	Low	5
Existing	Low	High	3
Existing	Low	Medium	7

Total medium target achievement			15

New	-	Medium	20
Existing	Low	Low	11
New	-	Low	36

Total high target achievement			67

Ref.: Table B. 67

It is worth noting that conclusions regarding targeting are based exclusively on direct beneficiaries. In some sectors, particularly irrigation and small industry, the project activity generates secondary beneficiaries through increased employment. These indirect beneficiaries are more likely to be from a poorer category than the direct beneficiary. Thus, the targeting achievement concept may under-claim the total benefit.

An analysis of the results by sector revealed that projects in both irrigation and small industry are the least successful at targeting the poor. However, of course, other selection criteria, such as experience, may be the prevailing objective for these sectors. Livestock projects are clearly the most successful (82% of the beneficiaries are poor).

TARGETING SUMMARY - SECTOR

<u>Project Status</u>	<u>Pre-Project Profit</u>	<u>Possessions</u>	<u>Food Crops</u> %	<u>Es-tate-Crops</u> %	<u>Live-stock</u> %	<u>Fish</u> %	<u>Irrig-ation</u> %	<u>Small Indus-try</u> %
Existing	High	Any	6	1	1	8	30	27
Existing	Medium	High	1	-	-	1	5	4
Existing	Medium	Medium	4	3	1	2	15	6
New	-	High	5	10	6	10	1	6
Total low target achievement			16	14	8	21	51	43
Existing	Medium	Low	7	2	1	5	23	5
Existing	Low	High	3	6	4	2	2	2
Existing	Low	Medium	8	12	6	6	3	5
Total medium target achievement			19	20	11	13	28	12
New	-	Medium	16	24	24	29	4	20
Existing	Low	Low	17	9	7	8	9	8
New	-	Low	32	32	51	28	7	16
Total high target achievement			65	65	82	65	20	44

Ref.: Table B. 63

SECTION 3 - ECONOMIC IMPACTS OF SUBPROJECTS

- 3.1 Assumed Benefit - Officials' Views
- 3.2 Assumed Benefit - Beneficiaries' Views
- 3.3 Methodology
- 3.4 Project Profit
- 3.5 Net Annual Gain
- 3.6 Conclusions on Economic Impact

One of the most important types of information desired from the survey was a measure of the economic value of subproject activities to recipients -- were the activities being supported actually benefiting recipients. Given the experimental nature of many PDP subprojects, it is not expected or essential that all subprojects result in benefits for their recipients or, in fact, succeed at all. Over the long run, however, there is a reasonable expectation that subprojects will generally be beneficial to those receiving assistance.

In determining the economic impacts of the subproject, both government officials (Section 3.1) and beneficiaries (Section 3.2) were interviewed. These interviews provided some useful general impressions of PDP's impact. However, in order to arrive at a common approach to measuring the economic impact of the wide range of sectoral activities supported under PDP, it was necessary to employ a relatively simple and straightforward methodology (Section 3.3). This methodology yielded estimates of PDP subprojects' profit and annual net gains (Section 3.4 and 3.5).

3.1 Assumed Benefit - Officials' Views

Discussions were held with BAPPEDA officials at all levels. In general, they perceive that the PDP program has successfully raised the income, aspirations and skill levels of its beneficiaries. Of course, there are wide differences in their perceptions of the subprojects' relative benefits.

In the view of the BAPPEDA officials interviewed, the execution of subprojects is often beset by physical and perceived, if not always actual, attitudinal problems. Almost by definition, the selected areas are poor, infertile and inaccessible; hence, their potential for improvement is limited. Moreover, the selected beneficiaries, though poor, may be unused to efforts to direct their livelihood, may have limited abilities, and may not apply themselves with full vigor to the projects.

There is a consensus among BAPPEDA officials that PDP is better equipped than other programs to achieve its objectives. PDP is apparently viewed as better planned, (direct) more detailed, more sensitive and, applicable to beneficiary needs. This enthusiasm is sometimes conditioned by a concern (though not always explicitly stated) that the PDP could conceivably be abandoned in the respondent's province or district. Some officials were quick to point out that the loss of PDP funding would have direct results at the local level.

Another interesting phenomenon is that many officials mention the benefits that PDP generates for the "system", rather than for the beneficiary. Thus, the system benefits from PDP via improved training and quality of the officers, better planning, better coordination and so on. These benefits are, of course, integral components of the institution-building goals of PDP.

The overwhelming number of Pimpros interviewed stated that PDP subprojects average, improved beneficiary incomes although the majority of these (69%) believe the amount of difference to be relatively small. In view of the low per capita cost of each subproject, this is not surprising. On this attitudinal measure, the most profitable sector is irrigation, with a 53% assessment of a much-improved income.

However, 64% of Pimpros believe that subproject impact varies from village to village within the same project, mainly due to varying site conditions but also due to the calibre of the kepala desa and enthusiasm of the beneficiaries. In general, both kepala desa and beneficiaries were perceived to cooperate enthusiastically.

PIMPRO ASSESSMENT OF BENEFICIARY IMPACT

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %	Multi Sector %
Much better off	18	10	5	21	10	53	20	24
Slightly better off	69	70	53	72	79	47	77	68
Not much difference	8	15	29	3	4	-	3	4
Worse off	*	-	3	-	-	-	-	-

Same in each desa	30	25	40	36	27	65	51	4
Varies bet- ween desa	64	68	50	59	67	35	46	92

Ref.: Table P.11/12

The question on impact posed to the kepala desa was approached in a slightly different manner: kepala desa were asked about the relative position (in wealth terms) of the beneficiaries compared to non-beneficiaries, both at the time of selection and currently. The relationship between these two periods gives a measure of change. On this criterion, 46% believed the beneficiaries had improved their economic position, although a relatively high 27% believed that no improvement had taken place. A high proportion (26%) were unable to measure the impact on the beneficiaries in their village. This may have been due to the recent implementation of subprojects or just uncertainty about the true financial effects.

CHANGE IN INCOME RELATIVE TO NON-BENEFICIARIES
KEPALA DESA VIEW

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %	Multi Sector %
Improved	46	49	14	54	22	44	44	62
Static	27	28	47	23	41	18	15	18
Worsened	1	*	-	-	2	7	-	4
Don't know	26	22	38	24	35	33	42	16

Ref.: Table K.23

Non-beneficiaries were also asked to express their opinion regarding the subprojects' impacts on beneficiaries. Of the 72% who believed that beneficiary income has improved, 56% were of the opinion that the change was only slight. LKMD and LKD officials, who are a sub-category of non-beneficiaries had roughly the same opinions as the non-beneficiary villagers.

NON-BENEFICIARY VIEW OF IMPACT

	Total Non- Beneficiary %	LKMD/LMD %	Non Beneficiary %
Much better off	16	21	16
Slightly better off	56	51	60
No difference	23	22	23
Worse off	5	5	5
Don't know	1	1	1

Ref.: Table NB.1

3.2 Assumed Benefit - Beneficiaries' Views

Out of the 75% of beneficiaries who are still involved in a PDP activity believe that they have gained income from the project, although only 5% of these beneficiaries believe their income gain be substantial. The sector with the least apparent impact is estate crops, but this is affected by subprojects which are not yet producing. Thus, beneficiaries tend quite reasonably to say there has been no difference (yet). Using the rating scale 5 = increased a lot to 1 = decreased a lot, the mean scores shown below give a simple representation of the impact status. A mean score nearer to 4, for example, means that on average, the gain has been some, near to 3 means no difference.

INCOME IMPACT ASSESSMENT - STILL-ACTIVE BENEFICIARIES

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
Increased a lot	6	6	*	3	5	10	5
Increased some	61	70	18	52	47	74	61
No difference	27	20	60	40	34	14	29
Decreased some/ a lot	1	1	1	1	2	1	*
No idea/too early	4	3	21	3	11	1	5
Mean score	3.7	3.8	3.2	3.6	3.6	3.9	3.7

Ref.: Table B.16

From the beneficiaries' assessment, it appears that improvements in the existing activities are more likely to generate gain than the introduction of activities that are totally new to the beneficiary. Of those already involved with the activity, 71% find some income improvement as compared to 53% for new activities.

INCOME IMPACT ASSESSMENT - STILL-ACTIVE BENEFICIARIES

	New	Existing	High	Net Gain	
	Activity	Activity		Medium	Low
	%	%	%	%	%
Increased a lot	4	6	6	4	2
Increased some	49	65	60	54	47
No difference	41	21	28	34	44
Decreased some/a lot	1	1	*	1	5
No idea/too early	6	6	5	7	2

Mean score	3.6	3.8	3.8	3.7	3.5

Ref.: Table B.16

Compared to five years ago, 82% of the beneficiaries status that they are slightly or much better off now. The comparable figure for ten years ago is 88%, but a much higher percentage felt they were considerably better off now. The variable of the year in which a subproject began shows virtually no difference in beneficiaries' perception of their change in income status. This is a useful finding because it would appear that the subproject improvement can be isolated from other events. Of course, many factors affect a beneficiary's economic welfare, and this result must thus be viewed with caution.

CURRENT INCOME STATUS COMPARISON TO 5 AND 10 YEARS AGO

	5 Years Ago Total %	1978- 1981 %	1981- 1983 %	1983- 1985 %	10 Years Ago Total %
Much better off	5	5	6	5	42
Slightly better off	77	77	75	78	46
No difference	16	17	16	15	9
Slightly/much worse	1	1	2	1	1

Mean score	3.9	3.9	3.9	3.9	4.3

Ref.: Table B.24/25

On balance, there is an underlying consensus among the various interested parties regarding positive beneficiary impact. However, relative to other group interviewed the Pimpros tend to have an inflated view of PDP's impact.

INCOME IMPACT ASSESSMENT - COMPARISON

	<u>Pimpro</u> %	<u>Kepala Desa</u> %	<u>Non Beneficiary</u> %	<u>Bene- ficiary</u> %
Much better off	18		16	5
Slightly better off	69	46	56	56
No difference	8	27	23	33
Slightly/much worse	*	1	5	1

Ref.: Table B.16

3.3 Methodology

To gain a more objective appraisal of PDP's impact on beneficiaries in addition to interviews with project officials and beneficiaries, beneficiaries were surveyed to determine the incremental net gain from the subproject activities. This figure is the balance between current net profit and that previously earned.

This measurement was made more complex by the presence of two PDP characteristics: the timing of sub-projects, which have entered the program over a seven-year period (1978-1984), and the multi-sectoral nature of PDP activities, whose profits can be realized slowly (e.g., estate crops) or relatively quickly (e.g. food crops). Each of these characteristics is discussed briefly before the methodology is presented.

Timing Factors

Economic measurements relating to the subprojects' impacts on beneficiaries were taken at three points in time:

- o pre-project
- o first productive year, and
- o current year.

Because all years between 1978 and 1984 were covered in the survey, the span between the first productive year and the current year can vary considerably. Thus, the issue of subproject sustainability interacts with this phenomenon. Some activities may currently be at full maturity while others are just on the verge of producing. In the case where a subproject activity is yet to become productive, particularly estate crops, an estimated value for expected revenues was assigned to the income computation. Also, a subproject may no longer exist in official terms, but the subproject activity stimulated by it may well be on-going. In these cases beneficiaries were surveyed on the current status of the activities.

Sectoral Considerations

A major objective of the questionnaire design was to provide a standardized approach to the estimation of net gain. To achieve this, a great variety of projects had to be accommodated. The end product was a design which led to the same result but via different routing. Short synopses of the techniques used to standardize the estimation approaches for each sector are given below.

Sector 1 - Food Crops: In general, this sector was the most straightforward. A typical project involved plants/seeds and inputs, and the measurement of change was clear. Furthermore, the projects were usually effective in the first year and so cases of "not yet producing" were rare. The most difficult evaluation was for crops such as lamtoro which serve a multiple function - soil improvement, animal feed and so on. In assessing the economic gain for such crops, the evaluation concentrated on their main function.

Sector 2 - Estate Crops: The principle employed for this sector was similar to Sector 1, but the major problem involved the not-yet producing category. As previously indicated, these were treated by using standard expected revenues.

Sector 3 - Livestock: In this sector, sales or consumption are not the sole criterion of derived benefit. The net gain figure was thus expanded to the increasing asset value (averaged out per year). Cattle fattening projects (in East Java) needed a slightly different approach and the calculation was of the average annual share of the proceeds of the sale. Poultry projects, especially ducks, required the addition of sales of eggs. Thus, the livestock sector is highly varied and comparisons among provinces need to consider the differing livestock mix situations.

Sector 4 - Fish: Two distinct types of fish subprojects were covered - pond production and sea fishing. It proved extremely difficult to get precise measures for both categories. In the first case, there has been a high rate of attrition and, in many cases, pond production activities are slow to yield, if at all. The second category involved sifting out individual from group income and the appropriate allocation of costs.

Sector 5 - Irrigation: This was perhaps the most clear cut of sectors. The only difficulty was that multiple-crop types were involved. This was covered by producing activity sheets for each crop and then aggregating the results to produce one single statistic for all crops.

Sector 6 - Small Industry: This sector relied mainly on sales data rather than production and there was considerable variety among the activities. Like the sea fishing projects, care was needed to ensure that individual rather than group earnings were recorded.

In Central Java, kecamatan-administered projects were initially classified as multi-sector. However, at the beneficiary level, it was possible to re-classify each individual according to his main sector activity. Thus, the beneficiary tables in the remainder of this chapter are all analyzed by six sector categories, and Central Java subprojects are subsumed under these categories.

Methodology

Perhaps the most integral component of the survey was the estimation of incremental net gain. Conceptually, the measurement of net gain was the major challenge of the survey. It was calculated as follows:

NET GAIN = Net profit from a subproject activity for a year (less interactive losses) minus net profit from the subproject activity before the subproject became part of the PDP.

Three measures of net gain were provided to yield the incremental net gain:

x = Project net gain during the first harvest (productive) years,
y = Project net gain during the current year, and
z = Project net gain averaged between the two periods.

x: is good representation of the immediate impact of the project. Some projects (e.g., those providing improved seed varieties) have a more immediate impact than others (e.g., livestock).

y: is good representation of the current situation and comparisons between y and x can indicate the sustainability or incremental effect of the project.

z: represents the average situation and is used extensively in making sectoral and other comparisons. As has been indicated, it must be remembered that the activity time span between first harvest and the current year varies considerably and will inevitably affect the statistics produced. However, because all sectors will have a representation across all the project years, it is assumed that this effect will be equally faced and hence comparative data are still valid.

Determining the values for x, y and z involved calculations of the net profit for the subproject activity at the three points in time: pre-subprojects, first harvest and current. Where the subproject involved a completely new activity, then pre-project net profit was clearly zero. Value x was then the difference between pre-subproject profit and first harvest profit (net incremental gain). Value y was the difference between pre-subproject and current profit. Thus, for completely new project activities, first harvest profit was equal to value x and, hence, any profit going to the farmer is all net gain. However, existing activities were already generating profit pre-project and hence, for the net gain to be positive, first harvest profit needed to exceed that pre-project.

In those cases where the subproject activity resulted in a net loss, creating a negative value of x or y, these situations were treated as zero (that is, nil gain). Subsequently, secondary analysis may be directed at specific examination of these loss activities. It should be noted that in total, only 23% of beneficiaries derived nil gain and most of these were a "no change" rather than a loss situation.

The survey was designed to give high levels of statistical reliability for analysis at province and sector level. Statistical reliability is largely a function of sample size and the level of confidence desired. For most purposes, the 95% level of confidence is satisfactory. Reliability is usually expressed in terms of a range.

Thus, the full sample of 4,517 beneficiaries gives a range of confidence on, say, a 20% incidence, of 20 plus or minus 1.17% (see the Technical Appendix). All results have been weighted to the appropriate universe. This ensures that the results are truly representative of PDP by sector and year of initiation.

These statistics may lack certain sophisticated elements that detailed case studies would reveal. However, the prime advantage is that they are constant, logical and consistent measures across all sectors. In this respect, they could possibly be treated as indices but for the purposes of clarity, it is reasonable to treat them as real incremental values because they have been calculated on this basis.

It should be noted that all monetary values used in the report and tables are based on current day prices. This eliminates any differences between the time periods which are due to inflation or currency exchange rate changes.

Prior to recording the data on which these precise calculations were made, the beneficiaries were asked their view regarding the financial implications of their subprojects. Furthermore, kepala desa, Pimpros and non-beneficiaries were also asked attitudinal questions. A compilation of their answers is used as a background to the detailed financial data.

3.4 Project Profit

The profit benchmark is the level of profit derived from the subproject activity before PDP assistance was provided. Clearly, in this analysis, it is important to distinguish between those beneficiaries for whom the project already existed (31%) and those for which the project was a new activity (69%). In the former case, pre-subproject average profit amounted to Rp. 153,000. For new projects, this value is obviously zero.

PRE-SUBPROJECT PROFIT FROM SUBPROJECT ACTIVITY

<u>Rp'000</u>	<u>New Activity</u> %	<u>Existing Activity</u> %
Nil	100	14
1 - 19	-	26
20 - 59	-	21
60 - 299	-	31
300+	-	8

Mean Rp'000	0	153

Ref.: Table B.53

As can be seen below, the proportion of new projects (nil pre-project profit) varies considerably by sector. Livestock beneficiaries are extremely likely (88%) to be newly engaged in husbandry. In contrast, and fairly predictably, irrigation beneficiaries are almost always already engaged in cultivation (usually rice). As a consequence of these differing compositions, pre-project average earnings vary considerably by sector, with small industry earnings being particularly high.

PRE-SUBPROJECT PROFIT FROM SUBPROJECT ACTIVITY

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	69	56	72	88	77	11	46
1 - 19	9	16	14	5	8	2	5
20 - 59	7	10	7	5	2	11	7
60 - 299	10	14	6	1	7	62	21
300+	4	4	*	*	4	14	21

(in Rp. 000)							
Avg. for these	59	41	17	7	87	171	275
with earnings	190	93	61	58	378	192	509

Ref.: Table B.53

The proportion of new entrants to a project activity also varies considerably by province. In Central Java, 86% are new to the activity (nil earnings) compared to 14% already engaged in the activity. Bengkulu has the lowest proportion of those new to the activity (36%), largely due to the incidence of irrigation subprojects which by and large require existing farm locations.

PRE-SUBPROJECT PROFIT FROM SUBPROJECT ACTIVITY

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
<u>Rp'000</u>								
Nil	53	36	65	86	72	64	77	54
1 - 19	6	5	10	5	14	7	5	16
20 - 59	11	11	10	4	7	3	5	9
60 - 299	25	36	13	4	5	20	8	15
300+	7	11	2	*	*	6	6	6

<u>Overall</u>								
Mean Rp'000	144	116	39	28	14	76	83	73
<u>All earning</u>								
Mean Rp'000	306	181	111	200	50	211	479	159

Ref.: Table B.53

For those beneficiaries new to the project activity, the immediate impact (at first harvest/first year of project) was to give an average net profit of Rp. 57,000. Similar increments were achieved by existing activity beneficiaries with a shift from Rp. 153,000 to Rp. 216,000, or a gain of Rp. 63,000. For the total beneficiary population (both new and existing), the shift in project profits was from Rp. 59,000 to Rp. 118,000, an incremental gain of Rp. 59,000.

PRE-SUBPROJECT VS. FIRST HARVEST PROFIT

	<u>New Activity</u>		<u>Existing Activity</u>	
	Pre-Project %	First-Harvest %	Pre-Project %	First-Harvest %
<u>Rp'000</u>				
Nil	100	26	14	8
1 - 19	-	24	26	20
20 - 59	-	26	21	25
60 - 299	-	22	31	35
300+	-	1	8	14

Mean Rp'000	0	57	153	216

Ref.: Table B.54

One in five beneficiaries derived no profit at the first harvest. These, of course, include beneficiaries whose crop or livestock died immediately. Small industry beneficiaries are clearly an extremely diverse group. Although 28% of them derived no profit in the first year, the overall average profit is high at Rp. 425,000. It is, of course, possible that those with nil profit had not yet found a market for their newly-acquired skill.

FIRST HARVEST PROFIT FROM SUBPROJECT ACTIVITY

	Total %	Food Crops %	Es- tate- Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	20	9	13	29	35	2	28
1 - 19	22	29	24	19	24	2	5
20 - 59	26	29	34	24	24	9	6
60 - 299	27	27	28	27	10	60	30
300+	6	6	1	3	6	29	31

<u>Overall</u>							
Mean Rp'000	118	75	62	70	122	252	425

Ref.: Table B.54

In NTT 97% of beneficiaries were able to make some profit in the first year and on average made Rp. 144,000. A high 43% in Aceh made no profit in the first year though the remaining 57% had profit levels high enough to produce an overall average of Rp. 195,000.

FIRST HARVEST PROFIT FROM PROJECT ACTIVITY

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
<u>Rp'000</u>								
Nil	43	16	19	24	16	16	20	3
1 - 19	8	11	23	19	35	5	16	28
20 - 59	16	11	24	30	31	14	21	26
60 - 299	25	42	29	27	15	52	34	32
300+	9	21	5	2	2	14	8	11
<hr/>								
<u>Overall</u>								
Mean Rp'000	195	198	80	72	43	207	167	144

Ref.: Table B.54

Among the beneficiaries which taking new activities, the level of more shown no profit currently (33%) than at first harvest (26%). The overall average profit, however, is very stable. Among those who had previously undertaken the activity, there is a similar shift but on a smaller scale than new entrants.

CURRENT PROFIT VS. PRE-AND FIRST PROFIT

	<u>New Activity</u>			<u>Existing Activity</u>		
	Pre- Project %	First- Harvest %	Current %	Pre- Project %	First- Harvest %	Current %
<u>Rp'000</u>						
Nil	100	26	33	14	8	13
1 - 19	-	24	19	26	20	19
20 - 59	-	26	26	21	25	23
60 - 299	-	22	22	31	35	33
300+	-	1	1	8	14	14

Mean Rp'000	0	57	56	153	216	219

Ref.: Table B.55

On the average, beneficiaries are currently showing an annual profit of Rp. 119,000 on their project activity. This, of course, is not net gain, which will be described in the following section. The lowest average profits (Rp. 59,000) are in the estate sector with the contrasting high in small industry (Rp. 461,000). As will be shown later, although estate crops have a low total profit, they show a high net gain because the starting point is most often zero.

CURRENT PROFIT FROM SUBPROJECT ACTIVITY

	Total %	Food Crops %	Es- tate- Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	26	13	15	36	56	2	32
1 - 19	19	28	22	14	16	2	5
20 - 59	24	29	32	23	19	6	6
60 - 299	24	25	28	26	5	57	26
300+	6	6	1	3	6	33	29
<hr style="border-top: 1px dashed black;"/>							
<u>Overall</u>							
Mean Rp'000	119	75	59	68	95	271	461

Ref.: Table B.55

As had been described, net annual or incremental, gain is the most valid measure of the impact of PDP. This figure is the balance between new net profit and that previously earned.

In the first procedure year, the average beneficiary gained an income increment of Rp. 64,000. This statistic includes the 25% who had no gain. Sectors with the highest immediate impact are small industry and irrigation.

NET ANNUAL GAIN FROM SUBPROJECT AT FIRST HARVEST

	Total %	Food Crops %	Es- tate- Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	25	19	18	31	40	15	33
1 - 19	26	35	27	23	24	12	8
20 - 59	25	28	32	22	25	22	13
60 - 299	21	17	21	23	9	44	31
300+	2	2	*	1	1	7	16

<u>Overall</u>							
Mean Rp'000	64	38	47	63	48	98	165
<u>Any gain</u>							
Mean Rp'000	85	47	57	91	80	115	246

Ref.: Table B.55

Of the beneficiaries, 30% currently show no gain from their subprojects. This figure includes the 25% who no longer are participating in the activity. It does not include currently non-yielding projects because estimates of future income have been entered as current gain. The fish and food crop sectors have the lowest recorded net gain, while small industry and irrigation projects have the highest.

NET ANNUAL GAIN FROM SUBPROJECT CURRENT

	Total %	Food Crops %	Es- tate- Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	30	21	21	36	60	13	40
1 - 19	22	32	25	18	14	9	6
20 - 59	25	29	32	21	20	17	9
60 - 299	21	16	22	23	5	51	29
300+	3	2	*	1	1	8	16

<u>Overall</u>							
Mean Rp'000	66	40	45	61	38	117	187
<u>Any gain</u>							
Mean Rp'000	94	51	57	95	95	134	312

Ref.: Table B.55

Two provinces, Aceh and South Kalimantan, have high proportions of beneficiaries who are showing nil net gain currently (54% and 41% respectively). 87% of beneficiaries in NTT have achieved gains from subprojects. Looking at the actual current gain level, subprojects in South Kalimantan, Bengkulu and NTB have provided high average gains.

NET ANNUAL GAIN FROM PROJECT CURRENT

	Aceh %	Beng- kulu %	West Java %	Central Java %	East Java %	South Kali- mantan %	NTB %	NTT %
<u>Rp'000</u>								
Nil	54	24	31	35	23	41	27	13
1 - 19	14	14	23	14	37	8	13	31
20 - 59	13	15	23	26	30	10	21	27
60 - 299	16	38	21	23	10	37	33	25
300+	3	9	3	1	*	5	6	6

<u>Overall</u>								
Mean Rp'000	77	109	49	46	29	115	101	76
<u>Any gain</u>								
Mean Rp'000	167	143	71	71	38	195	138	87

Ref.: Table B.59

A more detailed analysis by sector of the average net annual gain shows extreme comparability with that described for the current year.

AVERAGE NET ANNUAL GAIN FROM SUBPROJECT

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	23	14	17	30	40	7	31
1 - 19	28	38	29	23	27	10	11
20 - 59	25	30	32	22	23	25	11
60 - 299	22	17	22	23	8	51	32
300+	2	2	*	1	1	7	15

<u>Overall</u>							
Mean Rp'000	65	39	46	62	43	108	178
<u>Any gain</u>							
Mean Rp'000	84	45	55	89	72	116	258

Ref.: Table B.60

Average net annual gain takes the mean of the first harvest and that currently gained and is therefore a stable comparison. However, the ultimate test is the direction that change has taken between the two time periods. At the individual level, has the gain remained static, has it increased, or has it decreased? The data shown below indicate that gains achieved in the first year have generally been sustained to the current time. This generalization, of course, may hide a range of ups and downs that have the effect of balancing each other out.

NET ANNUAL GAIN COMPARISONS

	<u>First Harvest</u>	<u>Current</u>	<u>Average Annual</u>
	₧	₧	₧
<u>Rp'000</u>			
Nil	25	30	23
1 - 19	26	22	28
20 - 59	25	25	25
60 - 299	21	21	22
300+	2	3	2

<u>Overall</u>			
Mean Rp'000	64	66	65
<u>Any gain</u>			
Mean Rp'000	85	94	84

Ref.: Table B.59

Further analysis of net annual gain figures shows other important areas of difference. Subprojects with beneficiaries experienced in the PDP activity have a considerably higher success rate compared to new activities (Rp. 80,000 compared with Rp. 56,000). Analysis by year is indicative of growing success, even though the later groups appear to have dipped slightly. This phenomenon may be due to the fact that the projects have not yet reached their maturity.

AVERAGE NET ANNUAL GAIN FROM PROJECT

	New Acti- vity %	Exis- ting Acti- vity %	1978- 1981 %	1981- 1983 %	1983- 1985 %	DIP		DIP	
						Rp Or %	20M Low %	Rp %	20 M+
<u>Rp'000</u>									
Nil	26	18	30	34	11	27			17
1 - 19	24	34	34	26	26	27			29
20 - 59	27	24	20	17	34	25			26
60 - 299	21	21	14	21	28	19			21
300+	1	4	2	3	2	2			7

<u>Overall</u>									
Mean Rp'000	56	80	59	72	63	60			69
<u>Any gain</u>									
Mean Rp'000	76	98	84	109	71	82			83

Ref.: Table B.61

Average net annual gain has been further allocated to two categories to apportion the total into in-kind and cash benefits. Thus, of the overall average gain of Rp. 65,000, Rp. 12,000 have been consumed and Rp. 53,000 represent cash. This has an important bearing on the targetting aspect. Only 38% of beneficiaries consume some or all of the products. This proportion, however, varies considerably by sector, with a high of 74% for irrigation (rice) and a low of 4% for livestock. Livestock appear to be kept as a form of asset building or saving rather than being used for food.

AVERAGE NET ANNUAL GAIN IN KIND

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	62	30	55	96	49	26	100
1 - 19	26	50	40	3	32	18	-
20 - 59	8	13	5	1	17	32	-
60 - 299	2	6	-	-	1	23	-
300+	-	-	-	-	-	1	-

<u>Overall</u>							
Mean Rp'000	12	16	4	1	14	48	-

Ref.: Table B.61

On average, PDP gives a mean cash net gain of Rp. 53,000. Small industry projects are clearly the highest generators of cash. The figure of Rp. 61,000 shown for livestock is slightly misleading because cash includes the valuation of the asset as well as sales, although for wealth purposes, the asset value is as good as cash.

AVERAGE NET ANNUAL GAIN IN CASH

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Rp'000</u>							
Nil	36	38	23	31	65	35	31
1 - 19	25	30	28	23	21	11	11
20 - 59	21	19	28	21	6	24	11
60 - 299	17	10	21	23	8	25	31
300+	1	1	*	1	*	5	15

<u>Overall</u>							
Mean Rp'000	53	23	41	61	27	60	178

Ref.: Table B.62

3.6 Conclusions on Economic Impact

In terms of the percentage of beneficiaries who receive positive net gain from a subproject, irrigation has the highest gain (93%) and fish the lowest. The mean benefit derived shows considerable disparity, ranging from Rp. 178,000 for small industry projects to Rp. 39,000 for food crops.

NET ANNUAL GAIN - SECTOR

	<u>% Of Beneficiaries Showing Some Net Gain</u> %	<u>Mean Annual Net Gain</u> (Rp. 000)
Food crops	86	39
Estate crops	83	46
Livestock	70	62
Fish	60	43
Irrigation	93	108
Small industry	69	178

Ref.: Table B.60

Another way of assessing the data is to compute the benefit-cost ratio. To do so first involves estimating the total annual gain from PDP sunprojects. This is derived from:

Mean net gain per beneficiaries % total universe of beneficiaries:
e.g., Food crops $39.2 \times 57,350 = \text{Rp. } 2,248$ million.

The second calculation involves dividing this estimated annual gain by the total DIP spending to date on the types of subprojects.

e.g., food crops $\frac{2248}{3931} = .57$

It should be remembered that these results are based on the direct input costs (total DIP) of PDP and exclude infrastructural or overhead costs of the implementing and supervising studies. These data are not available. The result is thus the average annual net gain derived from one unit of direct cost. The calculation of the benefit-cost ratio gives .69 overall.

Small industry projects are clearly the most successful in terms of return. Most of these involve up-grading the technology of existing activities. The estate crops sector is surprisingly high, probably due to the very low (Rp. 36,000) per capita DIP investment. Fish is the least successful.

ESTIMATED BENEFIT-COST RATIO - SECTORS

	<u>Total Annual Gain</u>	<u>Total DIP Amount</u>	<u>Benefit - Cost Ratio</u>
	<u>Rp Million</u>	<u>Rp Million</u>	
Food crops	2,248	3,931	.57
Estate crops	1,060	1,106	.96
Livestock	4,257	5,943	.72
Fish	707	1,422	.50
Irrigation	1,018	1,820	.56
Small industry	945	573	1.65
TOTAL	<u>10,235</u>	<u>14,795</u>	<u>.69</u>

SECTION 4 - PROJECT SUSTAINABILITY

- 4.1 Objective
- 4.2 Current Project Activity Status (Overall)
- 4.3 Current Project Activity Status (Beneficiary)
- 4.4 Anticipated Sustainability
- 4.5 Reasons for Project Failure
- 4.6 Conclusions

4.1 Objective

One goal of most PDP projects is sustainability. The measurement of sustainability can take a variety of forms. At the simplest level, the incidence of currently on-going project activities compared to those already abandoned is a gross measure of success. A more subtle gauge of sustainability was used for this study: the comparison of net gains over time. Using this measure, it is possible to categorize projects into those on an upward track from first harvest to the present, those maintaining a steady balance, those on a downward track, and those which are no longer operating.

Beyond the quantitative assessment of sustainability, it is important to future planning that an attempt to be made determine the reasons behind variations in sustainability and at what stage if any projects changed levels of sustainability. The reasons for such differences are reported later in this section.

4.2 Current Project Activity Status (Overall)

The status of current project activities was measured in two ways. first, Pimpros were interviewed about the status of the project activity overall. Second, beneficiaries were interviewed regarding the status of the project at the individual level. Because the Pimpro needed to look at project status in terms of most beneficiaries, this information is subjective. The beneficiary-level information is the more reliable estimate because it is based on the actual individual situation.

The analysis of the results in this section is by project. It should be remembered that the Pimpro was asked about the project from the beneficiaries point of view. Thus, a project could be classified as continuing even though from the official point of view of the Dinas, it could be off their books and they are no longer concerned with it (the implementation of the DIP has been completed). The results thus reflect the view of the Pimpro regarding the status of the project activity rather than the administrative status of the project itself.

Overall, only 10% of PDP project activities have been discontinued, with a further 3% expected to be brought to an end. Thus, one in eight of the projects are effectively non-sustainable. The highest rate of attrition is in estate crops, followed by small industry and fish projects. In the first two sectors, attrition comes after some time, whereas for fish projects when failure occurs, it tends to be immediate. Subsequent analysis shows that estate crops and fish projects are subject to a high failure rate due to crop failure or fish mortality rather than for economic reasons.

CURRENT PROJECT ACTIVITY STATUS - PIMPRO ASSESSMENT

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %	Multi Sector %
<u>Most beneficiaries</u>								
Just started	5	1	19	2	10	-	16	-
Still doing it	85	89	54	92	74	100	63	100
Stopped immediately	4	4	-	1	17	-	3	-
Stopped after time	6	5	27	5	-	-	-	-

Expect it to stop	3	1	-	5	-	10	-	4

Ref.: Table P.3

Although the total failure rate (the "stopped immediately" and "stopped after time", and expect to stop" categories) has declined over the period 1978-1985, there has been only a small difference in the level of immediate failure. The earlier projects show a high proportion of deferred failure. Later projects have, of course, not yet had time to reach this cycle. There are strong indications that the smaller the project value, the greater the chance of failure (16% compared to 5%). It is possible that because the larger projects have more rigorous controls, they may be more sustainable.

CURRENT PROJECT ACTIVITY STATUS - PIMPRO ASSESSMENT

	INITIATION YEAR			DIP VALUE	
	1978- 1981 %	1981- 1983 %	1983- 1985 %	Rp 20 M Or Less %	Rp 20 M+
<u>Most beneficiaries</u>					
Just started	-	1	11	6	2
Still doing it	83	89	86	82	94
Stopped immediately	4	6	2	5	1
Stopped after time	13	4	4	7	3

Expect it to stop	3	2	3	4	1

Ref.: Table P.3

One possible reason for this pattern is that projects with a large number of beneficiaries may have administrative problems that appropriate support services being given to prevent (each individual). However, the data do not confirm this situation. Rather, projects with the smallest number of beneficiaries appear to have the highest failure rate (21%).

CURRENT PROJECT ACTIVITY STATUS - PIMPRO ASSESSMENT

	TOTAL BENEFICIARIES ON PROJECT		
	99 or Less %	100- 299 %	300+ %
<u>Most beneficiaries</u>			
Just started	6	2	7
Still doing it	77	94	87
Stopped immediately	10	1	1
Stopped after time	10	3	10

Expect it to stop	4	1	4

Ref.: Table P.3

4.3 Current Project Activity Status (Beneficiary)

Compared to the 13% level estimated by Pimpros, (25%) of selected beneficiaries are no longer doing the project activity or expect to stop soon. This is the effective rate of complete non-sustainability. The highest rate of non-sustainability is for fish projects (55%). One-third of livestock beneficiaries also drop out (usually after a period of time).

CURRENT PROJECT ACTIVITY STATUS - BENEFICIARY LEVEL

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
<u>Most beneficiaries</u>							
Just started	20	16	58	11	24	8	17
Still doing it	56	67	26	56	22	91	62
Stopped immediately	7	5	8	9	15	*	15
Stopped after time	17	12	8	23	40	*	6

Expect it to stop	1	*	2	2	-	-	2

Ref.: Table B.1

Consistent with the Pimpro results, the earlier projects account for most of the non-sustainable projects, with an activity failure rate of 44%. For later projects only time will tell the outcome, but there are clear indications that the rate of failure is falling. Even allowing for some future attrition, the change recorded between each time period is statistically significant. Similarly, the smaller the project, the greater the failure rate (30% compared to 19%). To some extent, this characteristic is a reflection of the small size of the earlier projects.

CURRENT PROJECT ACTIVITY STATUS - BENEFICIARY LEVEL

	<u>INITIATION YEAR</u>			<u>DIP VALUE</u>	
	<u>1978- 1981</u> %	<u>1981- 1983</u> %	<u>1983- 1985</u> %	<u>Rp 20 M Or Less</u> %	<u>Rp 20 M+</u> %
Just started	6	15	33	25	13
Still doing it	51	58	57	46	69
Stopped immediately	8	13	3	9	5
Stopped after time	35	14	7	20	13

Expect it to stop	1	2	1	1	1

Ref.: Table B.1

As could be expected, there is a clear relationship between project economic net gain and sustainability. Projects with a high net gain (Rp. 50,000 or more per year) have a failure rate of only 6%. In contrast, projects which have derived little or negative gain have failed at a rate of 68%.

CURRENT PROJECT ACTIVITY STATUS - NET GAIN LEVEL

	<u>NET GAIN</u>		
	<u>High</u> %	<u>Medium</u> %	<u>Low</u> %
Just started	23	25	5
Still doing it	73	58	28
Stopped immediately	1	3	27
Stopped after time	4	14	40

Expect it to stop	1	1	1

Ref.: Table B.1

4.4 Anticipated Sustainability

There is a strong correlation between net gain and sustainability. With no gain, the probability of stopping is high and remains high for projects with modest gains. However, once the Rp. 10,000 mark is passed, the level of sustainability is high overall. The sustainability of project activities is high for an estimated 77% of the total beneficiary population.

AVERAGE ANNUAL NET GAIN

<u>Average Net Gain</u> RP'000	<u>Still</u> <u>Doing</u>	<u>Project Status</u>		<u>Sustain-</u> <u>Able Level</u> <u>(A x C) (%)</u>	
		<u>(A)</u>	<u>(B)</u>		<u>(C)</u>
		<u>Probability Level</u>			<u>% of Bene-</u> <u>ficiaries</u>
		<u>Stopped</u>			
Nil	.32	.67	23	7	
1 - 9	.69	.31	15	10	
10 - 19	.87	.13	13	11	
20 - 29	.89	.11	9	8	
30 - 49	.91	.09	6	5	
50 - 59	.96	.04	10	10	
60 - 79	.95	.05	6	6	
80 - 99	.96	.04	4	4	
100 - 199	.94	.07	9	8	
200 - 299	.97	.03	3	3	
300 - 499	.99	.01	1	1	
500+	.96	.04	1	1	

Ref.: Table B.1

The relative change between the first production and the current year is an important factor in project sustainability because gains that are declining may make the project susceptible to failure. Seven percent of the beneficiaries report a gain during the first year, but have none now. This is particularly high (20%) in fish projects. Beneficiaries showing some gain, but nevertheless a decreasing gain (5%), are high in the irrigation (18%) and food crops sectors (10%). It should be noted that in the estate sector, net gains for "not yet producing" situations were estimated and both first harvest and the current year were automatically given the same value. This accounts for the same level of gain figure of 71%.

ANALYSIS OF GAIN CHANGE BETWEEN FIRST HARVEST
AND CURRENT - SECTOR

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
No gain then or now	23	14	17	30	40	7	31
Gain then but not now	7	6	4	6	20	6	9
Gain now but not then	2	4	1	*	8	2	4
Same level of gain	52	47	71	62	30	25	32
Gain now greater	10	18	4	1	5	36	21
Gain now less	5	10	3	1	5	18	5

Ref.: Table B.66

4.5 Reasons for Project Failure

As shown in Section 4.4, 25% of project activities have already failed or are on the verge of failing. Preliminary probing shows that almost half (45%) of this amount is due to crop failure or the death of livestock. Discussions have shown that a considerable part of this failure is attributable to logistics: that seeds or livestock are in such a poor condition that by the time they reach the beneficiary, they have virtually no chance of success. Some are even dead on arrival.

MAIN REASON FOR FAILURE

	<u>Expect to Cease</u> %	<u>Ceased Already</u> %
Crop/livestock died	20	46
Poor results	18	9
Others	43	45

Ref.: Table B.3

The problem of immediate failure is most critical for estate crop projects, where 68% of the failure is due to the short life or instant death of the plants given to beneficiaries. Some of this may be due to the late arrival of plants which in turn may have been due to the late release of the budget.

Discussions have also shown that part of the failure lies in the hands of beneficiary himself through his delays in planting the crop. Another reason may be that the kepala desa takes a long time to distribute the plants. At the heart of the matter, however, is the fact that because the benefits tend to be small (e.g. 1 coconut plant) the recipient does not necessarily treat them with enthusiasm or care.

MAIN REASON FOR FAILURE

	Total %	Food Crops %	Es- tate Crops %	Live- stock %	Fish %	Irrig- ation %	Small Indus- try %
Crop/livestock died	45	40	68	45	44	-	-
Poor results	9	23	9	4	4	38	12
Others	46	34	28	50	52	39	79

See Paragrahp 4.5.3

Ref.: Table B.66

Analysis of the other reasons for project activity failure needs to be done on a sector basis. the results shown below have been manually produced and are not on the computer file. In most sectors, a great variety of reasons were put forward, but only the major ones have been recorded.

<u>Food Crops</u>	<u>Total others 34%</u>
Water supply problems	5%
Animals/pests destroy/eat	4%
Poor equipment	3%
Harvest taken by Dinas	2%
Too busy	2%
 <u>Estate Crops</u>	 <u>Total others 28%</u>
No market	10%
Not enough seed	3%
 <u>Livestock</u>	 <u>Total others 50%</u>
Sold them (various reasons)	26%
Returned to PDP but not replaced	5%
Sick/old cows	4%
 <u>F i s h</u>	 <u>Total others 52%</u>
Harvest taken by Dinas	11%
Lack of water/dry season	10%
Floods	9%
 <u>Irrigation</u>	 <u>Total others 39%</u>
Dried up	39%
 <u>Small Industry</u>	 <u>Total others 79%</u>
Machine broke	14%
Capital finished	9%
Soil unsuitable for bricks	7%
Lack of training	5%
Losing money	5%
Too busy	4%

4.6 Conclusions

The three salient factors in determining an activity's sustainability (current project status at the beneficiary level, expected status, and annual net gain) were incorporated in a segmentation analysis and categorized into various levels of individual activity sustainability. The units for the annual net gain classification are slightly different from those used in the targetting analysis because they were found to be the most discriminating.

High	Rp. 100,000
Medium	Rp. 30 - 99,000
Low	Rp. 1 - 29,000
Nil	

The results have been ranked from highest to lowest sustainability. Almost half (45%) of beneficiaries are classified as working in high or medium sustainable activities on these criteria. Twenty-four percent are in the group "perhaps sustainable" where there is some uncertainty about continuance. The remainder are in unsustainable activities.

SUSTAINABLE SUMMARY - OVERALL

<u>Current Status</u>	<u>Future Status</u>	<u>Net Gain</u>	<u>Total #</u>
On-going	Continue	High	17
Just	Continue	High	4
On-going	Continue	Medium	17
Just	Continue	Medium	7

Very/likely sustainable			45

On-going	Continue	Low	15
Just	Continue	Low	8
On-going	Uncertain	-	1

Perhaps sustainable			24

On-going	Continue	Nil	5
On-going	Stop	-	1
Stopped	(After time)	-	17
Just	(immed.)	-	7

Unsustainable			30

Ref.: Table B.65

Irrigation projects, fairly predictably, have a high sustainability rating of 95%. The unsustainable level is critically high (59%) in fishing and fairly high (43%) for livestock projects.

SUSTAINABILITY SUMMARY - SECTOR

<u>Current Status</u>	<u>Future Status</u>	<u>Net Gain</u>	<u>Food Crops</u> %	<u>Es-tate Crops</u> %	<u>Live-stock</u> %	<u>Fish</u> %	<u>Irrig-ation</u> %	<u>Small Indus-try</u> %
On-going	Continue	High	15	6	13	5	73	42
Just	Continue	High	2	8	3	3	6	4
On-going	Continue	Medium	23	8	20	4	14	9
Just	Continue	Medium	5	22	4	10	2	1

Very/likely sustainable			45	44	40	22	95	56

On-going	Continue	Low	26	8	13	9	2	5
Just	Continue	Low	7	27	2	11	-	-
On-going	Uncertain	-	2	2	2	-	-	1

Perhaps sustainable			35	37	17	20	2	6

On-going	Continue	Nil	2	2	9	4	2	14
On-going	Stop	-	-	2	2	-	-	2
Stopped	(After time)	-	12	8	23	40	-	6
Just	(immed.)	-	5	8	9	15	-	15

Unsustainable			19	20	43	59	2	37

Ref.: Table B.65