SMERU

Research Report

Socioeconomic Impact Evaluation of the Sulawesi Agricultural Area Development Project (SAADP): Lessons Learned from a Micro-Credit Program in Indonesia

June 2004

For further information, please contact SMERU, Phone: 62-21-31936336; Fax: 62-21-31930850; E-mail: smeru@smeru.or.id; Web: www.smeru.or.id

Sosioeconomic Impact Evaluation of the Sulawesi Agricultural Area Development Project (SAADP): Lessons Learned from a Micro-Credit Program in Indonesia

Research Team

Coordinator:

H a s t u t i

Advisers:

Joan Harjono
Sudarno Sumarto
Asep Suryahadi
Sri Kusumastuti Rahayu

Researchers:

Bambang Soelaksono
Daniel Perwira
Daniel Suryadarma
Nina Toyamah
Rima Prama Artha
Rizki Filaili
Sri Budiyati
Wawan Munawar
Wenefrida Widyanti

Supporting Team:

Mona Sintia
Hesti Marsono
Bambang C. Hadi
Mardiani
Supriyadi

SMERU Research Institute

Socioeconomic Impact Evaluation of the Sulawesi Agricultural Area Development Project (SAADP): Lesson learned from a credit program in Indonesia/ SMERU Research Institute. –- Jakarta: SMERU Research Institute, 2004.

131 p.; 28 cm.

ISBN 979-98902–0-9

1. Microfinance
2. Agriculture

I. Title

361.05/DDC 21

ACKNOWLEDGEMENTS

We would like to thank William H. Cuddihy, Guo Li, dan Maria Triyani from the World Bank for facilitating this research project and providing technical guidance during the research phase.

We are grateful to all the respondents who took part in the study and provided the information that made it possible. We appreciate the assistance provided by village and sub-district heads and their staff, UPKD management, facilitators, Bappeda officials at the provincial and district level in the survey areas and other key informants who gave us their valuable time. We are grateful to the staff at the Directorate General for Regional Development, Ministry of Home Affairs in Jakarta for providing data and information on the SAADP. We would also like to thank the regional enumerators who helped us gather information in the field and the data entry people who made data available for analysis. Finally, we express our thanks to the Head of Bappeda of the Central Sulawesi Province, the officials from districts in the Central Sulawesi and South-East Sulawesi Provinces, and those who participated in the regional seminar which was held in Palu to discuss the preliminary findings of the study and provided constructive comments.

EXECUTIVE SUMMARY

The Sulawesi Agricultural Area Development Project (SAADP) is an economic-commercial project whose aim is to reduce poverty in Central Sulawesi and South-east Sulawesi. It was funded by a World Bank loan and was implemented between August 1996 and December 2003. In 1999 the project was redesigned in such a way that its focus changed from agricultural area development to local community initiatives (IMS) with stress on micro-finance activities, which at the village level are managed by the Unit for Management of Village Activities/Finances (UPKD).

The present socioeconomic impact evaluation of SAADP, which was undertaken in the context of providing an alternative input for the final SAADP report, was carried out by the SMERU Research Institute between February and May 2004 at the request of the World Bank. The objectives of the evaluation, which covers the period since the project was redesigned and focus shifted to micro-finance activities, were: (a) to assess the economic and social impacts of SAADP, (b) to examine the ways in which the SAADP implementation process at the local level has influenced outcomes, and (c) to study SAADP experiences in the interests of further policy development and the design of possible follow-on activities.

The study combined a quantitative household survey and in-depth interviews with key informants. Field research was carried out in four districts, namely Donggala and Tolitoli in the Province of Central Sulawesi and Konawe Selatan (Konsel) and Muna in the Province of South-east Sulawesi. In each district, three villages that had participated in SAADP were selected along with one control village, which is a village that had not participated in SAADP and was similar to the other sample villages in geographical typology and socioeconomic characteristics. The study involved 618 respondent households, of which 408 had participated in SAADP, 90 were control households living in the SAADP sample villages, and 120 were control households in the control villages. Sample households were chosen randomly, except for control households in the SAADP villages, which were selected purposively.

Research findings indicate that project socialization at the village level was generally carried out more than once. On the first occasion, the SAADP facilitator explained the project purpose and implementation process. On the second occasion, socialization took the form of a village discussion to establish UPKD management. Even so, only around 60% of SAADP respondents stated that they had obtained their first information about the project from a village meeting.

Information from the field reveals a number of differences in implementation between the first stage of the project and the following or revolving stage. In the first stage poor members of the community were selected as participants. Credit requests were submitted through groups in the form of a written proposal. The time between submission and the distribution of loans was relatively long because participants had to wait until the government released funds. Loans were channeled to participants either directly or through groups. Interest on loans was between 15% and 18% per year. The size of each loan was decided by a village verification team and loans were repaid through heads of groups or directly to the UPKD management.

In the revolving stage, the giving of loans focused on persons who were considered able to repay them, which means persons who had an economic activity. Even public servants and village officials were able to borrow. Usually individual members of the community made an oral request for a loan to UPKD office-holders. Almost all loans were handed directly to the participant relatively quickly, with some borrowers even receiving the money at the time of the request. The annual interest rate was set higher at 18% to 24%. The size of the loan was decided by the UPKD management and in most cases the money was repaid directly to the management.

Quantitative data show that most households (83%) were accepted as SAADP participants because they owned an economic activity while only 17% were selected because they were poor. Most loan proposals (76%) were submitted through a group and only 69% were in written form, even though the majority consisted of requests made at the beginning of the project. Furthermore, approximately 35% of proposals were prepared by UPKD office-holders. Around 64% of loans were available within one month. Loans ranged in size between Rp200,000 and Rp5 million, with most between Rp500,000 and Rp1 million. In the majority of cases (92%), annual interest was between 15 % and 24%.

On the whole, groups were formed only as a formality to meet project requirements. The majority (87%) were based on similarity in type of economic activity. For the most part groups functioned only at the beginning of the project, specifically at the time when loan proposals were submitted. In the case of proposals that were made through a group, the group was formed at the initiative of UPKD office-holders in 49% of cases, while only 33% of groups were formed at the initiative of the participants themselves.

Only 59% of SAADP household respondents knew about the process of UPKD formation, which is that the UPKD was established through a village discussion. Some 46% of respondents were involved in the sense that they were present at the village discussion and took part in the selection process. The majority of respondents (68%) said that the UPKD office-holders were ordinary members of the community, while 31% said that they were community figures.

Community evaluation of the capacity of UPKD office-holders varied. Most SAADP respondents (71%) said that the persons concerned were competent in handling the UPKD and 66% felt that UPKD service was good. Some 52% said that the UPKD office-holders played a part in decision-making about internal UPKD regulations and the credit mechanism, while 43% said that the village community played a role in decision-making of this kind.

At the beginning of the project UPKD management consisted of four to five office-holders, namely a chairman, a secretary/collector of credit installments, a treasurer, a head of economic activities, and a head of physical activities. Soon after the project became operational, however, the number was reduced to only three, namely a chairman, a secretary, and a treasurer. This management structure still exists in all sample districts except Muna, where UPKD management is handled by only one person, the chairman. According to the program stipulations, the UPKD management should be re-elected after three years, but in practice this regulation has been ignored. In many villages, there has been a change in office-holders but it has been for other reasons.

UPKD management generally has not been transparent. Only 34% of respondents said that there was or had once been information that the community could access about the UPKD's financial position. Reporting to and supervision by the community through a village meeting did not take place, the reasons being that this aspect was not emphasized during socialization. In addition, the village discussion forum did not function as intended. As a consequence, the community had very little sense of project ownership. Furthermore, the situation was complicated by the low levels of education among the community.

The system by which the UPKD was to report to higher levels at project management only functioned while the project was still in existence and when facilitators were still employed. After that, reporting activities in Konsel and Muna Districts ceased. Although in Tolitoli and Donggala districts reporting is still done, it is no longer a routine procedure. At the same time, supervision by higher administrative levels has been inadequate. On the whole, higher officials visited villages only once a year and even then only at the beginning of project implementation. From the point of view of the UPKD management, only the facilitators, who usually visited the village once a month to assist the UPKD, provided any kind of routine supervision.

The non-transparent system of UPKD management, the minimum amount of assistance given to the UPKD, and the weak supervision of UPKD performance resulted in a number of cases of misuse of project funds. Village residents, especially those who were SAADP participants, believe that there is urgent need for an institution to supervise the UPKD, although they feel that the function could be carried out by the village administration. In fact, steps in this direction have already been taken in Central Sulawesi with the formation of the UPKD Supervisory Body at village level; however, it has not yet achieved maximum performance. Even the UPKD management would like the village and subdistrict governments to be involved, particularly in supervision of credit repayment by the community. This is related to the fact that UPKD office-holders do not have authority and competence over the community.

In a number of sample villages, the UPKD is still the only formal financial institution but there are wide variations in its current condition. Some UPKDs are functioning relatively well, some are still functioning but with a very limited amount of funds to lend out, and some have ceased to function completely. The main problem faced by the majority of UPKDs is that loans have not been repaid. This has happened because on the one hand the community does not feel that it 'owns' the UPKD yet on the other hand the UPKD is unable to impose sanctions as it is not a legal entity. The UPKD likewise has no special relationship with the formal banking sector. It is an ordinary bank customer that opened an account with the nearest branch of the Indonesian People's Bank (BRI) at the beginning of the project for the purpose of receiving SAADP funds from a higher level.

In its implementation, the SAADP project in general did not differentiate between women and men. Both women and men have been directly involved as credit recipients, facilitators, and UPKD office-holders, although not in equal proportions. The majority (85%) of SAADP household respondents said that there was no discrimination against women in the submission of credit proposals. The fact that only 27% of all loans went to women is explained by the regulation that each household could receive only one loan

within one budget year. On the whole, women used their loans in accordance with their proposals, which is as business capital in the trade sector. With the availability of SAADP credit, the trading activities of many women progressed rapidly, while there was also an increase in the number of women who entered this sector. SAADP also had a positive effect on changes in the role of women in productive economic activities (12%), the figure being statistically significant at the 5% level. Similarly, changes in the role of women in household decision-making (5%) and in community activities at village, hamlet, and neighborhood levels (6%) are positive, although the values are not statistically significant.

In order to provide assistance to the community, the SAADP project included facilitators who were recruited from NGOs. In general, the facilitators played an important role at the beginning of the project in socialization activities, in facilitation of UPKD establishment, in the formation of groups, and in helping to prepare and select the initial credit proposals. After the project was functioning, the role of facilitators in assisting the community became much smaller and their activities focused instead on the UPKD, which they visited once or twice a month. For that reason it is not surprising that only 67% of SAADP respondents were aware of the existence of a facilitator in their village. In general, the community knew the facilitator only as the person who had given an explanation of the program during socialization and who had made several visits to the UPKD.

The performance of facilitators varied greatly from village to village. Some were considered by the community to have been very good in their work, yet there were also cases of facilitators who gave incorrect information about project funds, a mistake that later made recipients in certain places reluctant to repay loans. There were even cases of facilitators who embezzled project funds. Nevertheless, the UPKDs generally felt that the presence of facilitators had been of real benefit to project implementation and that they are still needed. For the UPKD, the facilitator could constitute a person to consult about the management of SAADP funds and a source of moral support in facing community demands; at the same time his/her presence could encourage the repayment of loans. The facilitator also helped the UPKD in bookkeeping and in the preparation of reports on project implementation.

Most SAADP respondents (73%) said that the extent of their involvement in the planning or implementation of local community activities had not altered. The impact of SAADP on increased involvement in activities was 6%, which is not statistically significant. The effect on greater participation in organizational activities was also insignificant. Only the effect on increased involvement in traditional ceremonies, which was 12%, which is statistically significant at 1% level.

The influence of SAADP on the strengthening of local institutions was likewise relatively small, as indicated by the following: (i) by comparison with pre-project days, the village discussion forum did not develop except briefly at the very beginning of project implementation; (ii) the group system did not function well; (iii) activities at the village, hamlet and neighborhood levels did not undergo many changes; and (iv) the UPKD system did nothing to strengthen other existing village institutions. In addition, there is no indication that SAADP implementation encouraged greater transparency at the local government level. This can be traced to the fact that within the UPKD

management itself the principle of transparency was observed only at the beginning of the project when credit was distributed to beneficiaries.

The majority of respondents (90%) felt that the SAADP project had been of benefit to them as it provided capital to add to existing business capital, to establish new economic activities, or to finance other needs. Most (93%) also stated that loans had been used in accordance with the purpose stated in their credit proposal, while virtually all (99%) said that they had used the money as capital in agriculture (food and tree crops), trading activities, fishing, home industry, and other economic undertakings.

In all sample areas there were households that had experienced an improvement in their business perspectives, the impact of SAADP being 15%, which is statistically significant at the 1% level. Qualitative information indicates that respondents usually obtained additional knowledge from neighbors, friends, or their own experiences. The type of knowledge in which the greatest increase occurred was diversification in activities, while the types most affected by SAADP were production techniques (11%), marketing (8%) and administration/finances (7%). The effect on these three types of knowledge was statistically significant at the 1% level, while the effect on greater knowledge about diversification (6%) was not statistically significant. The impact of SAADP on changes in business practices was also positive (5%) but insignificant, while the effect on each type of business practice was relatively small. There were positive effects on marketing practices (2%), production techniques (9%) and administration/finance practices (1%). The effect on diversification in business activities was negative (-4%). Only production techniques experienced an effect that was statistically significant (at 1% level).

Qualitative information indicates that SAADP assistance led to the appearance of new economic undertakings in all sample locations, although they varied in type and number depending on the creativity of community members and the effectiveness of SAADP implementation. Even so, there was no relationship between diversification in economic activities and increased capacity among respondents to face economic shocks. Although the impact of SAADP on diversification was negative, the effect on increased capacity to face shocks was positive (8%).

SAADP had a positive impact on increases in all types of agricultural perspectives among farming respondents. The greatest effect was on knowledge about land management (13%) and the use of fertilizer (12%), both figures being significant at the 1% level. The effect on marketing knowledge (8%) was significant at the 5% level, while effects on knowledge about the use of pesticide (7%) and post-harvest handling of crops (4%) were insignificant. SAADP also had a positive impact on changes in farming practices, the greatest effect being on land management practices (15%, which is significant at 5% level). The effects on practices in fertilizer use (10%) and marketing practices (8%) are significant at 1% level. The effects on other farming practices (the use of pesticide and post-harvest handling of crops) were not significant. On the whole, the level of use of fertilizer and pesticide is relatively low, except in Tolitoli. Even so, there were numbers of households that increased their use of agricultural inputs. SAADP had positive effects on the use of green fertilizer (9%) and pesticide (12%) (both significant at 1% level) and on the use of chemical fertilizer (8%) (significant at 5% level).

Most SAADP respondents (74%) said that their nominal household income has risen. Overall, the difference in the proportions of SAADP and control households that experienced an increase in nominal income was 9%, which is significant at 5% level. Even so, the increase in nominal income was smaller than the rate of inflation, which meant that real per capita average income experienced a decline. Nevertheless, the impact of SAADP on the average changes in real household income was small (0.5%) although positive, as was the effect on the average changes in real expenditure (5.4%), but these values are statistically insignificant.

SAADP had a positive though statistically insignificant influence on the tendency to save. Most respondents kept savings in the form of money, which they deposited in a bank or retained at home. At the same time there was very little change in the condition of the majority of houses and associated facilities owned by respondents. The effect of SAADP on changes in housing and associated facilities was generally relatively small and shows no definite pattern. The effect on changes in the ownership of valuable goods (such as electronic goods, bicycles, and motor-cycles), land and livestock likewise does not show a clear pattern.

The targeting of SAADP in poverty reduction was appropriate if seen in terms of village selection, for the villages that were chosen were in the 'poor' category, had experienced drought and economic crises, and in many cases were IDT or 'left behind' villages. Nevertheless, the target, which at the commencement of the project was poor households, has shifted to persons who owned an economic undertaking or were deemed able to repay the loan. Survey results show that although most (58%) of those who received loans have a low level of education (completion of elementary school at the most), the proportion of participants with a senior high school education, who generally come from the better-off groups in the community, is not small (22%). Furthermore, relatively better-off households tended to receive loans more frequently. The households (59%) that received three or more loans belong to the relatively better-off groups.

Quantitative data also show that the impact of SAADP on poverty reduction, while relatively small and statistically insignificant, tended to be positive. The effects on households that were 'still poor' (-3%) and that changed from 'not poor to poor' (-1%) are negative in value, while the figures for 'still not poor' and 'poor to not poor' are positive. This means that the proportion of SAADP households that were 'still poor' was lower than the proportion of control households in this category, while the proportion of 'still not poor' households was greater. The proportion of SAADP households that changed from 'poor to not poor' was higher and from 'not poor to poor' was lower. Meanwhile, in terms of the impact on welfare distribution, which is indicated by the difference in change in the Gini Ratio between SAADP and control households (0.0305), the decline in welfare gap among SAADP households was smaller than among control households. The effects of SAADP on other indicators of welfare among poor households were generally insignificant but positive. The effect on ability of poor households to pay for children's education was 11%, ability to access health services was 10%, ability to participate in traditional ceremonies was 10%, and ability to face economic shocks was 4%.

Examined from the aspects of UPKD development, the implementation mechanism, and the impact on the socioeconomic situation of the community, the evaluation results lead to the conclusion that the degree of success of the SAADP project has varied from place to place. Even so, it can be said that on the whole the SAADP project has not been a success as there are many UPKDs that are no longer functioning and the impact on social and economic conditions at community level has been relatively small.

There are many weaknesses in SAADP project implementation. Since the existence of non-functioning UPKDs can influence the performance of other UPKDs and since the funds and resources already expended are quite large, while the existence of the UPKD is still felt to be important for the community, the SAADP project, if it is to be continued, should focus on reviving, improving, and expanding the existing UPKDs so that they can form an example for future project implementation.

Cases of UPKDs that are not running well or have ceased to function must be settled through a village discussion that is facilitated by the local regional government, for example by forming a special team to handle loans that are in arrears. UPKDs that have performed well should be expanded and improved in the following aspects: (i) while awaiting ratification of micro credit legislation, the legal status of the UPKD as an institution must be raised, for example by a Provincial Regulation, so that it will have power and authority to take action according to the law; (ii) the UPKD needs further institutional improvement in its regulations, management structure, supervision, and reporting, so that it can grow into an independent financial institution; (iii) the UPKD should operate as a business entity and not as an agent of development in order to ensure sustainability in its undertakings; (iv) continuous improvement must be made in the ability of UPKD office-holders; (v) the scope of UPKD activities should be kept to productive activities in order to ensure that loans are returned and that money circulates; (vi) to prevent defaulting, consideration should be given to the introduction of collateral requirements that can be easily met by community members yet are binding on them; (vii) credit can be channeled on an individual basis or else through groups, in which case group development must be undertaken in a consistent way through the application of certain fixed standards; (viii) there is need for a serious commitment on the part of regional governments to the provision of support for UPKD development; (ix) supervision, guidance, and training are very important and must be integrated into every phase; (x) the role of facilitators in guiding participants in the development of their economic activities and the handling of credit must be increased, while facilitators should also be given adequate incentives and training to encourage better performance; and (xi) in the future implementation of similar programs, new institutions should not be formed but instead existing institutions like the UPKD should be used so that efforts will not be counter-productive, the performance of existing institutions will be strengthened, and unhealthy competition will be avoided.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS			ii
EXECUTIVE SUMMARY			ii
TABLE OF CONTENTS			ix
LIST OF TABLES			xi
LIST OF ABBREVIATIONS			xvi
I.	INTRODUCTION		1
	1.1	Background	1
	1.2	Research Objectives	2
	1.3	Research Methodology	3
	1.4	Timetable	4
	1.5	Systematic of the Report	5
II.	CHARACTERISTICS OF THE SAMPLE		6
	2.1	Village Characteristics	6
	2.2	Characteristics of Respondents	7
	2.3	Respondents' Experiences in Obtaining Credit	9
III.	A BRIEF PICTURE OF SAADP		14
	3.1	Program Objectives, Design and Characteristics	14
	3.2	Target Beneficiaries	15
	3.3	Village Criteria and Allocation of Funds per Village	16
	3.4	Project Management	17
	3.5	The Implementation Mechanism	18
IV.	THE PROJECT IMPLEMENTATION PROCESS		19
	4.1	The Implementation Teams	19
	4.2	Socialization	19
	4.3	SAADP Participants: the Selection Criteria and Process	21
	4.4	The Implementation Mechanism	24
	4.5	The Group System	32
V.	THE UPKD SYSTEM		35
	5.1	The UPKD Formation Process	35
	5.2	UPKD Management	36
	5.3	Decisions about Internal UPKD Regulations	40
	5.4	The Reporting and Supervisory System	42
	5.5	UPKD Financial Management Capacity	47
	5.6	UPKD Relationships with the Formal Banking System	48
	5.7	The UPKD and Development of Local Financial Markets	49
	5.8	The Present Status and Condition of the SAADP Project	49
VI.	THE INVOLVEMENT OF WOMEN AND NGOs IN SAADP		51
	6.1	The Involvement of Women	51
	6.2	The Involvement of Non-government Organizations	55

VII. LOCAL PLANNING, INSTITUTIONS AND TRANSPARENCY 61
7.1 Community Participation in Village Planning and Activities 61
7.2 Institutional Strengthening at the Local Level 64
7.3 Transparency in Local Governance 65

VIII. THE SOCIOECONOMIC IMPACT 66
8.1 The Benefits of SAADP Credit 66
8.2 Business Perspectives and Practices 67
8.3 Farming Perspectives and Practices 73
8.4 Household Income 79
8.5 Savings Behavior 82
8.6 Household Facilities and Assets 85

IX. THE IMPACT OF SAADP ON POVERTY INCIDENCE 88
9.1 Groups That Have Benefited and Those That Have Not 88
9.2 The Role of SAADP in Poverty Reduction 90

X. CONCLUSIONS AND POLICY RECOMMENDATIONS 96
10.1 Conclusions 96
10.2 Policy Recommendations 98

BIBLIOGRAPHY 101
APPENDIX 102

LIST OF TABLES

Table		*Page*
2.1.1.	Characteristics of the Sample Villages	6
2.1.2.	Proportion of SAADP and Control Households Receiving Non-SAADP Government Programs (%)	7
2.2.1.	Proportion of SAADP and Control Households by Main Source of Livelihood (%)	8
2.2.2.	Average Number of Household Members and Number of Members With Economic Activities in SAADP and Control Households	8
2.3.1.	Proportion of SAADP Households Based on Number of SAADP Participants (%)	9
2.3.2.	Proportion of SAADP Households by Frequency of SAADP Credit (%)	10
2.3.3.	Proportion of SAADP Recipients by Level of Education (%)	10
2.3.4.	Number of Households That Received Non-SAADP Credit	11
2.3.5.	Proportion of SAADP and Control Households by Frequency in Obtaining Non-SAADP Credit (%)	11
2.3.6.	Proportion of Non-SAADP Loans by Source (%)	12
4.2.1.	Proportion of SAADP Households by Form of Initial Information about SAADP (%)	20
4.3.1.	Proportion of SAADP Households by Criterion for Participating in SAADP (%)	21
4.3.2.	Proportion of Respondent Households by Evaluation of the Economic Level of SAADP Borrowers (%)	22
4.3.3.	Proportion of SAADP and Control Households by Opinions about Transparency in the Selection of SAADP Participants (%)	23
4.4.1.	Proportion of SAADP Loans by Credit Proposal Process (%)	25
4.4.2.	Proportion of SAADP Loans by Proposal Writer (%)	25
4.4.3.	Proportion of SAADP Loans by Type of Document Needed as an Additional Requirement (%)	26
4.4.4.	Proportion of SAADP Loans by Length of Time from Proposal Submission to Release of Credit (%)	28
4.4.5.	Proportion of SAADP Loans by Use and Size (%)	29
4.4.6.	Proportion of Loans by Comparison between Actual Amount and Proposed Amount (%)	29
4.4.7.	Proportion of SAADP Loans by Annual Interest Rate (%)	30
4.4.8.	Proportion of SAADP Households by Statements about the Giving of Incentives to UPKD Office-holders (%)	31

Table		*Page*
4.5.1.	Proportion of SAADP Loans by Initiator in Group Formation (%)	32
4.5.2.	Proportion of SAADP Loans by Basis of Group Formation (%)	33
5.1.1.	Proportion of SAADP Households that Understood and were Involved in the Process of UPKD Formation (%)	35
5.1.2.	Proportion of SAADP Households by Method of Selecting UPKD Management (%)	36
5.2.1.	Proportion of SAADP Households by Opinions about the Background of UPKD Office-holders (%)	37
5.2.2.	Proportion of SAADP Households by Evaluation of Ability of UPKD Management (%)	38
5.2.3.	Proportion of SAADP Households by Opinions about Reasons for Incompetence of UPKD Office-holders (%)	39
5.2.4.	Proportion of SAADP Households by Evaluation of Service Provided by the UPKD (%)	39
5.3.1.	Proportion of SAADP Households by Opinion about Who Played a Role in Decision-making about Internal UPKD Regulations (%)	40
5.3.2.	Proportion of SAADP Households by Opinion about Type of Regulation for Which Agreement Involved the Community (%)	41
5.4.1.	Proportion of SAADP Households by Knowledge of the Existence of Information/UPKD Financial Reports for the Community (%)	43
5.4.2.	Proportion of SAADP Households by Knowledge of Form of UPKD Financial Reports for the Community (%)	44
6.1.1.	Proportion of SAADP Borrowers and Loans by Gender (%)	51
6.1.2.	Proportion of SAADP Households by Opinion about Difference in Treatment of Women in Credit Proposals (%)	52
6.1.3.	Proportion of Women's SAADP Loans by Proposed Use (%)	53
6.1.4.	Proportion of SAADP and Control Households by Perception of Improvements in the Role of Women (%)	54
6.2.1.	Proportion of SAADP Households Aware of the Existence of a SAADP Facilitator (%)	56
6.2.2.	Proportion of SAADP Households by Opinion about the Current Existence of SAADP Facilitators (%)	56
6.2.3.	Proportion of SAADP Households by Opinions about the Activities of Facilitators (%)	57
6.2.4.	Proportion of SAADP Households by Opinion about the Extent of Facilitator Involvement in Project Implementation (%)	58
6.2.5.	Proportion of SAADP Household that Knew of Facilitators by Opinions about their Usefulness (%)	59

Table *Page*

6.2.6. Proportion of SAADP Households by Opinion about the Need for Facilitators (%) 60

7.1.1. Proportion of SAADP and Control Households by Involvement in Planning and Activities at Village, Hamlet and Neighborhood Levels (%) 61

7.1.2. Proportion of SAADP and Control Households by Increases in Involvement in Traditional Ceremonies (%) 62

7.1.3. Proportion of SAADP and Control Households by Involvement in Organizational Activities at Village, Hamlet and Neighborhood Levels (%) 63

8.1.1. Proportion of Households That Found SAADP Beneficial and Said Loans Were Used in Keeping with Credit Proposals (%) 66

8.2.1. Proportion of Households with Increased Business Perspectives (%) 68

8.2.2. Proportion of Households by Type of Additional Business Perspectives (%) 69

8.2.3. Proportion of Households that Changed Business Practices (%) 70

8.2.4. Proportion of Households by Type of Change in Business Practices (%) 71

8.2.5. Proportion of Households with Increased Capacity to Deal with External Shocks (%) 73

8.3.1. Proportion of Agricultural Households Experiencing an Increase in Knowledge of Farming Practices (%) 74

8.3.2. Proportion of Agricultural Households Putting Increased Farming Knowledge into Practice (%) 76

8.3.3. Proportion of Agricultural Households That Increased their Use of Farm Inputs (%) 77

8.3.4. Proportion of Households by System of Agricultural Land Management (%) 78

8.4.1. Proportion of Households by Statements concerning Changes in Nominal Household Income (%) 79

8.4.2. Changes in Average Real Per Capita Monthly Income Before and After the SAADP Project 81

8.4.3. Changes in Average Real Per Capita Monthly Expenditure Before and After the SAADP Project 81

8.5.1. Proportion of Households by Savings Behavior After the Introduction of the SAADP Project (%) 83

8.5.2. Proportion of Households by Form of Savings (%) 84

Table *Page*

8.5.3. Proportion of Households that Save Money by Location of Savings (%) 85

9.1.1. Proportion of Income Groups among SAADP Beneficiaries by Frequency of Loans (%) 89

9.2.1. Proportion of SAADP and Control Households by Change in Poverty Status between Pre- and Post-SAADP Periods (%) 91

9.2.2. Changes in the Gini Ratio Before and After SAADP 93

9.2.3. Proportion of Poor SAADP and Control Households that Have Experienced an Increase in Capacity (%) 94

APPENDIX

Appendix		*Page*
1.1.	SAADP Fund Allocation and Realization in Sample Villages	103
4.1.	SAADP Credit whose Realization was Less than Proposed (%)	104
8.1.	Proportion of SAADP Credit by Proposed Activity and Actual Use(%)	105
8.2.	Proportion of Households by Changes in Amount/Type of Economic Activity (%)	106
8.3a.	Proportion of SAADP Households by Changes in Condition of Residence(%)	107
8.3b.	Proportion of Control Households by Changes in Condition of Residence (%)	109
8.3c.	Difference in Proportion of SAADP and Control Households by Changes in Condition of Residence (%)	111
8.4a.	Proportion of SAADP Household by Changes in Asset Ownership (%)	113
8.4b.	Proportion of Control Households by Changes in Asset Ownership (%)	115
8.4c.	Difference in Proportion of SAADP and Control Households by Changes in Asset Ownership (%)	117
8.5a.	Proportion of SAADP Households by Changes in Land and Livestock Ownership (%)	119
8.5b.	Proportion of Control Households by Changes in Land and Livestock Ownership (%)	121
8.5c.	Difference in Proportion of SAADP and Control Households by Changes in Land and Livestock Ownership (%)	123
8.6.	Condition of Residence and Its Facilities	125

LIST OF ABBREVIATIONS

Bappeda	*Badan Perencanaan Pembangunan Daerah* Regional Planning Board
BKKBN	*Badan Koordinasi Keluarga Berencana Nasional* National Family Planning Coordinating Board
BPD	*Bank Pembangunan Daerah* Regional Development Bank
BPD	*Badan Perwakilan Desa* Village Representative Board
BPKB	*Bukti Pemilikan Kendaraan Bermotor* Motor Vehicle Ownership Certificate
BPS	*Badan Pusat Statistik* Central Agency of Statistics
BP-UPKD	*Badan Pengawas* *UPKD,* UPKD Supervisory Body
BRI	*Bank Rakyat Indonesia* Indonesian People's Bank
BTN	*Bank Tabungan Negara,* State Savings Bank
Ditjen Bangda	*Direktoral Jenderal Bina Pembangunan Daerah,* Directorate General for Regional Development
ICR	Implementation Completion Report
IMS	*Inisiatif Masyarakat Setempat* Local Community Initiatives
Juklak	*Petunjuk Pelaksanaan* Directions for Implementation
Kadus	*Kepala Dusun* Head of hamlet
KK	*Kepala Keluarga* Head of family
KPKN	*Kantor Perbendaharaan dan Kas Negara* Office of the State Treasury
KPS	*Keluarga Pra-Sejahtera* Pre-prosperous family
KTP	*Kartu Tanda Penduduk,* Identification Card
LEPPSEK	*Lembaga Pengkajian dan Pembinaan Sosial Ekonomi* Social and Economic Appraisal and Education Institute
LSM	*Lembaga Swadaya Masyarakat* Community Organization
MCK	*Mandi, cuci, dan kakus* Bathing, washing, and toilet facilities
MTR	Mid-term Review
Ornop	*Organisasi Non Pemerintah* Non-Government Organization
PBB	*Pajak Bumi dan Bangunan* Land and Buildings Tax

PEMPP	*Pemberdayaan Ekonomi Masyarakat Pinggir Pantai*, Program for Economic Empowerment of Coastal Communities
PMD	*Pembangunan Masyarakat Desa* Village Community Development
PNS	*Pegawai Negeri Sipil* Public Servant
PPK	*Program Pengembangan Kecamatan* Subdistrict Development Program
PPL	*Petugas Penyuluh Lapangan* Agricultural Extension Worker
P4-IMS	*Pembangunan Prasarana Pendukung Program IMS* Infrastructure Development to Support the IMS program
P4K	*Program Peningkatan Pendapatan Petani Kecil* Program for Increasing the Income of Small Farmers
RT	*Rukun Tetangga* Neighborhood Association (lowest level)
RW	*Rukun Warga* Neighborhood Association (consisting of several RTs)
SAADP	Sulawesi Agricultural Area Development Project
SD	*Sekolah Dasar* Elementary School
SMP	*Sekolah Menengah Pertama* Junior High School
SMU	*Sekolah Menengah Umum* Senior High School
SP2D	*Surat Perjanjian Pemberian Dana* Promissory Letter for Funds
Sulteng	*Sulawesi Tengah* Central Sulawesi Province
Sultra	*Sulawesi Tenggara* South-east Sulawesi Province
SUTA	*Sistem Usahatani* Farming Systems
TKPP	*Tim Koordinasi Pengelolaan Program* Coordinating Team for Program Management
TPP	*Tim Pengarah Pusat* Central Supervisory Team
UEP	*Usaha Ekonomi Produktif* Productive Economic Undertakings
UPKD	*Unit Pengelola Kegiatan/Keuangan Desa* Unit for Management of Village Activities/Finances

I. INTRODUCTION

1.1. Background

As one approach to poverty reduction in Central and South-east Sulawesi, the Indonesian government, with the assistance of the World Bank, initiated and developed the Sulawesi Agricultural Area Development Project (SAADP) as an economic and commercial project that was financed by a loan and implemented from August 1996 to December 2003. The objectives of the project were to increase farm incomes, to reduce disparities in income and welfare, and to increase regional government capacity and community participation in the expansion of economic undertakings.[1] SAADP had four main components, namely, replication of farming systems (SUTA), livestock development, productive economic undertakings and infrastructure development support program, and local community initiatives (IMS).[2]

As the follow-up to a project evaluation conducted in 1999, a number of basic changes were made to the focus of SAADP, which, from being an agriculture-based area development program, became a program based on local community initiatives. The purpose of these changes was to resolve the problems of complicated management structure and confusion caused by the original project design.[3] After some basic changes were made, the majority of project activities were grouped under the IMS component, which was implemented through a new type of unit, namely the Unit for Management of Village Activities/Finances (UPKD), which placed emphasis on micro-financial activities. IMS activities continued until finalisation of the project.

The Indonesian government has had much experience in the implementation of micro-financial undertakings, most of which have encountered certain constraints. One of these constraints has been the belief on the part of the community that the government funds channeled to members of the community through these programs and projects represent grants that do not have to be returned.[4]

Through SAADP the government introduced micro-finance activities that closely resembled previous activities. Among the questions that arose was whether or not the new financial institutions established through SAADP would be more capable of surviving and expanding and whether SAADP would make a contribution to and have a positive impact on the socioeconomic condition of the community. To answer these questions it is necessary to know how the project was implemented and what effect it had on the community, especially in view of the fact that the funds handled by the UPKDs were loans that had to be

[1] Details of SAADP objectives are based on the Indonesian *Directions for Implementation* (*Juklak*) (see Chapter III). According to the TOR from the World Bank, the aim of SAADP is to reduce poverty, increase farmers' productivity and incomes, promote sustainable agricultural activities that do not threaten the local environment, strengthen local institutions, and increase the participation of beneficiaries in project planning and implementation.

[2] According to the World Bank TOR, these activities consist of agricultural area development, increases in capacity, research into farming systems, and local community initiatives (IMS).

[3] See Chapter III.

[4] See the series of SMERU reports on this topic: *Small Rural Credit in Kupang, Minahasa, Tanggamus and Cirebon* and *Small Urban Credit in Jogjakarta*. 2002.

repaid. It is also important to know what part the UPKD played in the community and whether the UPKD is worth retaining with increased capacity so that in the long term it can play an independent role in providing the community with business capital.

The Government of Indonesia (GoI) and the World Bank now are discussing a possible follow-on project aimed at upgrading and transforming the UPKDs into sustainable micro-financial institutions. To ensure that the follow-on project can fully reflect the lessons accumulated from SAADP, the Implementation Completion Report (ICR) of SAADP has been proposed to be an intensive learning ICR.

In the context of providing alternative inputs for the final SAADP report, an Evaluation of the Socioeconomic Impact of SAADP was carried out by SMERU between February and May 2004 at the request of the World Bank. This report presents the findings of that evaluation.

1.2. Research Objectives

The present study was undertaken to evaluate the implementation of SAADP in the period since the focus was changed to IMS in 1999 and in particular to examine micro-financial activities. The general objectives of this socioeconomic impact evaluation were (a) to assess the economic and social impacts of SAADP since 1999, (b) to examine the ways in which the process of SAADP implementation at the local level has affected outcomes, and (c) to study SAADP experiences for further policy development and the design of possible follow-on activities.

The socioeconomic impact evaluation focused specifically on the following questions:

(i) In the project area, what groups have benefited from the project and what groups have not? What criteria were used for selecting villagers to participate in the project? Has project implementation resulted in a reduction of poverty incidence in the project areas? How did the selection of project villages and implementation methodologies influence the targeting of the project and achievement of the project's development objectives?

(ii) What are the observed benefits and costs for those who participated in the project? Has the beneficiaries' per capita income increased? Have their income sources been diversified so that they have a stronger capacity to deal with external shocks? Have traditional livelihood practices been improved? Has productivity increased? What is the relationship between the observed benefits and project implementation?

(iii) Has the project fostered beneficiary participation in village planning and implementation of community activities? Has project implementation strengthened local institutions? Has the project improved the transparency of local governance?

(iv) Has the UPKD system resulted in higher community financial literacy? Has the UPKD system had an improved financial management capacity (e.g. managing risk, cash flow, book keeping, etc)? What is the relationship between the UPKD system and the formal banking sector? Did the UPKD system promote the development of local financial markets?

(v) What was the degree of women's involvement in project implementation? How did women benefit or were they impacted negatively?

(vi) What was the degree of NGO involvement in project implementation? What are the observed benefits from engaging NGOs? What is the general attitude of communities towards the involvement of NGOs?

1.3. Research Methodology

The present study used a combination of a quantitative approach through household survey and a qualitiative approach that involved in-depth interviews with key informants. Data collection during the quantitative survey was based on the use of questionnaires, while interviews were based on an interview guide. The questionnaires were prepared in such a way as to cover the key points that had to be investigated in the study, while additional questions were included to obtain further clarification of certain matters. The focus of the qualitative information sought from key informants was on gaining a general understanding of project implementation and on clarification of a number of general points where information could not be adequately obtained through a questionnaire.

In the context of ensuring representativeness of the sample, the survey was conducted in the two provinces where SAADP was implemented, namely, Central Sulawesi and South-east Sulawesi. Using data from the Directorate-General for Regional Development (Ditjen Bangda) within the Department for Home Affairs and from the World Bank in Jakarta, the SMERU research team selected two sample districts (*kabupaten*) from each of the two provinces. The basis of the choice was the greatest allocation of SAADP funds, variations in distance from the provincial capital (relatively close and relatively far), ease of access to the location, and security conditions.

In each district one or two subdistricts (*kecamatan*) were chosen on a basis of the greatest number of villages involved in the SAADP project, the greatest allocation of SAADP funds, and the availability of a control village. Within these sample subdistricts three villages were selected that received the greatest allocation of SAADP funds from 1999 to mid 2002, that represented variations in the geographical typology of the district (coastal and non-coastal villages), and that had the highest population of all villages in that subdistrict.

In addition to the villages that had participated in SAADP, the research also included control villages, that is, villages that had not received SAADP assistance, in order to estimate the net impact of project implementation. The control villages were selected in the sample subdistricts or in the nearest subdistricts and as far as posible were villages that had not experienced a similar project (such as PPK and P4K)[5] and were similar to the SAADP villages in geographical typology and the socioeconomic characteristics of the people.

Since data for districts, subdistricts and villages, as required in the above criteria, were available in Jakarta, selection of sample villages was done in Jakarta. In the case of subdistricts and villages selection, it had to be confirmed in the field, and if necessary, changes were made in accordance with field information. Field information was very much

[5] PPK= Program Pengembangan Kecamatan or Subdistrict Development Program, which was funded by a loan from the World Bank. P4K=Program Peningkatan Pendapatan Petani Kecil or Program for Increasing the Income of Small Farmers, which was also assisted by the World Bank and the ADB.

stressed in decisions about control villages so that villages could be selected that had almost the same characteristics as the SAADP villages in terms of the main sources of livelihood, housing conditions, and living standards of the community.

In all, 618 households, consisting of 408 SAADP households and 210 control households, were interviewed. In each SAADP village approximately 34 SAADP households and 7 control households that had never participated in SAADP were interviewed. SAADP households were those that had received a SAADP loan for the first time between the year 2000 and the beginning of 2003. Meanwhile, in each control village 30 control households were interviewed. Respondent households from both SAADP households and control households in the control village were randomly chosen but consideration was given to the distribution of locations, that is, from two or three neighborhoods (RW), hamlets or blocks. Control households in the SAADP villages were selected in a purposive manner, the considerations being the fact that they should have socioeconomic characteristics similar to those in SAADP households and distribution of locations.

Several key informants were also interviewed in each area. These informants included SAADP project leaders at provincial and district levels, SAADP consultants, cluster managers, former facilitators, subdistrict office staff and 12 UPKD managers.

The method of analysis that was used to evaluate impact involved the measurement of changes in a number of indicators from the period before and the period after SAADP implementation among SAADP participants. These were compared with changes in the same indicators for control households. Since the SAADP participants and the non-participants had almost the same characteristics, the difference in change between the two sets of indicators was taken to represent the net impact of SAADP. It was hoped that, by comparing the changes between the two groups of households, it would be possible to remove or minimize the influence of other factors.[6]

Field research involved eight SMERU researchers and twelve local researchers who were divided into four teams. Each team was responsible for data collection in one district. Each team consisted of a team leader and four members and each had the same proportion of male and female researchers to facilitate interviews with both male and female respondents.

1.4. Timetable

The preparatory stage of the research commenced in mid January 2004 and took approximately one month. This stage took in the study of secondary data, discussions about research methodology, preparation of questionnaires and interview guides, the selection of research locations and the recruitment and training of local researchers. Before the field survey was begun, research plans were discussed with relevant institutions, namely, Bangda, the World Bank and Bappenas, in order to obtain inputs.

The field survey was conducted from the middle of February to the beginning of March 2004. Data entry and cleaning took the next four weeks. The whole SMERU team then compiled all findings and conducted an analysis of the results, which took another month.

[6] Nevertheless, it must be remembered that this approach would not necessarily isolate the influence of other factors completely since it proved extremely difficult in the field to identify SAADP and control villages that really had the same characteristics.

Before presentation of the final report at the beginning of June 2004, a discussion was held at SMERU in the third week of April 2004 to consider the preliminary findings and results of the evaluation. Participants in the discussion consisted of representatives from Bangda as the agency responsible for the project, representatives of the World Bank and SMERU researchers.

Following the discussion a workshop to present evaluation results was held at the end of April 2004 in one of the survey areas, namely, Palu in Central Sulawesi. Participants consisted of project managers at central, provincial and district levels, project consultants, UPKD managers, former facilitators, NGOs, representatives from the banking sector, and World Bank representatives. The participants came from both the Central Sulawesi and South-East Sulawesi Provinces as well as from Jakarta.[7]

1.5. Systematic of the Report

This final report on the study consists of 10 chapters. Chapter 1 describes the background, objectives and research methods that were used in the study. Chapter 2 presents the characteristics of the sample districts and respondents and also the previous experiences of respondents with credit programs. Chapter 3 gives a brief summary of the SAADP project based on the Directions for Implementation (*juklak*) that was issued by Bangda in the year 2000.

Chapter 4 presents details of the process of project implementation from the socialization stage, selection of participants, the credit mechanism, the system of reporting, supervision and evaluation, up to the status and condition of the SAADP project at the present time. Chapter 5, which describes the UPKD system, covers the selection of UPKD managers, management of the UPKD, and its effect on community knowledge. Chapter 6 describes the extent of involvement of women in the project as participants, UPKD managers, and facilitators, as well as the extent of NGO involvement in the project as facilitators. Chapter 7 explains the linkages between SAADP and local planning, institutional development and local transparency.

The next two chapters contain the essence of the study in that they present an analysis of the impact of SAADP on socioeconomic conditions and poverty. In Chapter 8 the indicators of socioeconomic impact that are analysed take in the use of credit by project beneficiaries, changes in business and farming knowledge and practices, changes in the extent of diversification of income sources, and changes in per capita income. An analysis is also given of changes in savings behavior and changes in housing facilities and in the ownership of household assets. Chapter 9 describes the impact of SAADP on poverty. Several indicators are used in this analysis since poverty is complex and multidimensional in nature. One approach that is used is identification of the group that obtained the greatest benefits from this project, that is, whether it was poor, medium-income, or rich households within the village community that gained most from SAADP. At the same time an analysis was made of the transition that occurred in household poverty status from the pre-project period and the period after credit was provided. An analysis was also made of the changes that occurred in the inequality in household welfare and in household capacity to meet certain needs. Chapter 10 presents conclusions and policy recommendations.

[7] Plans had been made to conduct a similar workshop in Kendari in South-east Sulawesi, but because the local provincial government was fully occupied with its own activities, this second workshop was cancelled. Instead, representatives of the provincial Bappeda and of all district-level Bappedas in South-east Sulawesi were invited to attend the workshop in Palu.

II. CHARACTERISTICS OF THE SAMPLE

2.1. Village Characteristics

Field research was carried out in four districts, namely Donggala and Tolitoli Districts in Central Sulawesi and Konawe Selatan (a part of the former Kendari District) and Muna Districts in South-east Sulawesi. As planned in the methodology for the study, three SAADP villages and one control village were selected in each district, making a total of 16 sample villages, 12 of them SAADP villages and 4 of them control villages (See Table 2.1.1).[8] In some cases the locations of the sample villages are in one subdistrict while in other cases they are in two different but adjacent subdistricts.

Table 2.1.1. Characteristics of the Sample Villages

Province	District	Village	Village Characteristics			
			Main Source of Livelihood	Typology of the Area	Population Density (persons per sq. km)	Distance to District Capital
Central Sulawesi	Donggala	Surumana	Tree crops	Coastal	94	77 km
		Tosale	Food crops	Coastal	76	51 km
		Salubomba	Food crops	Coastal	423	48 km
		Towale*	Food crops	Coastal	576	11 km
	Tolitoli	Oyom	Tree crops	Non-coastal	12	32 km
		Salugan	Food crops	Non-coastal	14	26 km
		Dadakitan	Tree crops	Non-coastal	15	11 km
		Tambun*	Tree crops	Non-coastal	191	6 km
South-east Sulawesi	Muna	Wasolangka	Food crops	Coastal	105	55 km
		Labulu-bulu	Food crops	Coastal	122	62 km
		Marobo	Food crops	Coastal	75	81 km
		Wadolao*	Food crops	Coastal	108	90 km
	Konsel	Amohola	Tree crops	Non-coastal	11	113 km
		Tambosupa	Tree crops	Non-coastal	17	80 km
		Lamokula	Tree crops	Non-coastal	14	89 km
		Lamotau*	Tree crops	Non-coastal	8	100 km

Source: Podes 2003, BPS.
Note: * = Control village.

In practice it was somewhat difficult to identify a control village that completely resembled the three SAADP villages, especially when time was limited. In a number of places therefore the plans for selection of control villages as intended in the methodology could not be fully adhered to. Nevertheless, before deciding on a control village the research team went through several stages to make the optimum selection by comparing the characteristics of a number of villages based on available quantitative data and information from certain resource persons in the field. At the very least, the selected control village was the one whose characteristics most closely resembled those of the SAADP villages. In Konsel District, for example, virtually all the villages in one subdistrict that had the same characteristics (in this case non-coastal villages) had

[8] Based on agreed criteria, the district chosen in South-east Sulawesi was Kendari District. At the time when the research was done, however, Kendari District had been subdivided into two districts known as Konawe District and Konawe Selatan (Konsel) District. By chance, the sample subdistricts and villages already selected were located in Konsel District.

participated in the SAADP project. The research team therefore decided to look for a control village in the adjacent subdistrict where there was likely to be a village that had the same characteristics.

The main sources of livelihood of the community and the typology of SAADP and control villages in each district have close similarities. Even though BPS data shown in Table 2.1.1 indicate that the main sources of livelihood in the sample villages in one district are not completely the same, field information indicated that they were actually basically the same, that is, agricultural in nature, and that almost all food crop farmers had in fact become tree crop cultivators.

If considered from the point of view of distance from the district capital, the villages in each district vary somewhat. Nevertheless, road conditions and forms of transportation available in the sample villages in each district are generally the same. Furthermore, the housing conditions of the local people and the availability of certain social and economic facilities are relatively the same.

The aspect that proved difficult in the selection of control villages was identification of villages that had had similar non-SAADP government programs. One reason was that there was a large range of government programs among the villages and in many cases the existence of some of these programs became known only after interviews were conducted with respondents. On the whole, however, the same non-SAADP government programs existed among control villages and households as among SAADP villages and households. The proportion of respondent households that were recipients of government programs outside SAADP proved to be relatively small, being only 3.9% of SAADP households and 5.7% of control households (see Table 2.1.2).

Table 2.1.2. Proportion of SAADP and Control Households Receiving Non-SAADP Government Programs (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Recipient of non-SAADP programs	2.0	5.9	3.9	7.8	0.0	3.9	3.9
N	102	102	204	103	101	204	408
Control households:							
Recipient of non-SAADP programs	7.3	3.9	5.7	7.7	3.9	5.8	5.7
N	55	51	106	52	52	104	210

2.2. Characteristics of Respondents

In the overall sense, the proportions of SAADP and control respondents based on groupings by type of livelihood show a similar pattern. The agricultural sector represents the main source of livelihood of SAADP households (84.8%) and also of control households (85.2%), as Table 2.2.1 shows. The most common agricultural undertakings are the cultivation of food crops and tree crops. Animal husbandry and marine fishing account for comparatively small numbers. The majority of farmers in both SAADP and control households also have other economic activities outside the agricultural sector.

Table 2.2.1. Proportion of SAADP and Control Households by Main Source of Livelihood (%)

Main Source of Livelihood	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Agriculture only	20.6 (40.6)	44.1 (49.9)	32.4 (46.9)	37.4 (48.7)	30.7 (46.3)	34.3 (47.6)	33.3 (47.2)
Agriculture and non-agriculture	50.0 (50.2)	43.1 (49.8)	46.6 (50.0)	51.5 (50.2)	61.4 (48.9)	56.4 (49.7)	51.5 (50.0)
Non-agriculture only	29.4 (45.8)	12.8 (33.5)	21.1 (40.9)	10.7 (31.0)	7.9 (27.1)	9.3 (29.1)	15.2 (35.9)
N	102	102	204	103	101	204	408
Control households:							
Agriculture only	18.2 (38.9)	64.7 (48.3)	40.6 (49.3)	51.9 (50.4)	34.6 (48.0)	43.3 (49.8)	41.4 (49.4)
Agriculture and non-agriculture	47.3 (50.4)	27.5 (45.1)	37.7 (48.7)	42.3 (49.9)	57.7 (49.9)	50.0 (50.2)	43.8 (49.7)
Non-agriculture only	34.6 (48.0)	7.8 (27.1)	21.7 (41.4)	5.8 (23.5)	7.7 (26.9)	6.7 (25.2)	14.3 (35.1)
N	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

The average number of persons in sample households in each district ranges from 4.5 to 5.4. On the whole, the average number of persons per household is much the same in both SAADP and control households (see Table 2.2.2). Furthermore, statistical testing shows that there is no significant difference between each group of households.

The same table also shows that there is likewise very little difference between SAADP and control households in the average number of household members who have economic activities (1.4 and 1.3 persons respectively). This applies to the overall number and is also true on a district basis. This too has been shown by statistitical testing to be the case.

Table 2.2.2. Average Number of Household Members and Number of Members with Economic Activities in SAADP and Control Households

		Central Sulawesi			South-east Sulawesi			Total
		Donggala	Tolitoli	Total	Muna	Konsel	Total	
Average number of household members:								
SAADP households		4.8 (2.2)	4.9 (1.7)	4.9 (1.9)	5.4 (2.0)	5.0 (1.5)	5.2 (1.8)	5.0 (1.9)
Control households		4.5 (1.7)	4.8 (1.9)	4.6 (1.8)	5.4 (2.1)	4.5 (1.5)	4.9 (1.9)	4.8 (1.8)
Average number of household members with economic activities:								
SAADP households		1.6 (0.5)	1.3 (0.5)	1.5 (0.5)	1.3 (0.5)	1.4 (0.5)	1.4 (0.5)	1.4 (0.5)
Control households		1.7 (0.7)	1.1 (0.3)	1.4 (0.6)	1.2 (0.4)	1.3 (0.6)	1.2 (0.5)	1.3 (0.6)
N	SAADP	102	102	204	103	101	204	408
	Control	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

From the above data it can be said that in the broad sense attempts to select control villages and households with the same characteristics as SAADP villages and households were successful. Furthermore, statistical testing was done of household income and expenditure to ascertain whether similarity existed (see Chapter 8). Results show that there is no statistical difference in the socioeconomic status of households in the two groupings. The conclusion can therefore be drawn that the control villages and households can be used in comparisons with the SAADP villages and households for purposes of estimating the net impact of the SAADP project.

2.3. Respondents' Experiences in Obtaining Credit

SAADP Credit

From a total of 408 respondent households, 436 household members have obtained SAADP credit. This indicates that the average number of household members who obtained SAADP credit is around one per household. Table 2.3.1 shows that in 93.6% of SAADP households there was only one borrower. The highest number of SAADP borrowers per household was three and this occurred only in Muna District, where the figure was 1.9% of households.

Table 2.3.1. Proportion of SAADP Households Based on Number of SAADP Participants (%)

Number of Participants per Household	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
1 person	94.1 (23.6)	92.2 (27.0)	93.1 (25.3)	91.3 (28.4)	97.0 (17.1)	94.1 (23.6)	93.6 (24.5)
2 persons	5.9 (23.6)	7.8 (27.0)	6.9 (25.3)	6.8 (25.3)	3.0 (17.1)	4.9 (21.6)	5.9 (23.6)
3 persons	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.9 (13.9)	0.0 (0.0)	1.0 (9.9)	0.5 (7.0)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

From the year 2000 to the beginning of 2003, these 436 borrowers had obtained 557 SAADP loans, that is, on average each borrowed 1.3 times. The average frequency of borrowing per household was 1.4 times. The majority of households (71.8%) borrowed only once, while around 7.1% of households did so three or four times. The proportion of households that borrowed up to three times was greatest in Tolitoli (19.6%) followed by Muna (13.6%), as Table 2.3.2 shows.

Persons with limited education, that is, those who had completed elementary school (SD) or less (57.6%), were on the whole able to gain access to SAADP credit. As Table 2.3.3 shows, SAADP borrowers were spread over all educational levels but most were persons who had completed SD or schooling of equivalent level. The same is found if figures for each district are examined. With the exception of Konsel District, borrowing was dominated by persons who had completed SD or the equivalent level. More than half of the persons who borrowed in Konsel District had completed junior high school (SMP) or higher. Most dominant were borrowers who had completed senior high school (SMU) or the equivalent or even a higher level of education. They

amounted to 36.5%. The greatest number of SAADP borrowers who had no schooling was in Muna District (15.8%) whereas in the other three districts the figure was less than 3%.

Table 2.3.2. Proportion of SAADP Households by Frequency of SAADP Credit (%)

Frequency of SAADP Credit	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Once	68.6 (46.6)	76.5 (42.6)	72.5 (44.7)	58.3 (49.6)	84.2 (36.7)	71.1 (45.4)	71.8 (45.0)
Twice	22.6 (42.0)	20.6 (40.6)	21.6 (41.2)	26.2 (44.2)	14.9 (35.7)	20.1 (40.5)	21.1 (40.8)
Three times	7.8 (27.0)	19.6 (13.9)	4.9 (21.6)	13.6 (34.4)	1.0 (10.0)	7.3 (26.2)	6.1 (24.0)
Four times	1.0 (9.9)	1.0 (9.9)	1.0 (9.9)	1.9 (13.9)	0.0 (0.0)	1.0 (9.9)	1.0 (9.9)
Average number of times	*1.4 (0.7)*	*1.3 (0.5)*	*1.3 (0.6)*	*1.6 (0.8)*	*1.2 (0.4)*	*1.4 (0.7)*	*1.4 (0.6)*
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Table 2.3.3. Proportion of SAADP Recipients by Level of Education (%)

Level of Education	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
No schooling	0.9 (9.6)	2.8 (16.5)	1.9 (13.5)	15.8 (36.6)	2.9 (16.8)	9.6 (29.6)	5.8 (23.3)
Did not complete SD or equivalent	25.9 (44.0)	29.6 (45.9)	27.8 (44.9)	22.8 (42.1)	9.6 (29.6)	16.5 (37.2)	22.1 (41.5)
Completed SD or equivalent	37.0 (48.5)	31.5 (46.7)	34.3 (47.6)	24.6 (43.2)	26.0 (44.1)	25.2 (43.5)	29.7 (45.7)
SMP or equivalent	19.4 (39.8)	23.2 (42.4)	21.3 (41.0)	13.2 (33.9)	25.0 (43.5)	18.8 (39.2)	20.1 (40.1)
SMU and higher	16.7 (37.4)	13.0 (33.7)	14.8 (35.6)	23.7 (42.7)	36.5 (48.4)	29.2 (45.8)	22.3 (41.7)
N	108	108	216	114	104	218	434

Note: - Two SAADP recipients did not indicate their educational level.
- Figures in brackets are the standard deviations.

Non-SAADP Credit

During the 1999 – 2004 period the numbers of SAADP and control households that at some time obtained non-SAADP credit were 16.2% and 19.5% respectively. The highest proportion was among control households in Muna (32.7%) while the lowest was among control households in Tolitoli (3.9%). There was a tendency for more households in South-east Sulawesi than in Central Sulawesi to obtain non-SAADP credit. On the whole, the proportions that obtained non-SAADP credit in SAADP households and control households were relatively balanced (see Table 2.3.4).

Table 2.3.4. Number of Households That Received Non-SAADP Credit

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	9 (8.8%)	19 (18.6%)	28 (13.7%)	21 (20.4%)	17 (16.8%)	38 (18.6%)	66 (16.2%)
N	102	102	204	103	101	204	408
Control households	13 (23.6%)	2 (3.9%)	15 (14.2%)	17 (32.7%)	9 (17.3%)	26 (25%)	41 (19.5%)
N	55	51	106	52	52	104	210

Note: The figures in brackets are the proportion of N.

In the 66 SAADP households that received non-SAADP credit, there were 68 borrowers, while in the 41 control households that received non-SAADP credit there were 41 borrowers. Thus in both SAADP and control households that obtained non-SAADP credit, generally only one household member borrowed.

The number of loans obtained by these borrowers was 90 in SAADP households and 55 in control households. Most households (78.8% of SAADP households and 78.1% of control households) obtained a loan only once. There was no great difference in the frequency with which credit was obtained between SAADP and control households, as Table 2.3.5 shows.

Table 2.3.5. Proportion of SAADP and Control Households by Frequency in Obtaining Non-SAADP Credit (%)

Frequency of Non-SAADP Credit	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Once	88.9 (33.3)	78.9 (41.9)	82.1 (39.0)	76.2 (43.6)	76.5 (43.7)	76.3 (43.1)	78.8 (41.2)
Twice	11.1 (33.3)	10.6 (31.5)	10.7 (31.5)	9.5 (30.1)	11.8 (33.2)	10.5 (31.1)	10.6 (31.0)
Three to five times	0 (0.0)	10.6 (31.5)	7.1 (26.2)	14.3 (35.9)	11.8 (33.2)	13.2 (34.3)	10.6 (31.0)
Average number of times	*1.1 (0.3)*	*1.3 (0.7)*	*1.2 (0.6)*	*1.4 (0.7)*	*1.3 (0.7)*	*1.4 (0.7)*	*1.3 (0.7)*
N	9	19	28	21	17	38	66
Control households:							
Once	92.3 (27.7)	100 (0.0)	93.3 (25.8)	64.7 (49.3)	77.8 (44.1)	69.2 (47.1)	78.1 (41.9)
Twice	0 (0.0)	0 (0.0)	0 (0.0)	29.4 (47.0)	11.1 (33.3)	23.1 (43.0)	14.6 (35.8)
Three to five times	7.7 (27.7)	0 (0.0)	6.7 (25.8)	5.9 (24.3)	11.1 (33.3)	7.7 (27.2)	7.3 (26.4)
Average number of times	*1.2 (0.6)*	*1.0 (0.0)*	*1.1 (0.5)*	*1.4 (0.6)*	*1.3 (0.7)*	*1.4 (0.6)*	*1.3 (0.6)*
N	13	2	15	17	9	26	41

Note: Figures in brackets are the standard deviations.

A distinction can be made between the sources of non-SAADP credit to which SAADP and control households have had access. These sources include banks, cooperatives, government programs, and informal credit providers. The banks that

have extended credit to respondents are the BRI (Bank Rakyat Indonesia or the Indonesian People's Bank), the BPD (Bank Pembangunan Daerah or Regional Development Bank), the BTN (Bank Tabungan Negara or State Savings Bank) and Mandiri Bank. As can be seen from Table 2.3.6, the credit source that, relatively speaking, is most often accessed by SAADP households is a bank. This was found in all districts (38.9% of total non-SAADP loans). Among control households in Donggala (46.6%) a bank was likewise the most common credit source, while for SAADP households in Tolitoli, the credit source most commonly used, was government programs. In both Tolitoli and Konsel, there was not one member of the control households who obtained credit from a bank.

Cooperatives are the main source of credit for control households in Muna and Konsel, but not one person in control households in Donggala and Tolitoli had borrowed from a cooperative. According to qualitative information, cooperatives in general no longer play a prominent role in these two districts in Central Sulawesi. In Donggala there is a Savings and Loans Cooperative that, prior to the establishment of the UPKD, was the only source of credit for the community, even though the interest rate was extremely high at 30 per cent per month. It seems that, apart from banks and government programs, households in Donggala prefer to borrow money from informal credit sources such as moneylenders, neighbors and relatives rather than from the cooperative.

Table 2.3.6. Proportion of Non-SAADP Loans by Source (%)

Source of Non-SAADP Loans	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Bank	50.0 (52.7)	42.9 (50.7)	45.2 (50.6)	34.4 (48.3)	37.0 (49.2)	35.6 (48.3)	38.9 (49.0)
Cooperative	0.0 (0.0)	14.3 (35.9)	9.7 (30.0)	31.3 (47.1)	29.6 (46.5)	30.5 (46.4)	23.3 (42.5)
Government program	20.0 (42.2)	33.3 (48.3)	29.0 (46.1)	25.0 (44.0)	0.0 (0.0)	13.6 (34.5)	18.9 (39.4)
Informal source	30.0 (48.3)	9.5 (30.1)	16.1 (37.4)	9.4 (29.6)	7.4 (26.7)	8.5 (28.1)	11.1 (31.6)
Other sources	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	25.9 (44.7)	11.9 (32.6)	7.8 (26.9)
N	10	21	31	32	27	59	90
Control households:							
Bank	46.7 (51.6)	0.0 (0.0)	41.2 (50.7)	19.2 (40.2)	0.0 (0.0)	13.2 (34.3)	21.8 (41.7)
Cooperative	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	34.6 (48.5)	50.0 (52.2)	39.5 (49.5)	27.3 (44.9)
Government program	26.7 (45.8)	100.0 (0.0)	35.3 (49.3)	19.2 (40.2)	16.7 (38.9)	18.4 (39.3)	23.6 (42.9)
Informal source	26.7 (45.8)	0.0 (0.0)	23.5 (43.7)	26.9 (45.2)	16.7 (38.9)	23.7 (43.1)	23.6 (42.9)
Other sources	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	16.7 (38.9)	5.3 (22.6)	3.6 (18.9)
N	15	2	17	26	12	38	55

Note: Figures in brackets are the standard deviations.

Meanwhile, government programs, especially those that include revolving credit such as the Subdistrict Development Program (PPK), are the main sources of credit for SAADP and control households in Tolitoli. PPK is also a government program credit source in all research locations. In Donggala, in addition to PPK there is also the Program for Economic Empowerment of Coastal Communities (PEMPP), which is conducted by the local Fisheries Service and takes the form of provision of ketinting engines for fishing boats.[9] Fishermen purchase these engines on the installment system. In Muna District there is also a revolving fund cattle project that is conducted by the local Agricultural Service. Approximately 90 cattle have been lent to the community, with each household receiving up to four animals. Other alternative sources of credit for SAADP and control households specifically in Muna and Konsel are companies that provide credit for the purchase of motor-cycles. The credit is handled either directly by the motor-cycle dealer himself or else through a credit company that works together with the dealer.

The amount of credit that can be obtained from a bank ranges from Rp1 million to Rp26 million. Loans from a cooperative, a government program or an informal source do not differ very much in size, being Rp50,000 to Rp5 million, Rp75,000 to Rp5 million and Rp60,000 to Rp6.75 million respectively. Where motor-cycles are bought through a credit arrangement, the range in price is from Rp10.7 million to Rp20.2 million. The interest rates charged by non-SAADP credit sources tend to be higher than SAADP rates. Some informal credit sources charge more than 30% per month. The purposes for which money is borrowed from a bank, cooperative or informal credit source do not differ very greatly. Loans are normally used to pay for house improvements or as capital for farming and trade.

[9] An outboard motor of 2 hp for small boats.

III. A BRIEF PICTURE OF SAADP

3.1. Program Objectives, Design and Characteristics

The Sulawesi Agricultural Area Development Project (SAADP), which was carried out in the Provinces of Central and South-east Sulawesi, was implemented by the Indonesian Government with assistance from the World Bank in the form of a loan (Loan Agreement 4007-IND). The project, which commenced in 1996, had the following objectives:[10]

i. To raise the income of farmers through improvement and expansion of farming systems involving food and tree crops, as well as development of livestock, fisheries and other economically productive undertakings;

ii. To reduce gaps in income and welfare levels through assistance with the development of backward rural areas; and

iii. To increase local government capacity and community participation in the development of economic undertakings among poor people.

The program was initially designed for the development of agricultural areas. The activities that were undertaken included, among others, livestock distribution, the provision of agricultural inputs such as seed, the replication of dry-farming technology, intensification in the use of home-lots and construction/repair of agricultural infrastructure. Support was provided in the form of institutional strengthening and a component involving expansion of integrated farming systems that was handled by the Body for Agricultural Technology Research (*Badan Pengkajian Teknologi Pertanian*) in Central Sulawesi and South-east Sulawesi. The type of assistance that was provided depended on needs and on considerations expressed by related agencies.

The results of the World Bank's Mid-term Review in January and February 1999, that is in the middle of the project implementation period, revealed that, since implementation was not very effective, target groups had experienced very little benefit. Furthermore, it appeared that the provision of micro credit was the activity most attractive to the community. For that reason an agreement was reached between the Directorate-General for Regional Development (*Bangda*) and the World Bank that from 1999 the focus of activities would be changed by combining a number previously separate project components into the Program for Local Community Initiatives (IMS). This component consisted of four main sections, namely:

- Replication of farming systems (SUTA);
- Livestock development;
- Productive economic undertakings (UEP) and
- Infrastructure development to support the IMS program (P4-IMS).

[10] *Directions for Implementation and Guide to Technical Operation of IMS-SAADP*, Directorate-General for Regional Development, Department of Home Affairs, 2000.

Since that time SAADP has been better known, at least among regional governments, as IMS-SAADP. The new system, which placed emphasis on revolving credit activities, required a participative approach and intensive community involvement, which were provided through facilitators and field workers. The revolving funds were to be managed by the community through the Unit for Management of Village Activities/Finances (UPKD), which was formed by the village community with facilitation from the project.

The main characteristics of IMS-SAADP as described in the *Directions for Implementation and Guide to Technical Operation of IMS-SAADP* (referred to as the juklak) were as follows:

- Proposals for the type of activity and the amount of funding were decided by the community itself, with support from the local Agricultural Extension Worker (PPL) and facilitator;
- IMS funds were provided in the form of a lump sum to the district level, while the amount of money that was channeled to each community group or institution was determined on a basis of group/village proposals;
- IMS funds were channeled directly to the village level through a transfer of money to the bank account of the UPKD, which then distributed the funds to farmers' or community groups;
- The timetable for processing and channeling funds to the village level had to be adhered to and had to be in accordance with the standard procedure and format;
- All supply activities were done by community groups and not through tenders;
- Proposed activities that utilized credit had to be oriented towards self-reliant economic activities; and
- Credit management was strict (in the supervision of repayment) and was in nature commercial in two senses: interest charges, decided on during a community discussion, were imposed with a minimum rate of 15% per year, and UPKD managers received an honorarium.[11]

3.2. Target Beneficiaries

The target beneficiaries in the IMS program were poor families or community groups, both male and female (widows or women who lived alone or conducted their own economic undertakings), in villages in the project locations. Priority in provision of program assistance was given to:

- Groups of poor people or poor farmers who had no source of income to meet their daily needs, especially food, education and health and other socioeconomic requirements;

[11] At the beginning of distribution of credit, the honorarium for the UPKD managers was taken from project funds. After credit activities had commenced, it was taken from the interest paid by borrowers on their loans.

- Groups of women and young people who were unemployed or did not have regular work;

- Groups of people who were not currently participants or beneficiaries in another on-going project.

Nevertheless, World Bank staff stated during a discussion with the SMERU research team at the time when preparations were being made for the evaluation study and early findings were presented in Jakarta, the above criteria were not applied because emphasis was on assisting persons who already had an economic activity. This was related to the nature of the program, which was not a social but rather an economic and commercial undertaking, since the money lent to the community was not a grant but had to be repaid. It can be assumed that, as a consequence of this approach, program beneficiaries did not constitute the poorest group in the community.[12]

3.3. Village Criteria and Allocation of Funds per Village

The villages that were selected to participate in the program were villages in the 'poor' category. They were chosen by the provincial and district Coordinating Teams for Program Management (TKPP), which used the following criteria:

- Villages with a large number of poor people;
- Villages with dry/irrigated land that had the potential for development;
- Villages located within one area; and
- Villages with limited economic infrastructure.

The ceilings for IMS funds were set at a minimum of Rp50 million and a maximum of Rp100 million per village. It was possible for villages that had already absorbed the maximum funds to receive further IMS funds, provided that UPKD performance was good and that there were proposals for activities that were suitable for funding.[13] IMS funds were given to the village and were intended to become a village asset to be used for activities involving replication of farming systems (IMS-SUTA), IMS for livestock raising, productive economic undertakings (IMS-UEP) and infrastructure development (P4-IMS). These funds were lent to community members who were formed into groups.[14]

[12] The World Bank and Bangda have confirmed that the target beneficiaries were not the poorest people in the community, even though one of the objectives of SAADP was to reduce poverty.

[13] Appendix Table 1.1 shows the SAADP fund allocation in sample village

[14] In a discussion with the SMERU research team, the World Bank stated that SAADP credit was not a group-based loan. Groups were needed only at the stage when proposals were put forward, so as to make the process easier. Each loan was the responsibility of the individual and repayment had to be made on an individual basis.

3.4. Project Management

Organization of the IMS-SAADP project involved the central level, with secretariats in Bangda, the province (Bappeda) and the district (Bappeda). At the central level project organization placed emphasis on guidance that in nature involved overall control. At the provincial level emphasis was more on coordination in project implementation, while at the district level emphasis was on coordination among those implementing the IMS project. The related agencies at district level included Bappeda, PMD and government offices (dinas) that dealt with agriculture, animal husbandry, plantations, fisheries and marine activities, and public works.

The village level organization was the core of IMS project implementation because the organization was created by the community through village meetings and recognized as legal by the village head. Village meetings represented the forum for gatherings of the whole village community to formulate, implement, monitor and evaluate activities. The organization that was formed was the UPKD, whose function was to handle financial management of the program and to undertake further expansion through coordination of the various financial sources at village level. It was hoped that this unit would become the embryo of a village financial institution.

In order to maximize project implementation in the field, additional accompanying elements were included, consisting of consultants at provincial and district levels as well as facilitators who were recruited from local NGOs. The coordinators of facilitators were located at provincial and district levels, while the facilitators themselves and extension workers (PPL) were placed at village level.

The role of consultants was, among other things, to provide technical assistance, suggestions and recommendations that were connected to various aspects of technical and general policies, to carry out project monitoring and evaluation, to make routine visits to villages in order to review UPKD financial reports while offering suggestions for improvements, and to assist the district-level Bappeda in coordinating activities, compiling project reports and selecting suitable proposals from among those that were submitted.

Meanwhile, the role of the facilitators was, among other things, to help in the socialization process, to form community groups, to provide these groups with assistance in skills, financial management and technical management, to help community members undertake discussions to identify the activities that would be proposed, and, in conjunction with the PPL, to help in the preparation of proposals.

3.5. The Implementation Mechanism

In the initial stage, socialization of the SAADP program was undertaken in a tiered manner from the central level, through the provincial and district levels, down to the village level. After the UPKD had been formed through village discussions and community members had formed groups,[15] UPKD office-bearers, together with the heads of groups, facilitators and members of the village administration, then disseminated information about the program to the community in various ways that included the placement of announcement boards, posters or brochures in several places such as the village meeting hall, the market, or close to places of worship.

After the community groups were formed, members prepared proposals with the help of a facilitator. The proposals were then submitted to the UPKD for evaluation by the village verification team, which consisted of the chairman of the UPKD, the facilitator and the PPL. After this, a report was made to the village head of the proposals that met requirements so that a village meeting could be held to discuss, evaluate, and decide on the priority ranking of the proposals. The UPKD then compiled a recapitulation of all proposals that had been agreed to at the village meeting on a basis of ranking.

The recapitulation of proposals was then forwarded on to the verification team at district level for evaluation. Results were immediately reported back to the UPKD management so that a Promissory Letter for Funds (SP2D) could be prepared and signed by the UPKD chairman and the cluster manager responsible for the subdistrict in question, and legalized by the head of the economic section in the district-level Bappeda. The types of activities, the amount of money, the period for implementation and the nature of the loan were stated in the SP2D. Using these SP2Ds as the basis, the cluster manager withdrew funds from the KPKN and directed them to the bank account of the UPKD. The UPKD then passed these funds on to the community groups in the form of revolving loans with regulations which had been agreed upon at a community discussion but which observed certain standard regulations such as a minimum interest rate of 15% per year.

[15] The groups were formed at the initiative of community members who wished to undertake economic activities with finance from the UPKD. Ideally, the groups were formed on a basis of similarity in type of economic activity or proximity in place of residence. The purpose in formation of these groups was to establish a means for guidance in efforts to build cooperation among community members in economic undertakings. The groups were usually organized and mobilized by the head and secretary of the group.

IV. THE PROJECT IMPLEMENTATION PROCESS

4.1. The Implementation Teams

As described in the *juklak*, a Program Management Coordination Team (the Provincial TKPP) was formed at provincial level to coordinate activities by the various agencies involved in SAADP implementation. In the same way a district-level TKPP was established in each district, including the four sample districts. The secretariats of the provincial and district TKPPs were attached to each provincial and district level Bappeda. The agencies represented in the TKPPs included, among others, Bappeda and related government offices (*Dinas*) like the Food Crop Office and the Plantations Office. In addition, consultants and coordinators of facilitators, whose task was to assist the TKPPs so that SAADP field implementation could be handled in an optimum way, were recruited at both provincial and district levels. At district level, coordinators were appointed to be in charge of several cluster managers. One cluster manager was normally appointed for several subdistricts, but in Donggala District each cluster manager had tasks in only two subdistricts.[16]

4.2. Socialization

According to project managers at provincial and district levels, socialization of SAADP was done in a tiered manner from provincial down to village level. Socialization at provincial level was carried out in Kendari and Palu and was attended by related agencies at provincial and district levels, non-government organizations, and representatives from universities. Socialization at district level was undertaken by each district with participants from the related government offices, the heads of subdistricts, officials from Village Community Development (PMD) and Agricultural Extension Workers (PPL).

Socialization was then carried out at the village level where, on the whole, it was undertaken more than once. On the first occasion, facilitators, the village head and his staff, community figures, religious figures, and members of the community were present. In addition, members of the district-level TKPP, cluster managers, and consultants attended. Most of the material, which was presented by facilitators, consisted of a general explanation of the project and covered the project purpose and objectives, the availability of funds that could be borrowed by the community to develop economic undertakings, and the requirements and criteria for participants. On the second occasion, socialization was usually attended only by relevant parties at village level, including members of the community and facilitators, and basically represented a village meeting to select the UPKD management. In a number of villages, socialization was also undertaken through announcements in mosques at the time of Friday prayers or by putting posters about SAADP in strategic locations such as the market and the UPKD office. Besides these approaches, facilitators and even the UPKD continued socialization of SAADP, although not in a specific manner. This was done, among other ways, through the formation forum and community group discussions. The material presented was related to details of SAADP credit implementation, such as the borrowing mechanism, the interest rate, and repayment.

[16] See Chapter III: A Brief Picture of SAADP.

Although, according to explanations from project managers, socialization was undertaken through direct meetings with the community, only around 59.6% of respondents stated that they obtained their initial information about SAADP at a gathering or meeting. Approximately 28.4% said that they had heard about SAADP during informal conversations with friends or neighbors, while 10.8% said their source of information was an oral announcement (see Table 4.2.1).

On the whole, members of the community who attended the SAADP socialization said that they had been invited or told about it by the head of their hamlet, by the head of their neighborhood (RT), by neighbors, or directly by the facilitator. In cases where socialization was done after the selection of the UPKD management, some people were told directly by the chosen UPKD office-holders. The constraint most frequently encountered by project managers and village officials at the time of socialization was that not all members of the community wanted to attend when they were invited to a village meeting. People who did not attend the socialization meeting usually obtained information only from friends or neighbors who had been present. This meant that the information passed on to the community was limited to general matters such as the availability of credit and the need to form groups. The whole process of giving people an understanding of the loan mechanism and the credit scheme had to be repeated by the UPKD office-holders when the loans were distributed.

Table 4.2.1. Proportion of SAADP Households by Form of Initial Information about SAADP (%)

Form of information	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Written announcement	1.9 (13.9)	1.0 (9.9)	1.5 (12.1)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	1.0 (9.9)
Oral announcement	11.8 (32.4)	27.4 (44.8)	19.6 (39.8)	0.0 (0.0)	4.0 (19.6)	2.0 (13.9)	10.8 (31.1)
Gathering/meeting	68.6 (46.6)	49.0 (50.2)	58.8 (49.3)	47.6 (50.2)	73.2 (44.5)	60.3 (49.0)	59.6 (49.1)
Informal conversation (neighbors/friends)	17.7 (38.3)	21.6 (41.3)	19.6 (39.8)	51.4 (50.2)	22.8 (42.1)	37.2 (48.5)	28.4 (45.2)
Other forms	0.0 (0.0)	1.0 (9.9)	0.5 (7.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.2 (4.9)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

The way in which socialization is handled can undoubtedly influence the overall success of a project. The understanding of project objectives and targets by those responsible for implementation, especially at the grassroots level, can affect individual performances. A case that occurred in one subdistrict in Konsel District illustrates the point. The explanation given by a facilitator that SAADP funds were a grant led to the perception on the part of the community that the money did not have to be returned.

4.3. SAADP Participants: the Selection Criteria and Process

According to the *juklak*, SAADP participants are poor community groups with priority given to poor people or farmers and to women and young people who are unemployed or who do not have regular work and who are not currently beneficiaries in an on-going project.[17]

In the initial stage of implementation the criterion of poor community groups was applied in selecting SAADP participants in all sample villages, although not very strictly. On the whole, the people who became participants were relatively poor families who worked as food-crop farmers or tree-crop smallholders, fishermen, owner/managers of household industries, construction workers, drivers and traders. Many of them were classified as 'pre-prosperous' (*pra-sejahtera*) families according to BKKBN criteria.

As the project proceeded, the repayment of loans by participants whose main source of livelihood was farming did not perform smoothly. The reasons were, among others, that their agricultural output could barely meet the family's daily needs and that a decrease in harvests had occurred. The length of time for installments of loan repayments, which was usually adjusted to the growing season (4 to 6 months), was thought to be a further reason. The length of time between installments meant that the participant had to pay a rather large amount of money in one go or else in two installments, which in turn affected his willingness to pay.

For these reasons, the granting of credit in the next or revolving stage was focused more on those persons who were considered capable of repaying the loan. Ultimately, people involved in trade became the main target because they had a daily income, which enabled them to repay loans in a regular manner every month. Furthermore, in a number of villages public servants (PNS), who at the beginning of the project had not been allowed to participate, were permitted to do so during the following stage. The reason was that they had a fixed income and could repay installments regularly. In actual fact, even at the beginning of the project, public servants had obtained loans either secretly by using the name of a family member or openly on the excuse that they could provide a good example to other participants in the repayment of loans.

Table 4.3.1. Proportion of SAADP Households by Criterion for Participating in SAADP (%)

Criterion for Participation	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Owned an economic undertaking	81.4 (39.1)	88.2 (32.4)	84.8 (36.0)	94.2 (23.5)	70.3 (45.9)	82.4 (38.2)	83.6 (37.1)
Was classed as a poor person	19.6 (39.9)	6.9 (25.4)	13.2 (34.0)	4.9 (21.6)	35.6 (48.1)	20.1 (40.2)	16.7 (37.3)
Others	7.8 (27.0)	28.4 (45.3)	18.1 (38.6)	13.6 (34.4)	8.9 (28.6)	11.3 (31.7)	14.7 (35.5)
N	102	102	204	103	101	204	408

Note : - Respondents could give more than one answer.
- Figures in brackets are the standard deviations.

[17] Ibid.

Table 4.3.1 shows that, according to their own admission, the majority of household respondents (83.6%) were able to become SAADP participants because they owned an economic undertaking. Only 16.7% said they were eligible because they were poor. According to the World Bank in discussions with SMERU, the focus on persons who owned an economic undertaking was correct because SAADP was not a social program but rather one that was economic and commercial in nature.[18]

Table 4.3.2 shows respondents' evaluation of the welfare status of community groups who obtained SAADP loans. Most SAADP households (85.1%) believed that the majority of SAADP beneficiaries were middle class and low-income households while only 5.4% said that beneficiaries were the wealthy in the village concerned.

The same trend was found among control households in SAADP villages, that is those who lived in SAADP villages but did not receive SAADP loans. Approximately 68.5% of these respondents said that the majority of SAADP beneficiaries were middle class and low-income households, while only 11.2% said that SAADP beneficiaries belonged to the wealthy group in the village community.

Table 4.3.2. Proportion of Respondent Households by Evaluation of the Economic Level of SAADP Borrowers (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Most SAADP participants were poor households	52.0 (50.2)	38.2 (48.8)	45.1 (49.9)	18.4 (39.0)	51.5 (50.2)	34.8 (47.8)	40.0 (49.0)
Most SAADP participants were middle class households	40.2 (49.3)	52.0 (50.2)	46.1 (50.0)	45.6 (50.1)	42.6 (49.7)	44.1 (49.8)	45.1 (49.8)
Most SAADP participants were wealthy households	6.8 (25.4)	3.9 (19.5)	5.4 (22.6)	8.7 (28.4)	2.0 (14.0)	5.4 (22.6)	5.4 (22.6)
SAADP participants were from all groups equally	0.0 (0.0)	2.0 (13.9)	1.0 (9.9)	27.2 (44.7)	4.0 (19.6)	15.7 (36.5)	8.3 (27.7)
Do not know	1.0 (9.9)	3.9 (19.5)	2.5 (15.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.2 (11.0)
N	102	102	204	103	101	204	408
Control households in SAADP villages:							
Most SAADP participants were poor households	56.0 (50.7)	23.8 (43.6)	41.3 (49.8)	9.1 (29.4)	19.0 (40.2)	14.0 (35.1)	28.1 (45.2)
Most SAADP participants were middle class households	28.0 (45.8)	38.1 (49.8)	32.6 (47.4)	45.5 (51.0)	52.4 (51.2)	48.8 (50.6)	40.4 (49.4)
Most SAADP participants were wealthy households	4.0 (20.0)	14.3 (35.9)	8.7 (28.5)	9.1 (29.4)	19.0 (40.2)	14.0 (35.1)	11.2 (31.8)
SAADP participants were from all groups equally	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	31.8 (47.7)	9.5 (30.1)	20.9 (41.2)	10.1 (30.3)
Do not know	12.0 (33.2)	23.8 (43.6)	17.4 (38.3)	4.5 (21.3)	0.0 (0.0)	2.3 (15.2)	10.1 (30.3)
N	25	21	46	22	21	43	89

Note: Figures in brackets are the standard deviations.

[18] Ibid.

Community evaluation of transparency and justice in the selection of participants is shown in Table 4.3.3. Around 67.7% of SAADP respondents said that the selection was done in a transparent and fair manner. If these two variables are differentiated, 79.5% of SAADP households stated that the selection of participants was done in a transparent way and 86.1% said that it was done fairly. They assessed the selection process in this way because it was done openly, especially at the beginning of project implementation, and because all who met the requirements and were interested in submitting a proposal had the same opportunity to become participants. In cases where available funds were limited, those who were first to submit proposals were given priority in receiving loans.

Meanwhile, only 26.7% of respondents who were not participants but who lived in SAADP villages said that the selection of SAADP participants was done transparently and fairly. Even so, 58.9% said that selection was transparent and 63.4% said that it was fair.

Table 4.3.3. Proportion of SAADP and Control Households by Opinions about Transparency in the Selection of SAADP Participants (%)

Selection of SAADP Participants	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Households:							
Transparent and fair	70.6 (0.5)	56.9 (0.5)	63.7 (0.5)	69.9 (0.5)	73.3 (0.4)	71.6 (0.5)	67.7 (0.5)
Not transparent but fair	9.8 (0.3)	23.5 (0.4)	16.7 (0.4)	23.3 (0.4)	16.8 (0.4)	20.1 (0.4)	18.4 (0.4)
Transparent but not fair	12.8 (0.3)	18.6 (0.4)	15.7 (0.4)	6.8 (0.3)	8.9 (0.3)	7.8 (0.3)	11.8 (0.3)
Not transparent and not fair	5.9 (0.2)	0.0 (0.0)	2.9 (0.2)	0.0 (0.0)	1.0 (0.1)	0.5 (0.1)	1.7 (0.1)
Do not know	1.0 (0.1)	1.0 (0.1)	1.09 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (0.1)
N	102	102	204	103	101	204	408
Control households in SAADP villages:							
Transparent and fair	44.0 (0.5)	14.3 (0.4)	30.4 (0.5)	31.8 (0.5)	13.6 (0.4)	22.7 (0.4)	26.7 (0.4)
Not transparent but fair	16.0 (0.4)	47.6 (0.5)	30.4 (0.5)	31.8 (0.5)	54.6 (0.5)	43.2 (0.5)	36.7 (0.5)
Transparent but not fair	32.0 (0.5)	38.1 (0.5)	34.8 (0.5)	31.8 (0.5)	27.3 (0.5)	29.6 (0.5)	32.2 (0.5)
Not transparent and not fair	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	4.6 (0.2)	2.3 (0.2)	1.1 (0.1)
Do not know	8.0 (0.3)	0.0 (0.0)	4.3 (0.2)	4.6 (0.2)	0.0 (0.0)	2.3 (0.2)	3.3 (0.2)
N	25	21	46	22	22	44	90

Note: Figures in brackets are the standard deviations.

According to the regulations, SAADP participants had to be people living within the village that received SAADP assistance. This stipulation was generally observed very strictly. In a few places some applicants were asked to bring a statement from the village head that they really were residents of that village. Even so, UPKD managers in one of the sample villages in Muna admitted that there were borrowers who came from a neighboring

village that did not receive SAADP. The reason for their acceptance by the UPKD was that these persons were able to return the loan without any trouble. Also they lived so close that they just had to cross the road to the sample village. In any case, the number of these borrowers was small.

The selection process in the early stage of implementation differed from the process in the revolving stage. In the beginning, selection of participants was based on selection of credit proposals submitted through a group. Thus the selection process was basically not decided individually. In accordance with the explanation given during socialization, participants who submitted requests for loans were generally not wealthy people and not public servants. Not all submissions from community groups could be accepted, however, because funds were limited. Furthermore, since the release of funds by the government was done in stages, not all groups received their loans at the same time. Decisions about which groups would receive the loans first was usually based on a scale of priorities that had already been fixed at the time when the UPKD put in a request for funds to the district. In one village in Muna, however, these decisions were made on a lottery basis.

The selection process at the revolving stage varied from one region to another and generally depended very much on the subjective considerations of UPKD managers. On the whole, the first consideration of the UPKD was regularity in repayments, which meant that loans were given to community members who were regarded as capable of repaying the money.

4.4. The Implementation Mechanism

The Credit Proposal Process

According to the regulations, proposals for SAADP loans had to be submitted through community groups. At the beginning of the project this process was followed rather consistently. At this stage members of the community formed groups or were put into groups by the UPKD, after which the proposals were put forward through the group. According to respondents' statements, which were supported by UPKD information, at the revolving stage, when funds were distributed in the following budget year (if the village obtained an additional SAADP quota), the group was set up only as a formality to meet project requirements at the time of proposal submissions. Usually people put forward their proposal to the UPKD managers and were then arranged into groups by the UPKD for purposes of reporting or recording.[19]

It can be seen from Table 4.4.1 that the majority of loan proposals (76.0%) were submitted through groups, while only 23.6% were submitted by the individual concerned or given directly to the UPKD. This information, however, does not reveal the present situation for submission of proposals because the data referred to include all loans that the respondent has ever received. The majority of proposals submitted through groups were first loans that were put forward at the beginning of the project.

[19] A more detailed description of the group system is given in section 4.5 below.

Table 4.4.1. Proportion of SAADP Loans by Credit Proposal Process (%)

Submission	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Through groups	88.9 (31.5)	74.6 (43.7)	82.1 (38.4)	50.9 (50.1)	97.4 (15.9)	70.1 (45.9)	76.0 (42.7)
Individually	11.1 (31.5)	25.4 (43.7)	17.9 (38.4)	49.1 (50.1)	0.9 (9.3)	29.2 (45.5)	23.6 (42.5)
Do not know	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.7 (13.1)	0.7 (8.4)	0.4 (6.0)
N	144	130	274	165	116	281	555

Note: - In the case of two loans, data are not complete.
- Figures in brackets are the standard deviations.

Requests for SAADP loans should be in the form of a written proposal. But as with the group requirement, this was done only at the beginning of the project. In the following stage, requests were generally made orally to the UPKD managers. Then, in some cases the UPKD office-holders reframed the request into a written proposal. In most instances, however, it was sufficient for the borrower to write his name on the list of persons who were submitting requests for loans.

Table 4.4.2 shows that of the 557 SAADP loans that were received by respondents, only 383 loans (68.8%) were submitted in the form of a written proposal and of these the majority were loans that had been requested at the beginning of the project. In terms of the person who actually prepared the proposal, around 34.7% of the 383 proposals were made by the UPKD office-holders, 27.4% were made by the head of the group and only 22.5% were made by members of the group.

A rather high proportion of proposals was prepared by UPKD office-holders, one of the reasons being that many UPKDs felt that it would be hard to expect the local community to prepare proposals themselves, because on the whole, educational levels are low. The UPKD managers therefore chose to prepare the proposals themselves (usually with the assistance of the facilitator) rather than try to teach participants how to do it.

Table 4.4.2. Proportion of SAADP Loans by Proposal Writer (%)

Proposal Prepared By	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Head of the group	15.8 (36.6)	23.7 (42.8)	18.8 (39.1)	61.2 (49.1)	23.3 (42.5)	38.2 (48.7)	27.4 (44.7)
Member(s) of the group	4.5 (20.8)	21.2 (41.2)	10.8 (31.1)	7.4 (26.5)	56.3 (49.8)	37.1 (48.4)	22.5 (41.8)
Participant/household member	21.1 (40.9)	7.5 (26.5)	16.0 (36.7)	9.0 (28.8)	5.8 (23.5)	7.0 (25.7)	12.0 (32.6)
Facilitator	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.5 (12.2)	2.9 (16.9)	2.4 (15.2)	1.0 (10.2)
UPKD office-holder	58.6 (49.4)	41.3 (49.5)	52.1 (50.1)	20.9 (41.0)	7.8 (26.9)	12.9 (33.7)	34.7 (47.7)
Other person	0.0 (0.0)	3.8 (19.1)	1.4 (11.8)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.8 (8.8)
Do not know	0.0 (0.0)	2.5 (15.7)	0.9 (9.7)	0.0 (0.0)	3.9 (19.4)	2.4 (15.2)	1.6 (12.4)
N=loans submitted in form of written proposal	133	80	213	67	103	170	383

Note: Figures in brackets are the standard deviations.

Proposals that had been prepared by individuals were given to the head of the group to be summarized and then passed on to the UPKD. Proposals prepared by the head of the group on a basis of submissions from group members were first signed by the members before they were submitted to the UPKD.[20] In a number of villages the facilitator and the Agricultural Extension Worker (PPL) helped with the proposal-making process at the level of groups and the preparation of a recapitulation.

The proposals submitted to the UPKD were then verified by the village verification team, which consisted of the UPKD chairman, the facilitator, and the PPL. In a few villages the village head and members of his staff were included in the team. In one village in Tolitoli District, the village head actually played the central role. In this village, the UPKD management usually waited for the village head's agreement before they passed on credit to anyone.

Additional Requirements

The SAADP project did not set any other requirements because the loans were designed as credit to which the village community would have easy access. For that reason, the UPKD generally did not impose further conditions at the commencement of project implementation. After the project had been running for some time and there proved to be serious delays in loan repayments, however, the UPKD realized that there was need for a formulation and agreement about this matter as one way to solve the problem of repayments that were in arrears.

Since there were no standard regulations that could be referred to, the additional requirements that were introduced differed from one sample village to another. Usually the UPKD management decided on the requirements but in some cases they were the outcome of an agreement with the community or with village authorities and community figures. They were usually formulated to suit the needs and conditions of each region and included, for example, a statement of assets such as land, agricultural produce, a boat, a boat engine, livestock, or electronic goods, as collateral, a letter of information from the village head, a land certificate, proof of payment of the land and buildings tax (PBB), a photocopy of the borrower's Identification Card (KTP), and a photocopy of the Family Card (KK). Most of these additional requirements did not generally apply to all persons in the village who wanted to obtain a loan but rather only to those who were judged to be unreliable in the repayment of credit.

From Table 4.4.3 it can be seen that the majority (61.3%) of SAADP loans did not have to be accompanied by any kind of document or letter at the time when the proposal was submitted. Some 27.6% of loans were accompanied by a statement of guarantee for a certain asset and 10.1% of loans had a KTP photocopy attached. There were also several SAADP loans that were accompanied by collateral in the form of valuable documents of the type that banks will accept, namely, land certificates (3.6%) and vehicle ownership papers (BPKB) (0.2%). If the two sample provinces are compared, it appears that additional requirements were more commonly imposed in Central Sulawesi than in South-east Sulawesi.

[20] See also section 4.5 concerning the group system.

Table 4.4.3. Proportion of SAADP Loans by Type of Document Needed as an Additional Requirement (%)

Type of Document	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Land certificate	0.0 (0.0)	15.4 (36.2)	7.3 (26.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	3.6 (18.7)
Proof of PBB payment	0.7 (8.3)	0.0 (0.0)	0.4 (6.0)	0.0 (0.0)	4.31 (30.4)	1.8 (13.2)	1.1 (10.4)
Photocopy of KTP	0.0 (0.0)	20.8 (40.7)	9.9 (29.9)	15.2 (36.0)	3.4 (18.3)	10.3 (30.5)	10.1 (30.1)
Photocopy of KK	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.8 (13.4)	0.9 (9.3)	1.4 (11.9)	0.7 (8.5)
Vehicle ownership papers	0.7 (8.3)	0.0 (0.0)	0.4 (6.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.2 (4.2)
Letter from the village head	3.5 (18.4)	8.5 (27.9)	5.8 (23.5)	0.6 (7.8)	0.0 (0.0)	0.4 (6.0)	3.1 (17.2)
Statement of guarantee	47.2 (50.1)	30.0 (46.0)	39.1 (48.9)	4.8 (21.5)	32.8 (47.1)	16.4 (37.1)	27.6 (44.7)
No additional documents or letters needed	47.2 (50.1)	52.3 (50.1)	49.6 (50.1)	80.6 (39.7)	61.2 (48.9)	72.6 (44.7)	61.3 (48.8)
N	144	130	274	165	116	281	555

Note: - Respondents could answer more than one type of document.
- Figures in brackets are the standard deviations.

If the purpose in setting additional requirements, in particular those that took the form of assets as collateral, was to ensure repayment of loans, there should have been sanctions of some kind when repayment was delayed, for example, confiscation of the assets that formed the guarantee. According to information from UPKD managers, however, this requirement was intended to have only a psychological effect or to frighten borrowers so that they would repay their loans promptly. When in fact repayments were in arrears, the UPKD never confiscated the collateral and preferred to settle the matter in a family spirit. Confiscation of an asset in the form of land was found in only one sample village in Donggala, but in this instance the problem was not a delay in loan repayment but rather the embezzlement of money by the UPKD chairman.

Distribution of Loans

After the proposals were approved, the UPKD distributed the funds to participants. At the beginning of project implementation, the loans were sometimes passed on directly to the participant but sometimes distribution was done through groups. At the revolving stage almost all loans were given directly to the borrower. Loan transactions were completed when each borrower signed a statement that he/she had received a SAADP loan.

Table 4.4.4. Proportion of SAADP Loans by Length of Time from Proposal Submission to Release of Credit (%)

Length of Time	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
One week	16.0 (36.8)	36.9 (48.4)	25.9 (43.9)	46.7 (50.0)	11.2 (31.7)	32.0 (46.7)	29.0 (45.4)
Two weeks	14.6 (35.4)	10.0 (30.1)	12.4 (33.0)	12.1 (32.7)	14.7 (35.5)	13.2 (33.9)	12.8 (33.4)
Three weeks	4.8 (21.6)	4.6 (21.1)	4.7 (21.3)	1.2 (41.0)	6.9 (25.4)	3.6 (18.6)	4.1 (19.9)
One month	14.6 (35.4)	14.6 (35.5)	14.6 (35.4)	21.2 (41.0)	19.8 (40.0)	20.6 (40.5)	17.7 (38.2)
More than one month	50.0 (50.0)	32.3 (46.9)	41.6 (49.4)	18.8 (39.2)	42.2 (49.6)	28.5 (45.2)	35.0 (47.7)
Do not know/ have forgotten	0.0 (0.0)	1.5 (12.4)	0.7 (8.5)	0.0 (0.0)	5.2 (22.2)	2.1 (14.5)	1.4 (11.9)
N	144	130	274	165	116	281	555

Note: Figures in brackets are the standard deviations.

The length of time from when the participant submitted his/her proposal to the time when he/she received the money from the UPKD varied somewhat, depending on the financial position of the UPKD. At the beginning of the project the UPKD's financial position was influenced by the length of time taken for money to be channeled from the government, while at the revolving staged it depended on how well loan installments were being repaid by borrowers.

In general, the release of loans was relatively quick, as can be seen from Table 4.4.4. Approximately 63.3% of loans took one month or less, while 35.0% took more than one month. Distribution of loans in the early stage of the project took longer because project funds were released in three installments every three months. In the revolving stage, the time was much shorter. If the UPKD had funds available, a borrower could make a request and receive the loan on the same day, especially if he/she had a good track record in repaying credit.

The Credit Scheme

The size of loans also varied from one borrower to another both within the same village and between villages. The range was from Rp200,000 to Rp5,000,000. The size of the loan, particularly at the revolving stage, was decided by the UPKD, while in the early stage these decisions were made by the verification team, that is the UPKD chairman, the facilitator and the PPL, usually with the involvement of the village head. The considerations that were used in decisions about the size of the loan were the participant's proposal and ability to repay the loan and the availability of funds in the UPKD office.

Table 4.4.5 shows that, on the whole, most loans (39%) were between Rp500,000 and Rp1,000,000. Participants whose livelihood was farming usually received smaller loans than those who had some other kind of economic undertaking, especially in trade. This is apparent from the fact that the proportion of loans for farming becomes smaller as the size of loans increases. On the other hand, for trade and livestock activities, the larger the loan the larger the proportion. Most loans in the range from Rp200,000 to Rp 500,000 and from Rp500,000 to Rp1,000,000 went to borrowers for agricultural purposes, namely,

49.2% and 35.3% of loans respectively. Loans in the range from Rp 1,000,000 to Rp2,000,000 and from Rp2,000,000 to Rp5,000,000 were given to borrowers for trading activities, that is, 39.4% and 47.8% respectively. Farmers said that the size of the loans they received was relatively small by comparison with their farming needs. Qualitative information indicates that larger loans were also given to public servants, village officials, and participants who had a close connection with UPKD office-holders.

Table 4.4.5. Proportion of SAADP Loans by Use and Size (%)

Use of Loan	Rp200,000 to ≤ Rp500,000	>Rp500,000 to Rp1 million	>Rp1mill. to Rp2 mill.	>Rp2 mill. to Rp5 mill.	Total
Capital for farming	49.2	35.3	32.9	10.5	34.8
Capital for fishing	6.4	3.2	1.4	11.9	4.5
Capital for livestock raising	3.2	8.3	6.9	14.9	7.5
Capital for industrial activities	5.6	11.5	6.9	3.0	7.9
Capital for trade	30.2	28.0	39.4	47.8	33.8
Capital for other purposes	0.8	6.0	5.5	3.0	4.3
House improvement/ construction and other consumption purposes	4.0	5.1	6.9	9.0	5.8
Clearing of unused land	0.8	2.8	0.7	0.0	1.4
N (% of total N)	126 (22.6%)	218 (39.1%)	146 (26.2%)	67 (12.0%)	557 (100%)

Table 4.4.6 shows that the amount of most SAADP loans (66.3%) were in fact the same as the amount proposed. Around 32.3% were smaller and only 1.4% were larger than the amount that had been requested. If a comparison is made of the two sample provinces, more cases of actual loans being smaller than the proposed amount occurred more frequently in South-east Sulawesi (46.6% of loans). The figure in Konsel District was as high as 68.6% of loans. Meanwhile, if the proposed activity is considered, it can be seen that, while the size of loans for use as farming capital (45.4%) was smaller than proposed amounts, the proportion was higher than loans for trade purposes (19.7%) (See Appendix Table 4.1).

Table 4.4.6. Proportion of Loans by Comparison between Actual Amount and Proposed Amount (%)

Comparison between Actual and Proposed Loan	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Same amount	86.8	76.9	82.1	67.9	27.1	50.9	66.2
	(34.0)	(42.3)	(38.4)	(46.8)	(44.6)	(50,1)	(47.3)
Smaller amount	12.5 (33.2)	23.1 (42.3)	17.5 (38.1)	30.9 (46.3)	68.6 (46.6)	46.6 (50.0)	32.3 (46.8)
Larger amount	0.7 (8.3)	0.0 (0.0)	0.4 (6.0)	1.2 (11.0)	4.2 (20.0)	2.5 (15.6)	1.4 (11.9)
N	144	130	274	165	118	283	557

Note: Figures in brackets are the standard deviations.

In connection with interest on loans, the SAADP credit was designed as commercial credit on which interest had to be paid. According to the *juklak*, the community decides the rate at a village meeting but the minimum is 15% per year. In actual implementation, the interest rate on loans was decided at a meeting between the UPKD management, the cluster manager, the project leader, and facilitators at district level. After this meeting a discussion with people in each village was normally conducted. The purpose of this discussion, however, was really to pass on the decision made at district level because members of the community usually just agreed with what they were told.

In the first year of implementation after the project had been redesigned, that is in 1999/2000, the village generally agreed to set the interest at 15%, this being the amount stated in the juklak. In later years, however, the rate rose to 18% and even 24% per year. Qualitative information indicated that the interest rate was raised on a recommendation from UPKD office-holders in connection with the low honoraria that they received from interest on loans. The low honorarium was one of the reasons why many of these office-holders resigned. Hence it seemed that the best way out of the problem was to increase the interest.

In a number of cases, decisions about interest rates were not carried out very strictly. For example, in one of the sample villages in Donggala, the interest rate was reduced from the original 18% to 15% per year for borrowers who were having difficulty in repaying installments of their loans for technical reasons.

Table 4.4.7 shows that on the whole most SAAD loans (91.9%) had interest charges of between 15% and 24% per year. This was the range in all sample villages from the beginning of the project up to the present time. Only 1.4% of loans had an interest rate under 15%, while interest of more than 24% per year was imposed on only 4.3% of loans. The fact that some had less than 15% while some had more than 24% interest is probably explained by the fact that some loans were fully repaid more quickly or more slowly than the period fixed for repayment.

Quite a number of respondents did not know what percentage interest rate they were paying on their loans. They only knew the amount of interest that they had to pay in the form of nominal value, the size of which remained the same irrespective of whether they paid off the loan more quickly or more slowly than agreed. If this were converted to percentages, the borrower who repaid his loan more quickly would have paid a higher annual interest rate while the opposite would apply to those who were slow to repay loans.

Table 4.4.7. Proportion of SAADP Loans by Annual Interest Rate (%)

Annual Interest Rate	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Do not know	1.4 (11.7)	3.8 (19.3)	2.6 (15.8)	0.6 (7.8)	0 (0.0)	0.4 (5.9)	1.4 (11.9)
<15%	0 (0.0)	2.3 (15.1)	1.1 (10.4)	7.9 (27.0)	4.2 (20.2)	6.4 (24.5)	3.8 (19.1)
15-24%	98.6 (11.7)	93.1 (25.5)	96.0 (19.7)	82.4 (38.2)	95.8 (20.2)	88.0 (32.6)	91.9 (27.3)
>24%	1.4 (11.7)	4.6 (21.1)	2.9 (16.9)	9.7 (29.7)	0 (0.0)	5.7 (23.1)	4.3 (20.3)
N	144	130	274	165	118	283	557

Note: Figures in brackets are the standard deviations.

On the whole, the repayment period for loans was set at one year at the most. The period and frequency of installment payments varied, depending on the type of economic activity stated by the participant in his loan submission. Loans for activities outside agriculture usually required an installment to be paid monthly, but in the case of agricultural undertakings installments were paid in accordance with harvest times, which generally meant once in three to six months.

At the beginning of project implementation, participants paid installments in two ways, either directly to the UPKD or else through the head of the group. In the next stage, that is the second year when funds were able to revolve, the majority of participants paid the money directly to the UPKD. There were several reasons why they chose this method: i) the head of the group had previously kept some of the money, ii) the head of the group had asked the UPKD office-holders for an incentive for his services, iii) participants were worried that the head of the group would not pass the money on to the UPKD, and iv) the head of the group objected to having the burden of passing on the installments from participants. Nevertheless, there are still a small number of participants who even now repay their loans through the group.

The Giving of Incentives by Respondents

In the program *juklak*, there are no regulations about the payment of incentives by borrowers to any one, apart from interest. All administrative and operational costs involved in project implementation were taken from a section of project funds in the first year and after that they were taken from the interest paid on loans. This is in keeping with the statements of some 90.7% of respondents in all sample villages that they had never given an incentive (a service fee) to anyone whatsoever, whether UPKD office-holders or village officials (see Table 4.4.8).

Table 4.4.8. Proportion of SAADP Households by Statements about the Giving of Incentives to UPKD Office-holders (%)

Incentive Given	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Yes, always	5.9 (23.6)	10.8 (31.2)	8.3 (27.7)	1.9 (13.9)	0.0 (0.0)	1.0 (9.9)	4.7 (21.1)
Yes, sometimes	2.9 (17.0)	10.8 (31.2)	6.9 (25.3)	1.0 (9.9)	3.0 (17.1)	2.0 (13.9)	4.4 (20.6)
Never	91.2 (28.5)	78.4 (41.3)	84.8 (36.0)	97.1 (16.9)	96.0 (19.6)	96.6 (18.2)	90.7 (29.1)
Do not know	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.0 (10.0)	0.5 (7.0)	0.3 (5.0)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Only 9.1% of respondents said that they had given incentives (always or sometimes). Around 4.7% of respondents stated that they did so voluntarily, while 2.9% said that they did so because the UPKD management asked them for an incentive. In addition, a number of respondents in one village in Tolitoli District said that the village head had cut between Rp17,500 and Rp37,500 from every loan and that they had never received any explanation of what the money was used for. In one village in Konsel District a respondent was charged Rp3,000 by the UPKD as the cost of preparing his proposal.

4.5. The Group System

Groups were usually formed at the early stage in SAADP implementation in order to meet the project requirement that loans had to be distributed through a system of groups. On the whole, members of the community knew that SAADP assistance would be given to them through groups.

The initiative and basis for formation of groups, however, varied from region to region. The first type of group was formed at the initiative of the community. Groups in this category generally looked for members who had similar economic activities or who lived close by, such as farmers and fishermen. The head of the group was then chosen by the members. The second type of group involved the selection of a group head by the UPKD. That person then went looking for members for the group. With the third type, the group was formed directly by the UPKD office-holders.

At the beginning of implementation the facilitator usually assisted the UPKD with the formation of groups. This was generally done at the time when proposals for loans were submitted. Similarity in type of economic undertakings was used as the basis for group formation. At the revolving stage group formation was more frequently decided by the UPKD on the basis of similarity in the date when funds were released. The formation of groups at this stage was done at the time when participants received their loans from the UPKD management but the groups existed only on paper. Some participants realized that they had been formed into groups while many were not aware of the fact.

Table 4.5.1. Proportion of SAADP Loans by Initiator in Group Formation (%)

Initiator	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Facilitator/NGO	0.8 (8.8)	1.0 (10.2)	0.9 (9.4)	1.2 (10.9)	16.8 (37.6)	10.2 (30.3)	5.2 (22.3)
UPKD management	67.9 (16.8)	38.1 (48.8)	55.1 (49.8)	33.3 (47.4)	47.8 (50.2)	41.6 (49.4)	48.8 (50.0)
Head of the village	0.8 (8.8)	6.2 (24.2)	3.1 (17.4)	1.2 (10.9)	3.5 (18.6)	2.5 (15.8)	2.8 (16.6)
Head of the hamlet/ RT/ RW	0.0 (0.0)	3.1 (17.4)	1.3 (11.5)	0.0 (0.0)	0.9 (9.4)	0.5 (7.1)	0.9 (9.7)
Community figure	0.8 (8.8)	2.1 (14.3)	1.3 (11.5)	0.0 (0.0)	2.7 (16.1)	1.5 (12.3)	1.4 (11.9)
Older group	3.9 (19.5)	12.4 (33.1)	7.6 (26.5)	1.2 (10.9)	7.0 (25.8)	4.6 (20.9)	6.2 (24.1)
Ordinary member of the community	25.8 (43.9)	29.9 (46.0)	27.6 (44.8)	63.1 (48.5)	20.4 (40.4)	38.6 (48.8)	32.7 (47.0)
Other	0.0 (0.0)	1.0 (10.2)	0.4 (6.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.2 (4.9)
Do not know	0.0 (0.0)	6.2 (24.2)	2.7 (16.1)	0.0 (0.0)	0.9 (9.4)	0.5 (7.1)	1.7 (12.8)
N=loans through groups	128	97	225	84	113	197	422

Note: Figures in brackets are the standard deviations.

As shown in Table 4.4.1 in section 4.4 above, 422 loan proposals (76%) were submitted through groups. From the point of view of initiative in formation of the group, there are wide variations, as Table 4.5.1 indicates. A large number of loans (48.8%) were submitted through groups formed at the initiative of the UPKD. Around 32.7% were submitted through groups formed at the initiative of the community or participants themselves, and only 6.2% were submitted by existing groups that had been formed previously.

The formation of most groups was based on similarity in economic activities (86% of loans), as can be seen from Table 4.5.2. This was found in all sample districts. In other cases the basis of group formation was proximity in the location of houses, proximity in location of economic activities, and family relationships.

Table 4.5.2. Proportion of SAADP Loans by Basis of Group Formation (%)

Basis of Group Formation	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Similarity in activities	85.9 (34.9)	83.5 (37.3)	84.9 (35.9)	94.0 (23.8)	81.4 (39.1)	86.8 (33.9)	85.8 (35.0)
Proximity in location of houses	6.3 (24.3)	4.1 (20.0)	5.3 (22.5)	6.0 (23.8)	5.3 (22.5)	5.6 (23.0)	5.5 (22.7)
Proximity in location of economic activities	0.0 (0.0)	1.0 (10.2)	0.4 (6.7)	0.0 (0.0)	6.1 (24.2)	3.6 (18.6)	1.9 (13.7)
Family relationships	4.7 (21.2)	0.0 (0.0)	2.7 (16.1)	0.0 (0.0)	2.7 (16.1)	1.5 (12.3)	2.1 (14.5)
Other	0.8 (8.83)	5.2 (22.2)	2.7 (16.1)	0.0 (0.0)	2.7 (16.1)	1.5 (12.3)	2.1 (14.5)
Do not know	2.3 (15.2)	6.2 (24.2)	4.0 (19.6)	0.0 (0.0)	1.8 (13.2)	1.0 (10.0)	2.6 (16.0)
N=loans through groups	128	97	225	84	113	197	422

Note: Figures in brackets are the standard deviations.

In practice, groups functioned only at the beginning of the project, at the time when proposals for initial loans were submitted. At the time when the loans were available, the managers of the UPKD asked the heads of groups and their members to come together to receive the money or else they handed the money over to heads of groups for distribution to their members.

At the beginning of the project, some of the participants who had received their loan through the head of the group repaid installments through the group also. As noted in section 4.3 above, at the next stage when funds were revolving, most borrowers preferred to pay installments direct to the UPKD. For this reason the groups did not continue to function.

In reality, the philosophy underlying the formation of groups in most government projects is that participants can share knowledge and experiences in order to expand their own individual undertakings.[21] It was hoped that, with the assistance of facilitators, the group system would enable participants to obtain a better understanding of the project and to draw up a list of priorities in the activities put forward in their proposals. It had also been

[21] The World Bank stated that the formation of community groups in the SAADP project was intended to reduce the cost of distributing loans to and collecting installments from the community.

expected that the PPLs would be able to help solve technical aspects of the agricultural problems faced by participants. But at field level the reality was somewhat different. Groups were formed basically only to meet project requirements, the role of facilitators was directed more toward assistance for the UPKDs, and the PPLs played a part only as members of the verification team. Thus they did not carry out their institutional task, which was to provide agricultural extension services in the field. For these reasons relatively effective groups were found only in certain villages and even then in very small numbers.

V. THE UPKD SYSTEM

5.1. The UPKD Formation Process

Involvement of Respondents

Not all respondents knew about or were involved in the UPKD formation process. In fact, there were respondents who were somewhat uncertain about the source of the loan that they had received and who had handled it. Only 58.8% of the 408 SAADP household respondents said that they understood the process by which the UPKD had been established (see Table 5.1.1). The proportion was much higher in the Province of South-east Sulawesi (70.6%) than in the Province of Central Sulawesi (47.1%). Donggala District had the smallest number of respondents who knew about the UPKD formation process (43%), while the proportions in the other districts were somewhat higher, with 51% in Tolitoli, 71% in Muna and 70% in Konsel. This indicates that socialization in the sample districts had not been entirely successful and that it had not reached all levels in the community that formed the project target. On the whole, involvement in UPKD formation meant being present at the village discussion forum and at the same time taking part in the selection process, according to 46.1% of respondents.

Table 5.1.1. Proportion of SAADP Households that Understood and were Involved in the Process of UPKD Formation (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Understood the process	43.1 (49.8)	51.0 (50.2)	47.1 (50.0)	70.9 (45.7)	70.3 (45.9)	70.6 (45.7)	58.8 (49.3)
Involved: were present and took part in selection process	43.1 (49.8)	39.2 (49.1)	41.2 (49.3)	37.9 (48.7)	64.4 (48.1)	51.0 (50.1)	46.1 (49.9)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Appointment of the UPKD Management

Although not all respondents knew about or were directly involved in UPKD formation, the process nevertheless basically followed the instructions for program implementation. Some 92.9% of the 240 SAADP household respondents who stated that they knew about the process said that UPKD management was decided at a village discussion forum in which the community was involved, that is, a community discussion. On the ather hand, 7.1% said that the UPKD was formed through a meeting of village officials or that office-holders were appointed directly by those officials (see Table 5.1.2).

Interviews with village officials and UPKD managers in each of the sample villages supported the above data. On the whole, the UPKD, as the institution that would handle revolving SAADP funds at village level, was formed in 1999 through a village discussion forum, which was attended by the village community, village officials, community figures, facilitators, subdistrict representatives and project leaders at district

level. On this occasion those who were present, especially members of the community, chose the UPKD office-holders from among a number of persons who were recommended by the community itself. They felt that the formation process and the selection of office-holders had gone very well and had been quite transparent.

Table 5.1.2. Proportion of SAADP Households by Method of Selecting UPKD Management (%)

Method Of Selection of UPKD Management	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
At a meeting of village officials	2.3 (15.1)	5.8 (23.5)	4.2 (20.1)	0.0 (0.0)	9.9 (30.0)	4.9 (21.5)	4.6 (21.0)
At a community meeting	93.2 (25.5)	88.5 (32.3)	90.6 (29.3)	98.6 (11.7)	90.1 (30.0)	94.4 (22.9)	92.9 (25.7)
Appointed by village officials	4.6 (21.1)	5.8 (23.5)	5.2 (22.3)	1.4 (11.7)	0.0 (0.0)	0.7 (8.3)	2.5 (15.6)
N=respondents who knew about UPKD formation	44	52	96	73	71	144	240

Note: Figures in brackets are the standard deviations.

5.2. UPKD Management

Criteria for UPKD Office-holders

Information from village officials and UPKD office-holders in all sample villages indicated that candidates had to be residents of the village and had to have at least a Senior High School (SMA) education. It was expected that candidates with an SMA education would have no trouble in absorbing training material about bookkeeping, would be capable of handling money, would have a broad outlook and would have the confidence to speak in public.

In addition to these requirements, there were other criteria that differed from village to village. For example, in one village in Tolitoli, UPKD candidates had to have experience in smallholder tree-crops or in animal husbandry and at the same time had to have their own private vehicle to facilitate the work of the UPKD. In a village in Muna, UPKD office-holders had to be representative of the existing hamlet-based pattern of ethnic groups. Thus the UPKD chairman was chosen from the Muna ethnic group, the treasurer from the Javanese ethnic group, and the secretary from the Balinese ethnic group. The purpose in choosing persons with different ethnic backgrounds was to make coordination and communications among the community easier.

According to qualitative information, there was great variation in the backgrounds of UPKD office-holders as individuals both between villages and within the same village. Most of these people were ordinary members of the community but some had previously been prominent community figures. This is supported by data from respondents shown in Table 5.2.1. Most SAADP respondents (68.1%) said that the UPKD management consisted of ordinary members of the community while 31.1% of respondents said that UPKD office-holders were community figures.

Although information in a number of villages indicated that village officials were not permitted to be UPKD office-holders and the basic design of the SAADP project itself sought to minimize interference from village officials, nevertheless a case was found where a village official was a member of the UPKD management, even though he was not the chairman. Data show that 11% of SAADP respondents stated that UPKD management in their village included village officials.

Table 5.2.1. Proportion of SAADP Households by Opinions about the Background of UPKD Office-holders (%)

Background of UPKD Office-holders	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Village official	5.9 (23.6)	17.7 (38.3)	11.8 (32.3)	0.0 (0.0)	20.8 (40.8)	10.3 (30.5)	11.0 (31.4)
Community figures	27.5 (44.84)	39.2 (49.1)	33.3 (47.3)	41.8 (49.6)	15.8 (36.7)	28.9 (45.5)	31.1 (46.4)
Ordinary members of the community	58.8 (49.5)	42.2 (49.6)	50.5 (50.1)	79.6 (40.5)	92.1 (27.1)	85.8 (35.0)	68.1 (46.7)
Others	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	0.3 (5.0)
Do not know	20.6 (40.6)	33.3 (47.4)	27.0 (44.5)	8.7 (28.4)	3.0 (17.1)	5.9 (23.6)	16.4 (37.1)
N	102	102	204	103	101	204	408

Note: - Respondents could choose more than one answer.
- Figures in brackets are the standard deviations.

Reference to the program *juklak* indicates that UPKD management should consist of a small group of between three and five persons. At the beginning of project implementation, the number of persons in several villages was four or five and consisted of a chairman, secretary/collector of installments, a treasurer, a person in charge of economic activities, and another responsible for physical activities. Not long after the UPKDs began to function, however, the number of office-holders was usually reduced to three, that is a chairman, a secretary and a treasurer. This structure is still found in almost all sample districts with the exception of Muna. In this district UPKD management generally consists of only one person, namely the chairman. The other office-holders have either resigned or are no longer active because they felt that their honorarium was too small. So far the UPKD chairman and the village head have made no attempt to replace the persons who resigned or became non-active.

The program *juklak* states that the UPKD management must be re-elected after three years. In reality, however, this regulation has rarely been applied, even though several sample villages have already passed the three-year period since the UPKD was established. The reasons are, among others, that the community and the UPKD have given no attention to the matter, that they are unaware of the existence of this regulation, or that it is difficult to find people who have the capacity and are willing to replace the current management.

Nevertheless, there are a number of UPKDs in which the chairman, secretary and treasurer have been replaced. The reason for their replacement, however, was not compliance with regulations, but because they were busy with other activities, were considered incapable of handling finances, lacked authority especially in collecting loan repayments from community members, were relatively inactive or suffered from poor health. There were also cases where office-holders (in many cases the UPKD chairman) were replaced because they had misused funds, that is they did not deposit installments paid by participants or else they embezzled SAADP funds. Cases of this kind were found in Tolitoli, Donggala, and Konsel Districts.[22]

The ability of UPKD office-holders to work together is an important element in program success. Several cases suggest that the lack of harmony within the UPKD has had a negative impact on effective revolving of funds. In one village in Konsel, for example, several UPKD office-holders resigned at the time when funds were released because they felt that the UPKD chairman completely dominated proceedings. After only one person was in charge, there was no control over the distribution of funds and cases of misuse of money occurred. The same happened in a village in Tolitoli, where the chairman did not include the other office-holders in matters relating to the release of funds but expected them to do the administrative work. Since there was no control, the chairman took the money that had been returned by community members as repayment of their loans.

Evaluation of the Performance of the UPKD Management

From Table 5.2.2 it can be seen that most SAADP household respondents (71.3%) believe that UPKD office-holders had the ability to handle the UPKD. The same trend was found in all four sample districts, with the highest proportion in Donggala (85.3% of respondents) and the lowest in Konsel (50.5%). Meanwhile, a certain proportion (23.8%) said that UPKD office-holders were either not fully competent or else quite incompetent in handling the UPKD. The highest proportion was in Konsel (44.6% of respondents) and the lowest in Donggala (9.8%).

Table 5.2.2. Proportion of SAADP Households by Evaluation of Ability of UPKD Management (%)

Ability of UPKD Management	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Competent	85.3 (35.6)	73.5 (44.3)	79.4 (40.5)	75.7 (43.1)	50.5 (50.2)	63.2 (48.3)	71.3 (45.3)
Not fully competent	6.9 (25.4)	16.7 (37.5)	11.8 (32.3)	17.5 (38.2)	32.7 (47.1)	25.0 (43.4)	18.4 (38.8)
Quite incompetent	2.9 (17.0)	2.0 (13.9)	2.5 (15.5)	4.9 (21.6)	11.9 (32.5)	8.3 (27.7)	5.4 (22.6)
Do not know	4.9 (21.7)	7.8 (27.0)	6.4 (24.5)	1.9 (13.9)	5.0 (21.8)	3.4 (18.2)	4.9 (21.6)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

[22] Some of these cases have already been settled by involving the village security apparatus and the BPD (Village Representative Council) or by confiscating the property (land) of the person concerned in lieu of the money that was taken.

This evaluation by respondents of the ability of UPKD office-holders is consistent with qualitative information about UPKD development. UPKDs in Donggala were more successful in distributing and collecting loans than UPKDs in the other sample districts. At the same time, the sample UPKDs in Konsel had a relatively higher rate of non-repayment of credit than those in other districts.

Table 5.2.3. Proportion of SAADP Households by Opinions about Reasons for Incompetence of UPKD Office-holders (%)

Reason for Incompetence	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Insufficient assistance and training	20.0 (42.2)	42.1 (50.7)	34.5 (48.4)	39.1 (49.9)	31.1 (46.8)	33.8 (47.7)	34.0 (47.6)
Lack of expertise	30.0 (48.3)	26.3 (45.2)	27.6 (45.5)	47.8 (51.1)	15.6 (36.7)	26.5 (45.5)	26.8 (44.5)
Low levels of education	0.0 (0.0)	15.8 (37.5)	10.3 (31.0)	8.7 (28.8)	6.7 (25.2)	7.4 (31.0)	8.3 (27.7)
Other reasons	40.0 (51.6)	26.3 (45.2)	31.0 (47.1)	8.7 (28.8)	40.0 (49.5)	29.4 (47.1)	29.9 (46.0)
Do not know	10.0 (31.6)	5.3 (22.9)	6.9 (25.8)	8.7 (28.8)	17.8 (38.7)	14.7 (25.8)	12.4 (33.1)
N= those who said that UPKD managers were incompetent	10	19	29	23	45	68	97

Note: Figures in brackets are the standard deviations.

When asked why UPKD office-holders were not really competent in handling the UPKD, 34% of the respondents who thought that UPKD management was incompetent said that the reason was insufficient assistance and training (see Table 5.2.3). This reason was given by most respondents in Tolitoli (42.1%). Most respondents in Muna (39.1%) said that the management lacked expertise, while most respondents in Donggala and Konsel (40% in each district) gave other reasons that included unfairness, dishonesty, excessive activities and inability to communicate with the community.

Table 5.2.4. Proportion of SAADP Households by Evaluation of Service Provided by the UPKD (%)

UPKD Service	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Good	80.4 (39.9)	71.6 (45.3)	76.0 (42.8)	60.2 (49.2)	53.5 (50.1)	56.9 (49.6)	66.4 (47.3)
Adequate	12.8 (33.5)	8.8 (28.5)	10.8 (31.1)	29.1 (45.7)	31.7 (46.8)	30.4 (46.1)	20.6 (40.5)
Poor	2.9 (17.0)	11.8 (32.4)	7.4 (26.2)	9.7 (29.8)	12.9 (33.7)	11.3 (31.7)	9.3 (29.1)
Do not know	3.9 (19.5)	7.8 (27.0)	5.9 (23.6)	1.0 (9.8)	2.0 (14.0)	1.5 (12.1)	3.7 (18.8)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Meanwhile, the majority (66.4%) of SAADP household respondents said that the service provided by the UPKD to participants was good, while 20.6% of respondents felt that it was adequate and only 9.3% felt that it was poor (see Table 5.2.4). The data in this table strengthens information presented in Table 5.2.3, namely that the sample UPKDs in Donggala displayed a relatively better level of performance than those in the other sample districts, especially if a comparison is made with sample UPKDs in Konsel. The majority (80.4%) of respondents in Donggala, which had the highest proportion among the four districts, judged the service provided by the UPKD as good. The smallest proportion of respondents who were satisfied with UPKD service occurred in Konsel (53.5%).

5.3. Decisions about Internal UPKD Regulations

According to qualitative information, decisions about internal UPKD regulations and the credit mechanism were made at district level during a meeting of a number of related parties that included UPKD office-holders, cluster managers, district project leaders, and facilitators, and were based on the program *juklak*. Decisions were then presented and discussed at a community discussion at village level to reach agreement.

Although generally community members simply agreed to the regulations passed down from the district level, they felt that they were involved in decision-making at village level. Table 5.3.1 shows that 42.7% of SAADP respondents believed that the village community played a role in decision-making about internal UPKD regulations and the credit mechanism while another 51.5% of respondents said that the UPKD management had played a role in decision-making. The greatest number of respondents who said that the UPKD management had played a role in decision-making occurred in Tolitoli (70.6%) while the greatest number who felt that the village community had played a role in this matter was found in Konsel (65.4%). Around a quarter (25.7%) of all respondents said that they did not know who had played a role in decision-making.

Table 5.3.1. Proportion of SAADP Households by Opinion about Who Played a Role in Decision-making about Internal UPKD Regulations (%)

Those Who Played a Role	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
UPKD management	35.3 (48.0)	70.6 (45.8)	52.9 (50.0)	56.3 (49.8)	43.6 (49.8)	50.0 (50.1)	51.5 (50.0)
Village head and staff	4.9 (21.7)	22.6 (42.0)	13.7 (34.5)	2.9 (16.9)	5.0 (21.8)	3.9 (19.5)	8.8 (28.4)
Heads of hamlets and neighborhoods	0.0 (0.0)	2.0 (13.9)	1.0 (9.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (7.0)
Community figures	1.0 (9.9)	6.9 (25.4)	3.9 (19.5)	1.0 (9.90	3.0 (17.1)	2.0 (13.9)	2.9 (16.9)
The village community	46.1 (50.1)	18.6 (39.1)	32.4 (46.9)	40.8 (49.4)	65.4 (47.8)	52.9 (50.0)	42.7 (49.5)
Do not know	38.2 (48.8)	22.6 (42.0)	30.4 (46.1)	22.3 (41.8)	19.8 (40.0)	21.1 (40.9)	25.7 (43.8)
Others	2.9 (17.0)	0.0 (0.0)	1.5 (12.1)	6.8 (25.3)	4.0 (19.6)	5.4 (22.6)	3.4 (22.6)
N	102	102	204	103	101	204	408

Note: - Respondents could choose more than one answer.
- Figures in brackets are the standard deviations.

The types of regulations in which decisions involved the village community, as stated by 42.7% of SAADP respondents, varied somewhat, as can be seen from Table 5.3.2. Of those who stated that the community played a role in decision-making, 69.5% said that the community was involved in agreements about the length of time for which money could be borrowed, while 64.4% of respondents also said that the community was involved in decisions about the interest rate on loans. Other decisions that involved the community concerned sanctions, according to 49.4% of respondents.

At the same time the community played a very small role in decision-making about internal UPKD regulations such as operational costs and honoraria for UPKD office-holders (only 9.2% and 12.6% respectively). This can be traced to the fact that internal regulations of this kind were normally decided at district level and were in keeping with project regulations.

Table 5.3.2. Proportion of SAADP Households by Opinion about Type of Regulation for Which Agreement Involved the Community (%)

Type of Regulation	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Administrative cost for loans	2.1 (14.6)	15.8 (37.5)	6.1 (24.0)	4.8 (21.6)	10.6 (31.0)	8.3 (27.8)	7.5 (26.4)
UPKD operational costs	2.1 (14.6)	10.5 (31.5)	4.6 (21.0)	16.7 (37.7)	9.1 (29.0)	12.0 (32.7)	9.2 (29.0)
Honoraria for UPKD office-holders	4.3 (20.4)	15.8 (37.5)	7.6 (26.7)	23.8 (43.1)	10.6 (31.0)	15.7 (36.6)	12.6 (33.3)
Interest rate on loans	42.6 (50.0)	94.7 (22.9)	57.6 (49.8)	95.2 (21.6)	51.5 (50.4)	68.5 (46.7)	64.4 (48.0)
Sanctions	55.3 (50.3)	42.1 (50.7)	51.5 (50.4)	26.2 (44.5)	62.1 (48.9)	48.1 (50.2)	49.4 (50.1)
Length of time for loan repayment	44.7 (50.3)	84.2 (37.5)	56.1 (50.0)	85.7 (35.4)	72.7 (44.9)	77.8 (41.8)	69.5 (46.2)
Other regulations	10.6 (31.2)	5.3 (22.9)	9.1 (28.9)	0.0 (0.0)	1.5 (12.3)	0.9 (9.6)	4.0 (19.7)
N=those who said that the community played a role in decision-making	47	19	66	42	66	108	174

Note: - Respondents could choose more than one answer.
- Figures in brackets are the standard deviations.

At the time when project loans were distributed, the honorarium paid to the UPKD management was 5% of the SAADP funds received in each village. After the revolving stage was reached, the honorarium for the UPKD was 20% of the interest paid by borrowers. In reality, however, the percentage of the interest that formed this honorarium varied from one village to another. The reason was that the interest had to be utilized for certain set purposes. Thus apart from 40% as additional capital and 10% as reserve funds, 10% of the interest was for UPKD operational costs, 10% for development funds and 10% for social funds. Thus the amount of interest that was left as the income of UPKD office-holders depended very much on the skill of the UPKD office-holders in managing expenditure, including dealing with requests for money from the village office and the community. In a number of villages where the UPKD is still functioning, requests from the village office and the community are in nature incidental and are not related to the amount of interest that is received.

The UPKD work mechanism varies from village to village. In Donggala, each of the UPKDs in the sample villages has had a fixed work schedule. The UPKD in one village provided services for borrowers every Wednesday and Saturday, while the UPKD in another village did the same on Fridays and Saturdays. The UPKD in the third village allowed time every Tuesday and Friday for old customers but provided services only once a month on the second day of the month for new borrowers. By contrast, the UPKDs in Muna did not have special times for borrowers, which meant that borrowers and prospective borrowers came at any time to the home of the UPKD chairman.

5.4. The Reporting and Supervisory System

The Reporting System

The directions for SAADP implementation require a reporting system to be carried out at different levels. The UPKD, with the assistance of the facilitator, makes a monthly report about developments in activities, including bookkeeping and the repayment of loans, to the project leader and the cluster manager. The facilitators also make their own monthly and three monthly reports for the project leader and the district TKPP. Reports from the district TKPPs are sent to the provincial TKPP every month. After these reports are consolidated, a quarterly report is prepared for the central level (Bangda). This report is then forwarded on to the World Bank and other related agencies. Both regional governments and UPKD office-holders said that the reporting system was effective while the project was still running. Reports were also presented at village meetings that were attended by the UPKD management, facilitators, cluster managers, heads of groups and village officials. Sometimes the UPKD sent a copy of its reports to the village and subdistrict offices.

Approximately six months before the project ended, that is at the time when facilitators were no longer employed (June 2003), reporting activities, particularly in Konsel and Muna Districts, ceased. Although reporting is still done in Tolitoli and Donggala, it is no longer a routine procedure. According to UPKD office-holders, the reason is that they do not know whether the UPKD still has to report on its activities. Also, they do not know how the report should be prepared and to whom it should be submitted.

According to UPKDs in sample villages in Konsel District, the biggest problem that they encountered in the SAADP reporting system was the frequency of disagreements between consultants, project leaders/cluster managers, and facilitators about the regulations that applied and the way of managing finances. As a result the UPKD had to make reports that differed.

UPKD Reports to the Community

One of the basic principles in the SAADP project is transparency, which means that all groups in the community must know about the handling of activities from the initial planning and implementation stages to continuity in credit opportunities at the revolving stage. Attempts to ensure transparency were to be undertaken through socialization during village discussions that were attended by all groups in the

community and through the conducting of regular gatherings where the UPKD could report on its own developments.

Thus the UPKD had to be managed in an open manner so that the community would know for certain what developments had occurred and what the financial position of the UPKD was at any time. One means by which the community could learn about how the UPKD was handling finances was preparation of a report about activities, including details of bookkeeping and the repayment of funds.

From statements made by the majority of respondents, it is apparent that UPKD management was not transparent since only 34.4% of respondents said that there was or had once been information that the community could access about the financial position of the UPKD (see Table 5.4.1). Some 38.7 % of respondents said that there had never been any reporting and 27% did not know whether there had been or not. Almost all respondents in Muna (91.3%) said that there had never been any reports and that they did not know of the existence of UPKD financial reports. By contrast, only 18.6% of Donggala respondents gave this answer.

Table 5.4.1. Proportion of SAADP Households by Knowledge of the Existence of Information/UPKD Financial Reports for the Community (%)

Existence of Information/ Reports	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Yes, they exist	50.0 (50.2)	23.5 (42.6)	36.8 (48.3)	3.9 (19.4)	19.8 (40.0)	11.8 (32.3)	24.3 (42.9)
They once existed	1.0 (9.9)	7.8 (27.0)	4.4 (20.6)	4.9 (21.6)	26.7 (44.5)	15.7 (36.5)	10.1 (30.1)
There are none	18.6 (39.1)	36.3 (48.3)	27.5 (44.7)	69.9 (46.1)	29.7 (45.9)	50.0 (50.1)	38.7 (48.8)
Do not know	30.4 (46.2)	32.4 (47.0)	31.4 (46.5)	21.4 (41.2)	23.8 (42.8)	22.6 (41.9)	27.0 (44.4)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

According to respondents who said that UPKD reports, accessible to the community, existed or had once existed, the reports were presented in the form of a report book, a single-sheet pamphlet, oral announcements at meetings, or an announcement on the UPKD's notice-board. As shown in Table 5.4.2, around 40% of the respondents who knew of the existence of reports said that accessible reports took the form of a report book while 37.9% of respondents said that they took the form of oral announcements. Oral announcements were the form that most respondents in Konsel (72.3%) were familiar with, while most respondents in Donggala (48.1%) knew about UPKD financial reports from the UPKD's notice-board.

Table 5.4.2. Proportion of SAADP Households by Knowledge of Form of UPKD Financial Reports for the Community (%)

Form of UPKD Financial Reports	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Report book	25.0 (43.7)	75.0 (44.0)	44.1 (49.9)	88.9 (33.3)	23.4 (42.8)	33.9 (47.8)	40.0 (49.2)
Pamphlet	1.9 (13.9)	6.3 (24.6)	3.6 (18.7)	0.0 (0.0)	2.1 (14.6)	1.8 (13.4)	2.9 (16.7)
Oral announcement	25.0 (43.7)	15.6 (36.9)	21.4 (41.3)	11.1 (33.3)	72.3 (45.2)	62.5 (48.9)	37.9 (48.7)
UPKD notice-board	48.1 (50.5)	3.1 (17.7)	31.0 (46.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	18.6 (39.0)
Do not know	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.1 (14.6)	1.8 (13.4)	0.7 (8.5)
N=those who said that UPKD financial reports existed/had once existed	52	32	84	9	47	56	140

Note: Figures in brackets are the standard deviations.

Among respondents in the two sample districts in South-east Sulawesi, there were none who had been able to obtain information from the notice-board. During a field visit the SMERU team encountered an UPKD that had a notice-board in a house that also functioned as an office. The report placed on the notice-board, however, was limited to a statement of which groups had borrowed money and the size of the loans. In fact, the community did not know for certain who the members of the groups were as the latter had been arranged only as a formality.

Supervision and Evaluation of the UPKD

According to the *juklak*, supervision and evaluation are also carried out at different levels and involve project leaders, consultants, cluster managers, facilitators, the village discussion forum and also community groups. Project leaders undertake monitoring and supervision of progress in project implementation. Consultants make general recommendations about such things as bookkeeping, financial reports and supervision, and also monitor and evaluate all project activities. Facilitators and PPLs monitor and control the activities of community groups and report on them to the district-level TKPP. At the same time, the community groups, in conjunction with related government agencies, monitor and evaluate the use of funds and the implementation of IMS activities at the group level.

In accordance with these stipulations, monitoring and supervision are to be undertaken by the central level two or three times a year, by the provincial level three or four times a year, and by the district level whenever the need arises. The operational project leader and cluster manager undertake monitoring and supervision at least every time new funds are released. Monitoring and supervision are also carried out if a problem demanding an urgent solution arises in the field.

In reality, however, the UPKD management was not aware of any routine supervision apart from that provided by the facilitator, who usually came to the village once a month to give assistance. The supervisory function of individuals at higher levels was considered to be inadequate or unsatisfactory. The experience of UPKDs in Muna and

Konsel was that supervision by anyone apart from the facilitator happened no more than once a year and even that occurred only at the beginning of project implementation. It was conducted in such a way that it was more of an ordinary visit than a supervisory exercise.

Supervisory activities on the part of the community likewise did not take place according to plan. The reason was that the supervisory function was not emphasized during project socialization. At the same time, the community had very little feeling of ownership toward the project, an attitude that was exacerbated by the low educational levels within the community. Meanwhile, the village discussion forum, which was intended to form a means for supervision by the community, did not continue to function as intended in the stipulations.

After the project came to an end and was transferred to the community, there was no clear division of authority between those responsible for decision-making, implementation, and supervision. It was not clear who had to take the initiative in conducting a village discussion if the UPKD had problems, for the role of the village head had been kept to the very minimum from the beginning of the project. It was not at all clear who had to carry out the supervisory function and prepare reports. Nor was it clear to whom reports should be submitted. Meanwhile, the concept expressed in the juklak of having young village people replace the facilitators was never put into practice. As long as these functions were not institutionalized in an appropriate way, it was difficult for the UPKD to develop and become sustainable. It would seem that the UPKD has lost direction, yet at the same time the regional government has very little sense of ownership of this unit. The consequence is that many UPKDs have declined or else have simply collapsed.

On the whole, the UPKDs in sample villages in Central Sulawesi are in better condition than those in South-east Sulawesi. Between the end of the year 2002 and the conclusion of the project in 2003, a special body, known as the BP-UPKD or UPKD Supervisory Body, was formed at village level in Central Sulawesi. The BP consists of community figures and members of the BPD (Village Representative Board). Its tasks are to supervise and control UPKD administration and finances, to ensure that administration and bookkeeping are done in an orderly manner, to report on activities at regular intervals or at least once in three months to a village meeting, and to monitor the work of community groups in handling and returning credit. On the whole, the role of the BP-UPKD appears to be effective with the result that the sample UPKDs in Central Sulawesi are generally still functioning.

In one village in Tolitoli, the BP-UPKD is also giving assistance to the UPKD management in preparing financial reports and is expected to be able to supervise community groups through a persuasive approach. UPKD office-holders admit that their ability to prepare financial reports is limited and so the assistance provided by the BP-UPKD has been very useful. UPKD financial reports have been checked every month and results forwarded to the project leader and cluster manager. In one village in Donggala, members of the BP UPKD visited aquaculture ponds whose owners had experienced failures when the ponds were destroyed by high waves. The BP-UPKD then held a village meeting to discuss the disaster and to find a solution to the problem of loan repayments that were in arrears.

In Konsel, community supervision is carried out only by an existing institution, namely the BPD. Its role, however, is almost non-existent because structurally it is not mentioned in the program. In one case in a sample village, however, the BPD took the initiative in conducting a village discussion when the UPKD management misused funds. In Muna, all sample UPKDs said that since the end of employment of facilitators, no institution has had a supervisory function with regard to the UPKD.

Related parties in all sample villages also said that since the beginning of the project there has been no involvement of community groups in the monitoring of UPKD performance and use of money. In any case, there is no clear mention of the control mechanism that should be adopted by community groups in connection with UPKD finances. Villagers themselves, especially borrowers, said that an institution to supervise the UPKD's performance is greatly needed. They felt that this function could be undertaken by the village head, another village official or some other institution.

In the design of SAADP, no mention is made of the involvement of village and subdistrict officials in project implementation, apart from the role of the village head in village discussions and preparation of letters of appointment for UPKD office-holders. Even so, many UPKD office-holders would welcome the inclusion of village and subdistrict governments, especially in the supervision of credit repayments by the community. This is related to the question of the authority and power of the local government within the community, for these are qualities that the UPKD management does not have. In Muna a district-level meeting decided that village and subdistrict governments would be involved in assistance to and supervision of SAADP implementation from September 2003. Nevertheless, up to the time when the SMERU study was carried out, the UPKDs had not experienced this involvement, except in one sample village where the village head happens to be the son of the UPKD chairman.

There are both advantages and disadvantages from the involvement of village officials in supervision of the UPKD. The non-involvement of the village head and other village officials has enabled the UPKD in a number of sample villages to act arbitrarily in extending loans and has encouraged the community to be more willing to leave the repayment of loans in arrears. In one sample village, however, where the village head was involved, he became so dominant that he weakened the role of the UPKD office-holders. This person has borrowed up to Rp10 million and has asked a number of participants for money.

So far there has been no monitoring by independent institutions like NGOs, apart from the NGO that supplied facilitators. In Konsel an NGO submitted a proposal to the district government to carry out monitoring, but because the government had no funds available for this purpose, the monitoring did not take place.

Misuse of Funds by UPKD Management

The consequence of the relatively non-transparent system of UPKD management, the very limited amount of assistance given to the UPKD, and the weak supervision of UPKD performance has on some occasions led to misuse of money repaid by participants. Cases of misuse of SAADP funds by the UPKD chairman in the early days of project implementation were reported in several sample villages in Konsel, Tolitoli, and Donggala.

Apart from issues concerning the UPKD, funds were also misused by the heads of groups, as happened in a case in Muna, where a number of group heads did not pass on to the UPKD the whole of the money paid to them by members of their groups. Such cases were settled, however, with the help of the village security apparatus. Other forms of misuse of money included the granting of a loan to a person not entitled to participate in SAADP, such as a facilitator.

5.5. UPKD Financial Management Capacity

Training for UPKD Office-holders

At the beginning of the project certain UPKD office-holders, namely the chairman and the treasurer, received training at least twice. The training, which was held at district level, was conducted by consultants or public servants from Bappeda. The training material covered the way in which loan proposals should be prepared, the criteria used in selection of proposals and the way to handle finances, revolving funds and bookkeeping. The UPKD office-holders also received guidance from facilitators who visited the village regularly.

In reality, not all UPKD office-holders, especially those from UPKDs that were late in formation, received training. This happened in the case of the UPKD in one sample village in Konsel. A training program for UPKD office-holders in the subdistrict where the village is located was cancelled by Leppsek. The reason given was that the training was to be held without the knowledge of Leppsek, which was the NGO that provided SAADP facilitators for the province of South-east Sulawesi.

Several UPKD office-holders felt that the frequency of training was insufficient, which affected their ability to handle finances and bookkeeping. UPKD office-holders in one sample village in Tolitoli stated that the training they received did not touch on their real needs. There were often changes, for example, in the bookkeeping format, which made it difficult for them to apply the format in their daily work. In dealing with problems of this kind, the UPKD management normally utilized the services of the facilitator for consultations or else they asked members of the village community who were relatively well educated or who understood bookkeeping to help them.

Risk Management: Sanctions and Security on Loans

As discussed above,[23] the *juklak* says nothing about security on loans. The introduction of guarantees as a requirement for loans occurred when difficulties arose in the repayment of credit and when the number of participants with outstanding debts rose. The notion of collateral, however, could not be implemented effectively and was really intended to "frighten" borrowers from defaulting.

In an attempt to encourage participants to return their loans as quickly as possible, the UPKDs adopted a number of different approaches. In one sample village in Tolitoli, for example, UPKD office-holders collected repayment installments accompanied by the village security apparatus so that participants in arrears would feel "scared" and immediately repay the credit. As it turned out, however, many members of the

[23] See section 4.4 concerning The Implementation Mechanism: Additional Requirements.

community regarded this method of collecting debts as a form of intimidation and some even described the UPKD as a "money-lender" who used threats in recovering money. This same UPKD also tried announcing the names of participants who had outstanding debts and the amount of money that they owed on a notice-board and through a pamphlet. This strategy, which was intended as a form of report and as a means of making the persons concerned feel so embarrassed that they would repay their loans promptly, did not go over very well with community members and led to protests that it was an insult to them.

One UPKD in Donggala also tried announcing the names of those with large outstanding debts in written form in the village meeting hall. This action, however, did not make the persons concerned feel embarrassed and repay their debts. Rather, it had a bad effect on other members of the community. Participants who had previously repaid credit installments regularly soon fell into arrears because they saw that no sanctions had been imposed on the big debtors.

Another method used by the UPKD in dealing with those in arrears with repayments was to send them a warning letter and then restructure the times for payment of their installments. Nevertheless, this approach, like others, did not achieve its objective since the UPKD was unable to impose any formal sanctions that would be binding upon participants because it was not yet a legal body. Ultimately, many UPKDs handed problems of this kind over to the village head and his staff. Village officials generally chose to settle the matters of arrears in a family spirit, which meant giving the borrower a better understanding of the credit mechanism and at the same time asking him/her to repay the loan.

5.6. UPKD Relationships with the Formal Banking System

The UPKDs have no specific relationship with the formal banking sector. Any contact between the two was limited to the beginning of the project, when the UPKD opened an account with the nearest branch of the BRI for receiving and keeping funds, as stipulated in the *juklak*. The UPKD account did not receive special attention but was treated like that of any other bank customer. Information from the BRI branches that were visited indicated that they did not know of the existence of the SAADP project nor were they aware of the existence of the UPKD as an account-holder.

Although the BRI was designated as the bank through which SAADP project funds would be released and kept, in actual implementation the UPKD could deposit funds in some other bank that was closer or more convenient. A number of UPKDs were found of having used the bank only for the release of funds. After funds reached the UPKD account, all the money was withdrawn for distribution as loans to project participants. Money repaid by participants was never deposited in the bank but was immediately lent out to other borrowers.

In one case in Donggala an UPKD has begun considering cooperation with a government bank (Bank Mandiri) to obtain financial support. The proposal has already been discussed and has received a positive response from the bank as well as support from the district government.

5.7. The UPKD and Development of Local Financial Markets

At the present time the UPKD is still the only formal financial institution in sample villages. Research observations indicate that the UPKD system has had no apparent influence on the development of local financial markets. No other financial institutions have emerged at village level since the UPKD was established. The nearest existing financial institution is the cooperative, which is located in the main town of the subdistrict. Cooperative managers normally come to the villages to lend out money or to collect debts. The amount of money that can be borrowed ranges from Rp100,000 to Rp200,000. In this matter of loans, however, the cooperative resembles a money-lender since daily repayment is required and interest is 20% per month. Not many village people borrow from these cooperatives, only those who had daily income.

An alternative source of credit is the bank. People generally borrow from a bank if they want to improve their house or buy a motor vehicle. The size of such loans varies, as does the repayment period. The banks impose interest rates that are higher than those set by the UPKDs.

The UPKD itself exists only for the second-stage lending out of project money, the amount of which is tending to decrease because credit repayments are in arrears. Meanwhile, there is absolutely no sign of the UPKD accumulating or receiving deposits of community funds. Nevertheless, the presence of the UPKD, especially in villages where it has been functioning rather well, has led to a relative expansion in the economic activities of borrowers in other businesses. In one village in Muna, for example, the existence of the UPKD has led to the creation of a business that provides TV and VCD viewing services. This in turn has encouraged the growth of trade activities in the immediate vicinity. Qualitatively, it can be said that the presence of effective UPKDs has increased the circulation of money at the village level.

5.8 The Present Status and Condition of the SAADP Project

Five years have passed since the change in design of the SAADP project and since the UPKD was established as a village credit institution. If seen from the present state of the UPKDs, the condition of the SAADP project in the sample villages can be said to vary greatly from place to place. There are UPKDs that are functioning relatively smoothly, there are those that are still functioning but with such large outstanding debts that the amount of money for revolving funds is extremely limited, and there are those that are not functioning at all. The main problem in the majority of SAADP villages is the fact that loans have not been fully repaid or else have not been repaid at all.

In Muna District, only one of the three UPKDs that were visited was functioning relatively well. Although this UPKD also had the problem of outstanding debts, they were not too large. The second UPKD was close to stagnation because a number of participants had made no repayments at all. In this village, the only type of credit that was still being repaid was loans given for trading activities. Meanwhile, repayment in the third village had stopped completely. At the end of 2002, the UPKD was able to recirculate around 30% of the Rp52.9 million that had initially been distributed to the community as loans. Up to now only Rp2.2 million of this money has been repaid. Meanwhile, the UPKD chairman has retained this sum. Respondents said that in fact they are willing to repay their outstanding debts if those who borrowed very large sums

of money also repay their loans, and if there is transparency on the part of the UPKD management concerning the financial situation and the use of funds. According to the UPKD management, the fact that no sanctions were imposed in neighboring villages where the UPKDs had already ceased to function, encouraged SAADP participants in this village to default on their loans.

In Konsel District, the three UPKDs that were visited had not operated since the end of 2003 because participants had not repaid their loans. According to qualitative information, only three out of the 20 UPKDs in the sample subdistrict are still running. One of the reasons why participants have not repaid their loans is that no sanctions have been imposed on the UPKD office-holders themselves for the misuse of funds. Other information indicates that another cause of the stagnation in certain UPKDs is a wrong perception of the project on the part of the community as a consequence of a statement by a facilitator during socialization that SAADP assistance was a grant, not credit.

Meanwhile, in Donggala and Tolitoli the repayment of loans has gone relatively well, the reason being that UPKD managers in both districts have taken actual operational measures to raise the repayment rate. They have, for example, formed teams to collect debts and have rescheduled the times for debt repayment. UPKD office-holders have themselves set a good example by repaying their own loans at the correct time.

They have also introduced changes in some of the sample villages in certain aspects of the credit scheme such as the interest rate, the length of time for repayment and the size of the loan that a person can obtain. A further change has involved doing away with the requirement that participants form groups. This has made it easier for members of the community to gain access to loans.

UPKD office-holders expressed the hope that the UPKD could be made into a legal entity as this would give it legal power to take firmer action against those who default on loans. At the present time there are no regulations that refer to micro-financial institutions like the UPKD. Some district governments have attempted to strengthen the existence of the UPKD through a Letter of Decree signed by the district head. The provincial government of South-east Sulawesi is currently seeking some kind of legal arrangement that is suitable for the UPKD. It is hoped that the UPKD, as a legal body, will be able to manage all government projects and programs in the form of revolving funds at village level. One other development is the formation of an UPKD Communication Forum in Banawa Subdistrict in Donggala District, which, it is hoped, will function as a place for discussions.

In order to ensure the sustainability of the UPKD after the end of the project, several districts have planned to allocate funds from their own budgets to pay facilitators who will be placed in each subdistrict. The provincial government of South-east Sulawesi has already provided funds to be used in guidance and supervision of the UPKDs in each district. At the same time the district government in Donggala has allocated a sum of money that will be deposited in the bank accounts of the UPKDs as fresh funds.

VI. THE INVOLVEMENT OF WOMEN AND NGOs IN SAADP

6.1. The Involvement of Women

Basically there was no difference in the way in which women and men were treated in the SAADP project. Both have been directly involved as credit recipients, facilitators, and UPKD office-holders, although not in equal proportions.

Overall, the number of women borrowers is relatively small by comparison with the number of men who obtained SAADP loans. Women borrowers account for only 117 or 26.8% of the 436 persons who received SAADP credit. The greatest proportion of women borrowers occurred in Donggala District (42.6%) and the smallest in Konsel District (14.4%), as Table 6.1.1 indicates. A comparison of the two provinces shows that the proportion of women borrowers in Central Sulawesi (33.6%) was somewhat greater than the proportion in South-east Sulawesi (20.1%).

The proportion of SAADP loans obtained by women shows a figure that is relatively the same as the proportion of borrowers. Only 28.7% of a total of 557 loans were given to women, with the highest percentage in Donggala (57.6%) and the lowest in Konsel (13.6%).

The high proportion of women borrowers and of SAADP loans to women in Donggala is a reflection of the extent to which women in this area are involved in trade or in the weaving of traditional cloth. This is one indication that women who own and are responsible for the running of a business have had the same opportunities as men to obtain SAADP credit.

Table 6.1.1. Proportion of SAADP Borrowers and Loans by Gender (%)

Gender	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP borrowers:							
Men	57.4 (49.7)	75.2 (43.4)	66.4 (47.4)	74.8 (43.6)	85.6 (35.3)	79.9 (40.2)	73.2 (44.4)
Women	42.6 (49.7)	24.8 (43.4)	33.6 (47.4)	25.2 (43.6)	14.4 (35.3)	20.1 (40.2)	26.8 (44.4)
N	108	109	217	115	104	219	436
SAADP loans:							
Men	57.6 (49.6)	73.1 (44.5)	65.0 (47.8)	71.5 (45.3)	86.4 (34.4)	77.7 (41.7)	71.5 (45.2)
Women	42.4 (49.6)	26.9 (44.5)	35.0 (47.8)	28.5 (45.3)	13.6 (34.4)	22.3 (41.7)	28.5 (45.2)
N	144	130	274	165	118	283	557

Note: Figures in brackets are the standard deviations.

The reason for the limited participation of women in SAADP is not that there was any discrimination or difference in treatment at the time when credit proposals were submitted, but rather that a relatively small number of women put forward proposals for loans. This can be traced very largely to the fact that one of the regulations in the

SAADP credit system was that each household could receive only one loan within one financial year. When the revolving stage had been reached, other household members were allowed to submit requests for loans, provided that they met the requirements.

In this matter the household itself did not make a sharp distinction between whether the loan was in the husband's name or in that of the wife because both husband and wife regarded it as a loan to the household, which was generally represented by the husband as the head of the family. Furthermore, the majority of requests for SAADP credit and the main purposes for which the credit was used involved farming and fisheries. This type of work is usually handled by men with women normally assisting their husbands, although in practice both have almost equal responsibility

The absence of any kind of discrimination against women in the acceptance of credit proposals is further proven by the negative answers of a majority (84.6%) of respondents from SAADP households to this question. Only around 1.5% of respondents stated that there was a difference in the treatment of women, as Table 6.1.2 reveals.

Table 6.1.2. Proportion of SAADP Households by Opinion about Difference in Treatment of Women in Credit Proposals (%)

Difference in Treatment	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
A difference	2.0 (13.9)	2.9 (17.0)	2.5 (15.5)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	1.5 (15.5)
No difference	79.4 (40.6)	77.5 (42.0)	78.4 (41.23)	94.2 (23.5)	87.1 (33.7)	90.7 (29.1)	84.6 (41.2)
Do not know	18.6 (39.1)	19.6 (39.9)	19.1 (39.4)	4.9 (21.6)	12.9 (33.7)	8.8 (28.4)	14.0 (28.4)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

According to the 1.5% of household respondents who said that there was a difference in the treatment of women, those differences lay in the amount of credit, conditions for collateral, and the rejection of proposals submitted by women in fishing activities. One further form of discrimination that was mentioned by these respondents, namely that women's proposals were given priority in acceptance since women were considered to be more disciplined in repaying loans, was actually to the advantage of women.

Table 6.1.3. shows that 62.5% of SAADP loans given to women involved capital for trading activities, while 15.1% involved capital for agriculture and 11.9% capital for home industry. If an examination is made by districts, trade and farming are the activities most frequently proposed by women in all areas in requests for SAADP loans. In Donggala and Konsel, however, the proportion of credit proposals from women for industrial undertakings was rather large. In the case of Konsel, the types of industrial activity undertaken by the majority of women were cake-making and stone-crushing, while in Donggala cottage weaving was the main industrial activity.

According to qualitative information from UPKDs, there was relatively no difference between women and men participants in the repayment of loans. Repayment by women

who owned kiosks tended to be somewhat better than average because their economic undertakings were more stable and, unlike activities in farming, smallholder agriculture and fisheries, were not subject to changes in natural conditions.

Table 6.1.3. Proportion of Women's SAADP Loans by Proposed Use (%)

Purpose of Proposed Credit	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Capital for farming	6.6 (25.0)	17.1 (38.2)	10.4 (30.7)	12.8 (33.8)	50.0 (51.6)	22.2 (41.9)	15.1 (35.9)
Capital for fishing	1.6 (12.8)	0.0 (0.0)	1.0 (10.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.9)
Capital for animal husbandry/aquaculture	1.6 (12.8)	2.9 (16.9)	2.1 (14.4)	4.3 (20.4)	0.0 (0.0)	3.2 (17.7)	2.5 (15.7)
Capital for home industry	27.9 (45.2)	0.0 (0.0)	17.7 (38.4)	0.0 (0.0)	12.5 (34.2)	3.2 (17.7)	11.9 (32.5)
Capital for trade	60.7 (49.3)	77.1 (42.6)	66.7 (47.4)	63.8 (48.6)	31.3 (47.9)	55.6 (50.1)	62.5 (48.6)
Capital for other undertakings	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	4.3 (20.4)	6.3 (25.0)	4.8 (21.5)	1.9 (13.6)
School expenses	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	14.9 (36.0)	0.0 (0.0)	11.1 (31.7)	4.4 (20.6)
House improvements	1.6 (12.8)	0.0 (0.0)	1.0 (10.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.9)
Consumption	0.0 (0.0)	2.9 (16.9)	1.0 (10.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.9)
N	61	35	96	47	16	63	159

Note: Figures in brackets are the standard deviations.

On the whole, SAADP loans to women were used for the purposes stated in the proposals, where most were used as capital for trade by kiosk owners and itinerant vendors. With the availability of SAADP credit, the trading activities of many women progressed rapidly. At the same time, there was an increase in the number of women who entered the field of trade. For example, the provision of SAADP credit in one village in Donggala led to a rise in the number of women trading in fish. Apart from that, the position of women traders was strengthened because they now had ready cash and could therefore be more selective in the fish that they bought and the fishermen from whom they bought it. Previously they could purchase fish only from fishermen who were willing to wait for payment until after the fish had been completely sold (usually one to two days).

Three indicators have been used to measure positive change in the role of women after introduction of the SAADP project, namely productive economic activities, decision-making within the household, and the involvement of women in community-level activities (Table 6.1.4). The overall proportion of households that believed that the role of women, as revealed by these three indicators, had increased was greater in SAADP than in control households. Thus the difference between the proportions of SAADP and control households was positive in value, which shows that SAADP had some positive effect in improving the role of women, at least as far as these three indicators were concerned.

The impact of SAADP on the role of women in productive economic activities was 11.9%, which is statistically significant at the 5% level. The effect on the role of women in household decision-making was 4.8% and in activities at village, hamlet (RW) and neighborhood (RT) levels was 5.7%, but these last two figures are not statistically significant. If the impact is considered by district, a significant effect was found only in the third indicator (involvement in village-level activities) in Tolitoli District. The relatively insignificant change for women is perhaps explained by the fact that the majority of SAADP participants were men.

Table 6.1.4. Proportion of SAADP and Control Households by Perception of Improvements in the Role of Women (%)

Type of Improvement in the Role of Women	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Productive economic activities	58.8 (49.5)	53.9 (50.1)	56.4 (49.7)	57.3 (49.7)	50.5 (50.2)	53.9 (50.0)	55.2 (49.8)
Household decision-making	8.8 (28.5)	37.3 (48.6)	23.0 (42.2)	42.7 (49.7)	33.7 (47.5)	38.2 (48.7)	30.6 (46.2)
Involvement in RT/RW and village activities	16.7 (37.5)	36.3 (48.3)	26.5 (44.2)	18.5 (39.0)	34.7 (47.8)	26.5 (44.2)	26.5 (44.2)
N	102	102	204	103	101	204	408
Control households in control villages:							
Productive economic activities	53.3 (50.7)	36.7 (49.0)	45.0 (50.2)	50.0 (50.9)	33.3 (47.9)	41.7 (49.7)	43.3 (49.8)
Household decision-making	6.7 (25.4)	26.7 (45.0)	16.7 (37.6)	50.0 (50.9)	20.0 (40.7)	35.0 (48.1)	25.8 (44.0)
Involvement in RT/RW and village activities	16.7 (37.9)	16.7 (37.9)	16.7 (37.6)	13.3 (34.6)	36.7 (49.0)	25.0 (43.7)	20.8 (40.8)
N	30	30	60	30	30	60	120
Difference between SAADP and control households:							
Productive economic activities	5.5 (10.5)	17.2 (10.2)	11.4 (7.4)	7.3 (10.5)	17.2 (10.1)	12.2 (7.3)	11.9* (5.2)
Household decision-making	2.1 (5.4)	10.6 (9.5)	6.3 (5.7)	-7.3 (10.5)	13.7 (8.8)	3.2 (7.1)	4.8 (4.6)
Involvement in RT/RW and village activities	0.0 (7.8)	19.6* (8.4)	9.8 (5.8)	5.2 (7.4)	-2.0 (10.1)	1.5 (6.4)	5.7 (4.3)

Note: - Figures in brackets are the standard deviations; in the specific case of differences, they indicate the standard errors.
- * Significant at the 5% level.

In all sample districts except Konsel, women were involved in UPKD management. Usually women held the position of treasurer. In Muna, there were women UPKD treasurers in two of the sample villages. In the first of the two villages, however, the woman concerned was active only at the beginning of project implementation, after which her task was taken over by the head of the UPKD. In the second village, the woman concerned was not appointed officially through a village meeting or with the agreement of the community. She was asked by her father, who happened to be the head of the UPKD, to take on the job of treasurer as a replacement for the elected treasurer who had moved to another district. Her role was to handle the UPKD's bookkeeping.

In one village in Donggala, a woman held the two positions of head of the UPKD and treasurer, while in yet another village there was a woman treasurer who proved to be extremely active in collecting outstanding SAADP credit. In Tolitoli, there were two villages in which the UPKD treasurers were women. One was so committed to her work that she was more active than the head of the UPKD.

On the question of women's involvement in UPKD management, there was in fact a recommendation from the provincial and district governments in South-east Sulawesi that the position of UPKD treasurer should be held by a woman because women are considered to be more industrious and more painstaking in recording financial matters. This suggestion, however, was ignored in most villages.

Women facilitators were found in almost all areas, with the exception of the sample villages in Muna District. Even so, there were seven women out of a total of 35 facilitators in Muna. By chance, none was involved in activities in the sample villages.

Even though the number of women facilitators was limited, their performance was considered to be good. In some cases, as in a certain village in Donggala, the woman facilitator was extremely active. According to the local UPKD management, this woman did not hesitate to spend time explaining the program to the community, even though she had to do this in the evening. Towards the end of her period of duty she was still trying to establish a cooperation between the UPKD and a government bank. She was involved directly in the preparation of a proposal and helped arrange meetings between relevant persons at district level and the branch manager of the bank in question.

6.2. The Involvement of Non-Government Organizations

In order to maximize implementation in the field, the SAADP project included facilitators to assist the community. They were recruited from local non-government organizations (NGOs). The facilitators for Central Sulawesi came from the Rosontapura NGO and those for South-east Sulawesi from the NGO known as Leppsek. The NGO placed a coordinator of facilitators at the district level and facilitators at village level. In general, one facilitator had duties in three to four villages.

In South-east Sulawesi, changes or rotations in the locations where facilitators were placed were introduced so that they would not become bored and would gain additional knowledge. Because of this policy, the sample villages that received SAADP credit between the 1999/2000 financial year and 2003 had usually had two or three different facilitators. The replacement of facilitators also occurred in Central Sulawesi but for a different reason. In this province the tender for selection of an NGO to provide facilitators was repeated every year. The chosen NGO changed every year except during the last two years, when the tender was won by Rosontapura consecutively.

According to the *juklak* issued by Bangda, the tasks and functions of the facilitators were in essence to help in implementation of project activities, in the provision of field-level guidance from the preparatory and planning stages to the stages of supervision of implementation and monitoring, and in administrative work. In undertaking these tasks, the facilitator was to have frequent contact with the community and in particular with community groups that had become SAADP

participants. Information from respondents, however, revealed that many people were unaware of the existence of facilitators. Out of a total of 408 households that participated in SAADP in the four sample districts, only 66.9% knew of the existence of a facilitator (Table 6.2.1). The fact that quite a large number of households (33.1%) did not know points to the absence of a close relationship between the facilitator and the community.

Table 6.2.1. Proportion of SAADP Households Aware of the Existence of a SAADP Facilitator (%)

Awareness of the Existence of a Facilitator	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Aware	66.7 (47.4)	57.8 (49.6)	62.3 (48.6)	62.1 (48.7)	81.2 (39.3)	71.6 (45.2)	66.9 (47.1)
Not aware	33.3 (47.4)	42.2 (49.6)	37.8 (48.6)	37.9 (48.7)	18.8 (39.3)	28.4 (45.2)	33.1 (47.1)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

On the whole, the community knew the facilitator as the person who gave an explanation of the program during project socialization and who visited the UPKD several times. Very few SAADP participants knew that the employment of facilitators ended in June 2003. This can be seen from the answers of the 66.9% of respondent households who were aware of the existence of facilitators. Some 37.7% of this number stated that there are still facilitators while 4.8% said that they did not know (Table 6.2.2).

Table 6.2.2. Proportion of SAADP Households by Opinion about the Current Existence of SAADP Facilitators (%)

Opinion about the Current Existence of Facilitators	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Yes, they still exist	83.8 (37.1)	49.2 (50.4)	67.7 (46.9)	3.1 (17.5)	18.3 (38.9)	11.6 (32.2)	37.7 (48.6)
No, they do not exist now	13.2 (34.1)	40.7 (49.5)	26.0 (44.0)	90.6 (29.4)	80.5 (39.9)	84.9 (35.9)	57.5 (49.5)
Do not know	2.9 (17.0)	10.2 (30.5)	6.3 (24.4)	6.3 (24.4)	1.2 (11.0)	3.4 (18.2)	4.8 (21.3)
N = number who knew of the existence of facilitators	68	59	127	64	82	146	273

Note: Figures in brackets are the standard deviations.

In general facilitators played a role only at the beginning of project implementation or during the preparatory and planning stages. They were involved during the program socialization process and facilitated formation of the UPKD and they also assisted the UPKD in selecting community proposals for initial loans. This fits in with the knowledge respondents had of the activities carried out by facilitators in the context of the SAADP project (Table 6.2.3). Some 82.4% of the 273 households that knew of the existence of facilitators believed that their main activity was SAADP socialization, while 56.5% also said that facilitators provided assistance to the UPKD management.

After the SAADP project was functioning, that is after funds had been released and distributed by the UPKD to the community, the role of the facilitator in assisting the community grew steadily smaller. His/her role became more focused on the UPKD and on preparation of the regular reports on UPKD activities that had to be submitted to the cluster manager and project leaders at district level. Even so, facilitators usually visited the UPKD only once or twice a month.[24]

Table 6.2.3. Proportion of SAADP Households by Opinions about the Activities of Facilitators (%)

Activities of Facilitators	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Carried out socialization	80.9 (39.6)	72.9 (44.8)	77.2 (42.1)	85.9 (35.0)	87.8 (32.9)	87.0 (33.8)	82.4 (38.1)
Helped with the making of proposals	67.7 (47.1)	50.9 (50.4)	59.8 (49.2)	20.3 (40.6)	30.5 (46.3)	26.0 (44.0)	41.8 (49.4)
Provided assistance/training for participants	67.7 (47.1)	55.9 (50.0)	62.2 (48.7)	6.3 (24.4)	19.5 (39.9)	13.7 (34.5)	36.3 (48.2)
Provided assistance for UPKD management	69.1 (46.5)	67.8 (47.1)	68.5 (46.6)	26.6 (44.5)	61.3 (49.0)	45.8 (50.0)	56.5 (49.7)
Listened to problems and handled matters concerning participants	54.4 (50.2)	44.1 (50.1)	49.6 (50.2)	4.7 (21.3)	50.0 (50.3)	30.1 (46.0)	39.2 (48.9)
N = number who knew of the existence of facilitators	68	59	127	64	82	146	273

Note: - Respondents could give more than one answer.
- Figures in brackets are the standard deviations.

Relatively good facilitators were found in several instances in the sample villages. In one sample village in Donggala, for example, a facilitator was still actively assisting the UPKD even though the project had concluded. This facilitator carried out all tasks with enthusiasm, giving guidance in financial management to UPKD office-holders and visiting local households together with UPKD staff to explain the program. Another facilitator has been actively involved in the house-to-house collection of loan instalments. The relatively better role played by facilitators in Donggala is reflected in the high proportion (67.7%) of respondents from SAADP households who said that the facilitator had also helped with assistance to and the training of participants. It can be noted that the frequency of each activity undertaken by facilitators is not known since these activities generally occurred only at the beginning of the project and did not extend to all participants.

The activities and involvement of facilitators in Donggala District would appear to be relatively better than in the other three sample districts. Of 68 SAADP respondents in Donggala who knew of the existence of facilitators, around 85.3% stated that the facilitator had played a role or had played an adequate role. This proportion is far

[24] At the workshop for presentation of SMERU research findings in Palu, confirmation was obtained from former facilitators and related agencies that NGOs and facilitators did not play a big part in providing assistance to the community. One of the reasons was that each facilitator had to handle more than one village (usually four villages) and sometimes had to attend coordination meetings at provincial level. Another reason was that incentives for facilitators were considered to be too low. Besides this, a discussion at provincial level had once indicated that the UPKD represented the spearhead of the project and should therefore receive emphasis in assistance activities, which took around 70% of the facilitator's time.

higher than proportions in the other districts. Overall, some 38.5% of respondents who knew of the existence of a facilitator said either that the facilitator had played an inadequate role or had had no role or else that they did not know about his/her role (Table 6.2.4).

Table 6.2.4. Proportion of SAADP Households by Opinion about the Extent of Facilitator Involvement in Project Implementation (%)

Role of the Facilitator	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Played a role	69.1 (46.5)	28.8 (45.7)	50.4 (50.2)	7.8 (27.0)	32.9 (47.3)	21.9 (41.5)	35.2 (47.8)
Played an adequate role	16.2 (37.1)	27.1 (44.8)	21.3 (41.1)	32.8 (47.3)	29.3 (45.8)	30.8 (46.3)	26.4 (44.1)
Played an inadequate role	5.9 (23.7)	22.0 (41.8)	13.4 (34.2)	35.9 (48.4)	24.4 (43.2)	29.5 (45.7)	22.0 (41.5)
Played no role	4.4 (20.7)	11.9 (32.6)	7.9 (27.0)	12.5 (33.3)	9.8 (29.9)	11.0 (31.3)	9.5 (29.4)
Do not know	4.4 (20.7)	10.2 (30.5)	7.1 (25.8)	10.9 (31.5)	3.7 (18.9)	6.9 (25.3)	7.0 (25.4)
N = number who knew of the existence of facilitators	68	59	127	64	82	146	273

Note: Figures in brackets are the standard deviations.

In this context some 45.5% of respondents stated that the main benefit they felt from the involvement of facilitators was a better understanding of the project (Table 6.2.5). This is in accordance with the statement of a large majority of respondents that socialization was the main activity carried out by facilitators during the project. At the same time, some 29% of respondents said that the main benefit from the involvement of facilitators was that they obtained assistance while a similar proportion said that it meant that they had persons whom they could consult. This proportion is about the same as the proportion of respondents who felt no benefit at all from the involvement of facilitators (27.5%).

During the study, information was obtained about a case where a facilitator made a serious error at the beginning of the SAADP project. In one subdistrict in Konsel, the facilitator informed the community that SAADP funds were a grant and therefore did not have to be returned. Although the facilitator concerned was replaced and socialization was repeated, there are still community members who believe that SAADP loans do not have to be repaid. This error in perception is thought to be the main reason why credit has not been repaid in all sample villages, but a further factor is the misuse of funds by a manager.

Table 6.2.5. Proportion of SAADP Household that Knew of Facilitators by Opinions about Their Usefulness (%)

Benefits Gained from Facilitators	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
A better understanding of the project	47.1 (50.3)	40.7 (49.5)	44.1 (49.8)	40.6 (49.5)	51.2 (50.3)	46.6 (50.1)	45.4 (49.9)
Assistance	41.2 (49.6)	54.2 (50.2)	4.7 (50.1)	20.7 (21.3)	47.2 (40.8)	13.7 (34.5)	29.3 (45.6)
Person for consultations	38.2 (49.0)	37.3 (48.8)	37.8 (48.7)	15.6 (36.6)	25.6 (43.9)	21.2 (41.0)	28.9 (45.4)
No benefit at all	16.2 (37.1)	17.0 (37.8)	16.5 (37.3)	45.3 (50.2)	30.5 (46.3)	37.0 (48.4)	27.5 (44.7)
Other benefits	0.0 (0.0)	1.7 (13.0)	0.8 (8.9)	1.6 (12.5)	0.0 (0.0)	0.7 (8.3)	0.7 (8.5)
N = **number who knew of the existence of facilitators**	68	59	127	64	82	146	273

Note: - Respondents could give more than one answer.
- Figures in brackets are the standard deviations.

Apart from these cases, the facilitators in two sample villages in Muna passed on the information that part of the interest on loans woud be deducted in advance at the time when the money was distributed to the community. The mistake was only realized when funds reached the revolving stage or when the facilitator was replaced.

Another case involved a facilitator who borrowed Rp7 million from SAADP funds in one of the sample villages. The UPKD found it impossible to refuse his request because it was believed that this facilitator had done the village a service by enabling it to obtain SAADP assistance. Although part of the money has been returned, the consequence is that the case has been used by other borrowers as a reason for not repaying their own loans when they fall due. These various cases point to a weakness in the facilitation system that was adopted.

Nevertheless, UPKDs felt on the whole that the involvement of facilitators was of real benefit to project implementation and that they are still needed. The facilitator could constitute a place for consultations about the management of SAADP funds, a source of moral support for the UPKD in facing community demands and proof to the community that there was constant supervision of SAADP implementation to ensure that loans were repaid. UPKD office-holders in a number of villages in all sample districts admitted that, in the time since the employment of facilitators ceased, the UPKD has been unable to refuse credit requests from cluster managers and officials such as those in subdistrict and village administrative offices.

Apart from UPKD office-holders, a majority of SAADP households (52.0%) also indicated that they still need facilitators, while 18.3% agreed but added that improvements are necessary (Table 6.2.6). This appears to be contradictory to the statements of the same participants about the limited role played by facilitators and their poor performance in the past. The opinion can, however, be understood because

in actual fact these participants did not know exactly what the real task of facilitators was, yet at the same time they felt that they still needed guidance.[25]

Table 6.2.6. Proportion of SAADP Households by Opinion about the Need for Facilitators (%)

Need for Facilitators	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Still needed	77.9 (41.8)	64.4 (48.3)	71.7 (45.2)	29.7 (46.0)	39.0 (49.1)	34.9 (47.8)	52.0 (50.1)
Needed but with certain improvements	2.9 (17.0)	8.5 (28.1)	5.5 (22.9)	31.3 (46.7)	28.1 (45.2)	29.5 (45.7)	18.3 (38.8)
Not needed	8.8 (28.6)	15.3 (36.3)	11.8 (32.4)	31.3 (46.7)	23.2 (42.5)	26.7 (44.4)	19.8 (39.9)
Do not know	10.3 (30.6)	11.9 (32.6)	11.0 (31.4)	7.8 (27.0)	9.8 (29.9)	8.9 (28.6)	9.9 (29.9)
N = number who knew of the existence of facilitators	68	59	127	64	82	146	273

Note: Figures in brackets are the standard deviations.

[25] In the Districts of Donggala and Muna in particular, there are plans to re-employ facilitators using funds from the local district budget, but the number employed will be somewhat smaller.

VII. LOCAL PLANNING, INSTITUTIONS AND TRANSPARENCY

7.1. Community Participation in Village Planning and Activities

The influence of SAADP on the involvement of participants in village planning and in the implementation of community activities has been examined through three indicators: involvement in planning and community activities at the local level (village, hamlet, or neighborhood), involvement in traditional ceremonies, and involvement in organizational activities. From changes in the extent of respondents' involvement after the introduction of the SAADP project, it is possible to judge whether there has been increased participation, the same level of participation, or less participation. After a comparison is made of changes in these indicators between SAADP and control households, the difference between the two is regarded as the influence of SAADP.

Table 7.1.1. Proportion of SAADP and Control Households which Increased Their Involvement in Planning and Activities at Village, Hamlet, and Neighborhood Levels (%)

Changes in Extent of Involvement	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Households	17.7 (38.3)	49.0 (50.2)	33.3 (47.3)	5.8 (23.5)	28.7 (45.5)	17.2 (37.8)	25.3 (43.5)
N	102	102	204	103	101	204	408
Control Households	14.5 (35.6)	31.4 (46.9)	22.6 (42.0)	7.7 (26.9)	23.1 (42.5)	15.4 (36.3)	19.1 (39.3)
N	55	51	106	52	52	104	210
Difference	3.2 (6.1)	17.6* (8.2)	10.7* (5.3)	-1.9 (4.4)	5.6 (7.4)	1.8 (4.4)	6.2 (3.5)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * significant at 5 percent level.

Most respondents among SAADP households (72.6%) and control households (71.9%) stated that their involvement in planning or the implementation of community activities at the local level had not changed. Data in Table 7.1.1 show that only 25.3% of SAADP household respondents said that their involvement had increased.. These answers do not differ very much from those of control respondents, where 19.1% of them stated that there had been an increase in their involvement. This means that the net impact of SAADP on the increased involvement in local planning and activities was 6.2%, and it is statistically not significant. An effect that is statistically significant at 5 percent level occurred in Tolitoli and the Province of Central Sulawesi (respectively 17.6% and 10.7%).

Meanwhile, some 47.8% of SAADP household respondents and 36.2% of control household respondents reported increased involvement in traditional ceremonies. This means that the effect of SAADP in encouraging participation in traditional ceremonies was 11.6%, which is statistically significant at 1 percent level. The same happened in Tolitoli and Konsel Districts and in the Province of South-east Sulawesi as a whole, where the effect was significant at 5 percent level (see Table 7.1.2).

Table 7.1.2. Proportion of SAADP and Control Households which Increased Their Involvement in Traditional Ceremonies (%)

Changes in Extent of Involvement	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Households	44.1 (49.8)	56.9 (49.8)	50.5 (50.1)	50.5 (50.2)	39.6 (49.2)	45.1 (49.9)	47.8 (50.0)
N	102	102	204	103	101	204	408
Control Households	43.6 (50.1)	39.2 (49.3)	41.5 (49.5)	38.5 (49.1)	23.1 (42.5)	30.8 (46.4)	36.2 (48.2)
N	55	51	106	52	52	104	210
Difference	0.5 (8.4)	17.7* (8.5)	9.0 (6.0)	12.0 (8.4)	16.5* (7.7)	14.3* (5.7)	11.6** (4.2)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

The pattern of SAADP and control households on the change of respondents participation in local organizational activities is similar, most of them (75,7% and 72,9% respectively) stated that their involvement had not changed. The proportion of responden who said that their involvement was increased only 19,9% among SAADP households and 16,7% among control households. The overall impact of SAADP on the increased involvement of respondents in local organizational activities is positif (3,2%) but statistically not significant (See Table 7.1.3). This finding indicate that the presence of SAADP project did not tend to increase the level of respondent's involvement in local organizational activities.

Table 7.1.3. Proportion of SAADP and Control Households which Increased Their Involvement in Organizational Activities at Village, Hamlet and Neighborhood Levels (%)

Changes in Extent of Involvement	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Households	10.8 (31.2)	40.2 (49.3)	25.5 (43.7)	7.8 (26.9)	20.8 (40.8)	14.2 (35.0)	19.9 (39.9)
N	102	102	204	103	101	204	408
Control Households	14.6 (35.6)	25.5 (44.0)	19.8 (40.0)	11.5 (32.3)	15.4 (36.4)	13.5 (34.3)	16.7 (37.4)
N	55	51	106	52	52	104	210
Difference	-3.8 (5.7)	14.7 (7.9)	5.7 (4.9)	-3.7 (5.2)	5.4 (6.5)	0.7 (4.2)	3.2 (3.3)

Note: Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.

Although the performance of groups, facilitators and PPLs was considered to be unsatisfactory, there were certain participants who could more actively and more effectively absorb information from the training that was provided than could other participants. The level of their activity had an influence on their involvement in local community affairs. Qualitative information reveals that increased participation in village planning and the implementation of village activities was indeed apparent among those persons who experienced growth in their economic capacity after they had participated in the SAADP project. This economic growth enabled their social status to improve, encouraged them to take part in village planning and other community activities, and to interact more frequently with facilitators. As a result, their outlook broadened and they

were more able to contribute both money and ideas to the community, while their increased social status also led to them being more respected by other members of the community. In this way success in efforts to raise the individual's status within his social environment was able to help increase his role in the wider life of the community.

7.2. Institutional Strengthening at the Local Level

It had been hoped that the presence of the UPKD system, which was introduced and established through the IMS-SAADP project, would exert a positive influence through the strengthening of wider local institutions outside the UPKD itself. The UPKD system provided a forum for community discussion about such matters as SAADP implementation, the formation of community groups, activities by facilitators, and transparency in UPKD management. The opportunity to discuss these matters should have led not only to improvements in patterns of thought and behavior and increased community knowledge about micro-finance but also to a spin-off in the form of a strengthening of other institutions at the village level. Experience has shown, however, that the hope was far from actual achievement. The fact that the project design was not always implemented in an optimum manner, as has been explained in earlier chapters of this report, reduced the possibilities for a positive impact in the shape of a strengthening of existing local institutions. Qualitative information in the field highlighted the following points:

1. The village discussion forum, which was the community gathering at which decisions could be made about various village problems, generally did not develop by comparison with pre-project days, except at the very beginning of project implementation.

2. The group system, which was intended to strengthen group cooperation in economic undertakings, also did not function well, the reason being that groups were established only as a formality to meet project requirements, particularly at the time when credit proposals were submitted.[26] Ultimately, the community groups that had been expected to stimulate institutional activities within the community did not eventuate.

3. Activities at the hamlet and neighborhood levels on the whole experienced very little change, in the sense that those persons who had always been active remained active while those who had never been active stayed that way.

4. The SAADP system did virtually nothing to strengthen other institutions that existed in the village such as rotating credit groups (*arisan*) and savings-and-loan activities.

The description presented in Chapter V about the UPKD system also shows that throughout the project there was no special relationship between the UPKD and formal and informal financial institutions either within or outside the village. Furthermore, there has been no sign of any strengthening or increase in local financial institutions. Even so, there are certain features of the UPKD system that have the potential to strengthen local institutions.

[26] See section 4.5: The Group System.

On the whole, the regional governments themselves feel that the UPKD approach is better than the sectoral approach. This belief has encouraged the provincial government of South-east Sulawesi to commence discussions concerning the formation of a South-east Sulawesi Bank that uses the UPKD as one of its models. In expanding other developmental programs, the same provincial government has begun to introduce the "integrated-harmonious" (*padu serasi*) system, to ensure that programs coming into the province do not overlap with each other. In other words, new programs should not detract in any way from existing programs but rather must prove complementary. For example, in Kolaka District (which was not one of the SMERU sample areas), management of the revolving funds associated with the Subdistrict Development Program has been entrusted to the UPKD in a number of villages rather than to a new institution.

7.3. Transparency in Local Governance

Field-level research found no indications that implementation of the SAADP project had encouraged greater transparency at the local government level. The reason lies in the fact that within the UPKD management itself the principle of transparency was not fully observed. The majority of UPKD office-holders were judged by respondents to be insufficiently open, and only 34.4% of households stated that accessible UPKD reports and information were available or had once existed (see section 5.4: The Reporting and Supervisory System).

Transparency in UPKD management generally existed only at the initial stage of distribution of funds for loans. At that stage a number of parties still played a part in project implementation, a fact that encouraged transparency. The facilitator and the PPL, for example, were members of the verification team, while the village head, who according to regulations was not supposed to be involved, was in actual practice also a member of the verification team in a number of villages. Furthermore, community discussions were still held at that stage and provided an opportunity for the presentation of information to the community about project development.

With progress in the project, implementation became more concentrated among UPKD office-holders to the point where in some villages the UPKD was run by the chairman alone. Decisions about the granting of loans were made exclusively by the UPKD, while the community gatherings that should have been held every three months no longer took place or else were held very infrequently.

VIII. THE SOCIOECONOMIC IMPACT

The socioeconomic impact of the SAADP project can be seen through changes in a number of output and outcome indicators that are related to the socioeconomic situation of the community. These indicators include changes in business management (which covers perspectives and practices), changes in family income, changes in savings behavior, changes in housing conditions, and changes in ownership of assets. As described in research methodology in Chapter 1, impact is measured by comparing the situation before and after project implementation between households that received SAADP loans and control households.

8.1. The Benefits of SAADP Credit

The majority (90.4%) of respondents believe that the SAADP project has been of benefit to them as a source of micro credit. The benefit felt by respondents has been the availability of capital, which has been used to add to existing business capital, to establish new economic activities, or to pay for other needs. The proportion of respondents who said that SAADP has been of benefit is greater in South-east Sulawesi (96.6%) than in Central Sulawesi (only 84.3% of respondents) (see Table 8.1.1).

Table 8.1.1. Proportion of Households that Found SAADP Beneficial and Said Loans Were Used in Keeping with Credit Proposals (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP was beneficial	81.4 (39.1)	87.3 (33.5)	84.3 (36.5)	99.0 (9.8)	94.1 (23.8)	96.6 (18.3)	90.4 (29.4)
N : SAADP Households	102	102	204	103	101	204	408
Loan used in keeping with proposal	97.9 (14.3)	96.9 (17.3)	97.4 (15.8)	89.1 (31.3)	89.8 (30.4)	89.4 (30.8)	93.4 (24.9)
N : SAADP Loans	144	130	274	165	118	283	557

Note: Figures in brackets are the standard deviations.

Most respondents (93.4%) also said that the credit they received was used in accordance with the purpose stated in their credit proposal. If, however, the proportion who said that SAADP was beneficial is compared with the proportion who used the loan in accordance with their proposal, it will be seen that the two do not always run parallel. The reason is that credit is felt to be more beneficial if it is used in keeping with the respondent's needs at a certain point in time or if the economic activity thus financed is able to expand.

According to the regulations, SAADP credit was intended for productive economic activities. Data reveal that the majority of SAADP participants in all sample districts proposed (98.3%) and used (99.7%) loans as business capital, whether for agriculture (cultivation of food crops and tree crops), trading activities, fishing, and household industry, or for other economic undertakings. Even so, a small number of participants made a proposal (6.6%) and used (16.7%) the SAADP credit for educational and health expenses, house improvements, daily consumption purposes, and the outlay of

money required for a household member to become an Indonesian Overseas Worker (TKI). These figures indicate that a slight shift occurred in the use of credit, that is loans requested for productive economic activities were in actual practice used for other purposes that tended to be consumptive. This happened particularly in the two districts in South-east Sulawesi (see Appendix Table 8.1). The fact that proposals were accepted for credit that would be used outside productive economic activities indicates that the UPKD did not exert strict control in deciding which activities would be financed by SAADP credit.

Respondents engaged in the agricultural sector generally used SAADP credit to expand an existing activity, such as land management, the purchase of production inputs (seed, fertilizer, and pesticides), expansion in farm land, and additions to or replacement of the types of crop under cultivation. Fishermen normally used the credit to buy fishing equipment, such as ordinary nets and dragnets and outboard motors. In other sectors like home industry and trade, the loans were used to increase the volume of business or to purchase additional industrial inputs and trading goods. This information is supported by qualitative explanations from various resource persons in all four sample districts.

A problem frequently mentioned by both respondents and resource persons is the absence of any guarantee that the provision of credit will continue. Many people are worried that this will hinder further expansion in their economic activities. On the whole, the first loans were sufficient only as investment capital to start an economic activity but a continuous injection of working capital is needed to keep the business going.

8.2. Business Perspectives and Practices

Table 8.2.1 shows that in all locations there were households that felt an improvement in their business perspectives after the SAADP project was introduced. The proportion ranged from 27.3% to 62.8% of all sample households. On average, the proportion of SAADP households that experienced a change of this kind was 53.2%. During the same period some 38.1% of control households had the same experience of an increase in their business perspectives. Thus the net effect of the SAADP project on increased business perspectives is 15.1%, which is statistically significant at 1 percent level.

In most sample districts, SAADP had a positive impact on the increase in business perspectives, with values that are statistically significant at 1 percent level (in Donggala and Tolitoli) and at 5 percent level (in Konsel). The only exception was Muna District, where the increase in business perspectives was felt more by control households, even though the difference is not statistically significant. Qualitative information suggests that this can be traced to insufficient or even lack of transfer of business knowledge from the SAADP project and that additional knowledge obtained from other sources by SAADP households was similar to that obtained by control households.

Table 8.2.1. Proportion of Households with Increased Business Perspectives (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Households	52.0 (50.2)	62.8 (48.6)	57.4 (49.6)	45.6 (50.1)	52.5 (50.2)	49.0 (50.1)	53.2 (50.0)
N	102	102	204	103	101	204	408
Control Households	27.3 (45.0)	39.2 (49.3)	33.0 (47.30	53.9 (50.3)	32.7 (47.4)	43.3 (50.0)	38.1 (48.7)
N	55	51	106	52	52	104	210
Difference between SAADP and control households	24.7** (7.8)	23.5** (8.4)	24.3** (5.8)	-8.2 8.5	19.8* (8.3)	5.8 (6.0)	15.1** (4.1)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

According to respondents and resource persons, additional knowledge was usually obtained from friends and neighbors or from personal experience. The PPLs, whose institutional task was to provide agricultural extension services, played the role designated for them in the *juklak*, that is as members of the verification team, and for that reason they were active only at the beginning of the project. In fact, many respondents were not aware of the existence of the PPLs. Meanwhile, the facilitators, as described in Chapter V, played a greater role in assisting the UPKD than in helping the community. The number of respondents who obtained additional knowledge from PPLs or related government agencies was extremely small. In many cases additional knowledge from these official channels was a source of information that was passed on orally from one person to another, to the benefit of other community members.

The various types of business perspective that respondents said had increased were placed in four groups, namely marketing, diversification in activities, administration/finances, and production techniques, as shown in Table 8.2.2. In both SAADP and control households the type of knowledge that increased most of all concerned diversification in activities, followed by knowledge about production techniques, marketing, and administration/finances.

Overall, the proportion of SAADP households that experienced an increase in business perspectives was greater than the proportion of control households. This occurred in the case of all types of perspectives. From the point of view of differences in the proportion of SAADP and control households, the types of business knowledge most affected by SAADP were production techniques (11.4%), marketing (8.4%), and administration/finances (7.4%). The effect on these three types of knowledge was statistically significant at 1 percent level, while the impact on diversification in economic activities (6.4%) was not statistically significant. The impact of SAADP showed a very similar trend among households in Tolitoli. In Donggala the impact of SAADP was significant on increased knowledge about administration/finances while in Konsel it was significant on increased knowledge about production techniques. Meanwhile, the effect in Muna was not significant on increases in any kind of business perspectives.

Table 8.2.2. Proportion of Households by Type of Increased Business Perspectives (%)

Type of Business Perspectives	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Marketing	19.6 (40.0)	31.4 (46.6)	25.5 (43.7)	7.8 (27.0)	10.9 (31.3)	9.3 (29.1)	17.4 (38.0)
Diversification in activities	20.6 (40.6)	37.3 (48.6)	28.9 (45.5)	40.8 (49.4)	27.7 (45.0)	34.3 (47.6)	31.6 (46.6)
Administration	12.8 (33.5)	20.6 (40.6)	16.7 (37.4)	1.0 (9.9)	6.9 (25.5)	3.9 (19.5)	10.3 (30.4)
Production techniques	10.8 (31.2)	53.9 (50.1)	32.4 (46.9)	3.9 (19.4)	30.7 (46.4)	17.2 (37.8)	24.8 (43.2)
N	102	102	204	103	101	204	408
Control households:							
Marketing	9.1 (29.0)	11.8 (32.5)	10.4 (30.6)	3.9 (19.4)	11.5 (32.3)	7.7 (26.8)	9.1 (28.8)
Diversification in activities	20.0 (40.4)	21.6 (41.5)	20.8 (40.7)	38.5 (49.1)	21.2 (41.2)	29.8 (46.0)	25.2 (43.5)
Administration	0.0 (0.0)	5.9 (23.8)	2.8 (16.6)	1.9 (13.9)	3.9 (19.4)	2.9 (16.8)	2.9 (16.7)
Production techniques	7.3 (26.2)	29.4 (46.0)	17.9 (38.5)	9.6 (29.8)	7.7 (16.7)	8.7 (28.3)	13.3 (34.1)
N	55	51	106	52	52	104	210
Difference between SAADP and control households:							
Marketing	10.5 (5.6)	19.6** (6.5)	15.1** (4.3)	3.9 (3.8)	-0.7 (5.5)	1.6 (3.3)	8.4** (2.7)
Diversification in activities	0.6 (6.8)	15.7 (7.5)	8.2 (5.1)	2.3 (8.4)	6.6 (7.3)	4.5 (5.6)	6.4 (3.8)
Administration	12.8** (3.3)	14.7* (5.2)	13.8** (3.1)	-1.0 (2.1)	3.1 (3.7)	1.0 (2.1)	7.4** (1.9)
Production techniques	3.5 (4.7)	24.5** (8.1)	14.4** (5.0)	-5.7 (4.6)	23.0** (5.1)	8.5* (3.8)	11.4** (3.2)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

If the impact of SAADP on changes in business practices is considered, there is overall a positive value, namely 5.4%, but the figure is not statistically significant. In the sample area, the figures of 20.9% for Konsel District and 12.7% for the Province of South-east Sulawesi are significant at 5% percent level. In Donggala District and Central Sulawesi values tend to be negative and statistically insignificant (see Table 8.2.3).

A number of respondents said that the availability of SAADP loans encouraged them to change their business practices. In many instances, however, the changes that they made were based not on new knowledge but rather on knowledge that they had already mastered but had been unable to put into practice because of a shortage of capital. This explains why the proportion of households that made changes in their business practices was greater than the proportion that experienced increases in business perspectives.

Table 8.2.3. Proportion of Households that Changed Business Practices (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	43.1 (49.8)	62.8 (48.6)	52.9 (50.0)	58.3 (49.6)	55.5 (50.0)	56.9 (49.6)	54.9 (49.8)
N	102	102	204	103	101	204	408
Control households	43.1 (49.8)	62.8 (48.6)	52.9 (50.0)	58.3 (49.6)	55.5 (50.0)	56.9 (49.6)	54.9 (49.8)
N	55	51	106	52	52	104	210
Difference between SAADP and control households	-4.1 (8.4)	0.0 (8.4)	-1.8 (6.0)	4.4 (8.5)	20.9* (8.3)	12.7* (6.0)	5.4 (4.2)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * significant at 5 percent level.

Parallel with the types of business perspectives, the types of business practices that underwent the greatest changes in both SAADP and control households were diversification in activities and production techniques. Overall, the influence of SAADP on changes in each type of business practice was relatively small, as can be seen from Table 8.2.4. A positive effect occurred with marketing practices (1.8%), administrative/financial practices (0.8%), and production techniques (8.5%), while in the case of diversification in activities the effect was negative, namely, –3.5%. However, statistical tests indicate that the impact of SAADP was significant at 1 percent level only in the case of practices connected with production techniques.

In Donggala and Tolitoli, the effect of SAADP on diversification in economic activities has a negative value because the proportion of control households that increased their types of economic activity was greater than the proportion of SAADP households. The negative value at the provincial level in Central Sulawesi was 12.5%, which is statistically significant at 5 percent level. In Muna, SAADP had a positive impact on marketing practices (3.9%) that was statistically significant at 5 percent level. In Konsel and at the provincial level in South-east Sulawesi, the SAADP impact was positive and significant at 1 percent level in the case of production technique practices, the values being 23.1% and 10.4% respectively.

In Tolitoli the large number of control households that increased their types of economic activity can be traced to the decline in cloves and cocoa production due to the age of the trees. Members of these households tried to find additional work as drivers of *ojek* (motor-cycles that carry paying passengers) or as drivers of public transport vehicles. Meanwhile, in Donggala the increase in new types of undertakings was, among other things, stimulated by the establishment of a new soccer field, which encouraged a number of respondents to start selling snack foods and beverages. Besides this, increased demand for house-roofing made from sago palms, which were readily available in the control village in this district, also encouraged a number of control households to begin making this product.

The types of new economic activities undertaken by respondents show wide variations and include trade, small and handicraft industries, services, agriculture, and animal husbandry. On the whole, diversification in agricultural activities has involved the cultivation by farmers of additional types of crops that they had previously not grown.

The types of production techniques that experienced increases include the use of certain kinds of nets and of boats with outboard motors by fishermen who previously had used only fishing roads and ordinary boats, the use of chainsaws to fell timber that had previously been cut with manual saws, the use of tractors in agriculture and the increase in other agricultural production techniques such as the drying of agricultural commodities, the use of fertilizer, and the planting of new seeds.

Table 8.2.4. Proportion of Households by Type of Change in Business Practices (%)

Type of Business Practice	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Marketing	7.8 (27.0)	3.9 (19.5)	5.9 (23.6)	3.9 (19.4)	3.0 (17.1)	3.4 (18.2)	4.7 (21.1)
Diversification in activities	21.6 (41.3)	15.7 (36.5)	18.6 (39.0)	47.6 (50.2)	18.8 (39.3)	33.3 (47.2)	26.0 (44.0)
Administration	2.9 (17.0)	4.9 (21.7)	3.9 (19.5)	1.9 (13.9)	1.0 (10.0)	1.5 (12.1)	2.7 (16.2)
Production techniques	10.8 (31.2)	38.2 (48.8)	24.5 (43.1)	5.8 (23.5)	32.7 (47.1)	19.1 (39.4)	21.8 (41.4)
Others	2.9 (17.0)	1.0 (9.9)	2.0 (13.9)	1.0 (9.8)	2.0 (14.0)	1.5 (12.1)	1.7 (13.0)
N	102	102	204	103	101	204	408
Control households:							
Marketing	1.8 (13.5)	2.0 (14.0)	1.9 (13.7)	0.0 (0.0)	7.7 (26.9)	3.9 (19.3)	2.9 (16.7)
Diversification in activities	34.6 (48.0)	27.5 (45.1)	31.1 (46.5)	38.5 (49.1)	17.3 (38.2)	27.9 (45.1)	29.5 (45.7)
Administration	1.8 (13.5)	3.9 (19.6)	2.8 (16.6)	0.0 (0.0)	1.9 (13.9)	1.0 (9.8)	1.9 (13.7)
Production techniques	9.1 (29.0)	27.5 (45.1)	17.9 (38.5)	7.7 (26.9)	9.6 (29.8)	8.7 (28.3)	13.3 (34.1)
Others	1.8 (13.5)	2.0 (14.0)	1.9 (13.7)	7.7 (26.9)	1.9 (13.9)	4.8 (21.5)	3.3 (18.0)
N	55	51	106	52	52	104	210
Difference between SAADP and control households:							
Marketing	6.0 (3.2)	1.9 (2.8)	4.0 (2.1)	3.9* (1.9)	-4.7 (4.1)	-0.5 (2.3)	1.8 (1.6)
Diversification in activities	-13.0 (7.7)	-11.8 (7.3)	-12.5* (5.3)	9.1 (8.4)	1.5 (6.6)	5.4 (5.5)	-3.5 (3.8)
Administration	1.1 (2.5)	1.0 (3.5)	1.1 (2.1)	1.9 (1.4)	-0.9 (2.1)	0.5 (1.3)	0.8 (1.2)
Production techniques	1.7 (5.0)	10.7 (8.0)	6.6 (4.8)	-1.9 (4.4)	23.1** (6.2)	10.4** (3.9)	8.5** (3.1)
Others	1.1 (2.5)	-1.0 (2.2)	0.1 (1.6)	-6.7 (3.8)	0.1 (2.4)	-3.3 (2.3)	-1.6 (1.4)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

Qualitative information also shows that the existence of SAADP led to the appearance of new undertakings in all sample locations. These undertakings varied in type and number, depending on the creativity of the community and on the extent to which SAADP implementation went smoothly. In the SAADP sample villages, there was a rise in the number of kiosks and traders, the availability of rental services for agricultural equipment like tractors and sprayers, and the emergence of services for TV and VCD viewers.

Besides the respondents who expanded their number of economic activities or undertook diversification, there were also respondents whose economic activities remained the same or else declined in number. The proportion of households in which the number and types of activities remained the same occupied the highest position in all sample areas, with an average of 59.3% among SAADP households and 52.4% among control households. The proportion of respondents whose undertakings declined in number was relatively small, with 6.4% among SAADP households and 5.7% among control households (see Appendix Table 8.2). The impact of SAADP on changes in respondents' types of economic activity was negative and significant in Tolitoli District (-20.6%), at the provincial level in Central Sulawesi (-12.0%) and overall (-10,3%) at 1 percent level. Meanwhile, the effects of SAADP on changes in types of activities in Konsel (-11.4%) and at the provincial level in South-east Sulawesi (-8.6%) were significant at 5 percent level.

It had been hoped that diversification in economic activities within a household would enable it to survive in the face of risks stemming from external shocks such as crop failure and falls in prices. Households that had alternative sources of income or that were not dependent on just one kind of activity should have greater resistance than those with only one source of income. Nevertheless, Table 8.2.4 (which shows variables in the diversification of activities) and Table 8.2.5 demonstrate that there is no single harmonious relationship between diversification in activities and increases in respondents' capacity to face external shocks. Overall, even though the impact of SAADP on diversification in economic activities shows a negative trend, the impact on increased capacity to handle disruptions has a positive value (7.6%), although not statistically significant. In general, the proportion of respondents who experienced an increase in their capacity to handle such shocks was greater than the proportion of respondents who undertook diversification in their economic activities. This means that diversification of activities is not the only factor that influences the level of the community's capacity to face external shocks. Increases in the production of agricultural commodities and fish, rises in prices, and expansion in economic undertakings are other important factors that exert influence over the capacity to withstand shocks.

In Tolitoli and Konsel, the impact of SAADP on increased capacity to face external shocks has positive values of 32.4% and 24.4% respectively. Both figures are significant at 1 percent level. In Muna there is a negative value of 19.8%, which is significant at 5 percent level. At the provincial level in Central Sulawesi the effect of SAADP on respondents' capacity to withstand shocks has a value of 12.9% and is significant at 5% level. Meanwhile, there is no significant effect at the provincial level in South-east Sulawesi.

In Muna and Donggala, the differences in increased capacity to deal with external shocks have negative values, which indicates that the increase in control households is higher than in SAADP households. This is due to the fact that control households in these two districts on the whole feel that they have experienced a rather large increase in income, both from the economic activities that they were previously carrying out and from additional activities (diversification). For example, a number of control households in Muna obtain additional income from remittances sent by family members who are working in Malaysia. Meanwhile, in Donggala households engaged in weaving have been able to increase production because they have children old enough to assist in this work.

Table 8.2.5. Proportion of Households with Self Assessed Increased Capacity to Deal with External Shocks (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	67.7 (47.0)	65.7 (47.7)	66.7 (47.3)	41.7 (49.6)	45.5 (50.1)	43.8 (49.7)	55.2 (49.8)
N	102	102	204	103	101	204	408
Control households	72.7 (44.9)	33.3 (47.6)	53.8 (50.1)	61.5 (49.1)	21.2 (41.2)	41.4 (49.5)	47.6 (50.1)
N	55	51	106	52	52	104	210
Difference between SAADP and control households	-5.1 (7.6)	32.4** (8.2)	12.9* (5.9)	-19.8* (8.4)	24.4** (7.6)	2.5 (6.0)	7.6 (4.2)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

8.3. Farming Perspectives and Practices

The indicators of farming perspectives and practices that have been analyzed cover the management of land, the use of fertilizer and pesticides, the marketing of products and the post-harvest handling of crops. Only respondents whose livelihood is in the agricultural sector were asked about these five indicators.

Overall, SAADP has had a positive impact on increases in all forms of farming perspectives, as Table 8.3.1 shows. The greatest impact was on knowledge concerning land management (13.4%) and the use of fertilizer (12.0%), both figures being significant at 1 percent level. The effect on knowledge of marketing was 7.8%, which is significant at 5 percent level. Meanwhile, the effects on the other types of farming knowledge, namely, the use of pesticides (7.4%) and post-harvest handling of crops (3.8%), are not statistically significant.

An impact with an almost identical trend in significance occurred at the provincial level in Central Sulawesi, namely, on increases in perspectives concerning land management (15.3%), the use of fertilizer (16%) and the marketing of products (14.9%). All three are statistically significant at 5 percent level. In South-east Sulawesi the effects of SAADP on increased knowledge of land management (13.3%) and the use of fertilizer (10.7%) are statistically significant at 1 percent level.

Table 8.3.1. Proportion of Agricultural Households Experiencing an Increase in Knowledge of Farming Practices (%)

Farming Knowledge	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Land management	31.4 (46.9)	68.7 (46.7)	54.5 (50.0)	8.7 (28.3)	48.4 (50.2)	28.7 (45.3)	39.5 (48.9)
Use of fertilizer	31.4 (46.9)	69.9 (46.2)	55.2 (49.9)	12.0 (32.6)	24.7 (43.4)	18.4 (38.8)	33.9 (47.4)
Use of pesticides	11.8 (32.5)	67.5 (47.1)	46.3 (50.0)	13.0 (33.9)	31.2 (46.6)	22.2 (41.6)	32.3 (46.8)
Marketing of products	27.5 (45.1)	53.0 (50.2)	43.3 (49.7)	5.4 (22.8)	21.5 (41.3)	13.5 (34.3)	26.0 (43.9
Post-harvest handling of crops	15.7 (36.7)	49.4 (50.3)	36.6 (48.3)	5.4 (22.8)	19.4 (39.7)	12.4 (33.1)	22.6 (42.0)
N Agricultural Households	51	83	134	92	93	185	319
Control households:							
Land management	19.2 (40.1)	50.0 (50.5)	39.2 (49.2)	6.8 (25.5)	23.4 (42.8)	15.4 (36.3)	26.1 (44.0)
Use of fertilizer	15.4 (36.8)	52.1 (50.5)	39.2 (49.2)	2.3 (15.1)	12.8 (33.7)	7.7 (26.8)	21.8 (41.4)
Use of pesticides	7.7 (27.2)	52.1 (50.5)	36.5 (48.5)	4.6 (21.1)	25.5 (44.1)	15.4 (36.3)	24.9 (43.3)
Marketing of products	7.7 (27.2)	39.6 (49.4)	28.4 (45.4)	9.1 (29.1)	10.6 (31.2)	9.9 (30.0)	18.2 (38.7)
Post-harvest handling of crops	3.9 (19.6)	37.5 (49.0)	25.7 (44.0)	9.1 (29.1)	17.0 (38.0)	13.2 (34.0)	18.8 (39.2)
N Agricultural Households	26	48	74	44	47	91	165
Difference between SAADP and control households:							
Land management	12.1 (10.2)	18.7* (8.9)	15.3* (7.2)	1.9 (4.8)	25.0** (8.1)	13.3** (5.1)	13.4** (4.4)
Use of fertilizer	16.0 (9.8)	17.8* (8.9)	16.0* (7.2)	9.7* (4.1)	12.0 (6.7)	10.7** (4.0)	12.0** (4.2)
Use of pesticides	4.1 (7.0)	15.4 (8.9)	9.8 (7.1)	8.5 (4.8)	5.7 (8.0)	6.8 (4.9)	7.4 (4.3)
Marketing of products	19.8* (8.3)	13.4 (9.0)	14.9* (6.8)	-3.7 (5.0)	10.9 (6.2)	3.6 (4.0)	7.8* (3.9)
Post-harvest handling of crops	11.8 (6.4)	11.9 (8.9)	10.9 (6.6)	-3.7 (5.0)	2.3 (6.9)	-0.8 (4.3)	3.8 (3.9)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

From the point of view of the district level, SAADP had a positive effect in all sample areas on all types of additional farming knowledge with the exception of marketing and post-harvest handling of crops in Muna. The impact of SAADP on increased knowledge about the use of pesticides and post-harvest handling of crops is insignificant at both district and provincial levels. Of the four sample districts Muna has the lowest proportion of respondents who feel that they have obtained increased farming knowledge of any kind. As explained above, this situation can be traced to the extremely limited role played by PPLs in providing agricultural extension services. In reality, the fairly high increase in perspectives concerning the use of fertilizer and

pesticides in SAADP households is very largely explained by the presence in one of the sample villages of Javanese and Balinese communities that have informally disseminated agricultural knowledge which they obtained from Java.

Meanwhile, the rather high proportion of Tolitoli respondents who feel that they have gained additional farming knowledge has been influenced, among other things, by the presence of a local community member who attempted to obtain additional knowledge from the related government agencies at his own initiative. Besides this fact, the role of PPLs at the beginning of the project cannot be ignored, even though they provided extension services only to the heads of groups. This knowledge was then passed on informally to other members of the community, although dissemination was not rapid and not simultaneous in all places.

The proportion of SAADP households that have put increased farming knowledge into practice shows a pattern that is almost the same as that for increased knowledge. In the case of control households, however, the pattern is somewhat irregular, even though it reveals a tendency for changes in farming practices to be influenced by greater farming knowledge. Overall, the impact of SAADP on changes in farming practices shows a positive value (see Table 8.3.2). The highest effect occurred with land management practices (14.8%), which is significant at 5 percent level. The effects on the use of fertilizer (10.0%) and marketing (8.3%) are significant at 1 percent level, while the effects on the use of pesticide and post-harvest handling of crops are not statistically significant. In the specific case of post-harvest handling of crops, there is no statistically significant influence at either district or provincial levels.

At the provincial level in both Central Sulawesi and South-east Sulawesi, the impacts of SAADP on improved land management practices are significant at 1 percent level, being 12.2% and 19.4% respectively. The same is true in Tolitoli and Donggala, where the effects are 28.4% and 23.9% respectively. The impact of SAADP on increased use of fertilizer is also significant at 1 percent level in Muna (9.8%) and the Province of South-east Sulawesi (9.7%), while in Tolitoli the impact of 20.1% is significant at 5 percent level. In Tolitoli and Muna, SAADP has had a significant impact at 5 percent level on the use of pesticide (19.8% and 8.6% respectively). Meanwhile, at the provincial level in Central Sulawesi and in Tolitoli District, SAADP has also had a significant effect on improved marketing practices. Only in Donggala did SAADP display no significant effect on any type of farming practices. By contrast, almost all such practices (with the exception of post-harvest handling of crops) in Tolitoli experienced a significant increase.

Community interest in putting new farming knowledge into practice is quite high, where more than 78% of the SAADP and control households that felt their knowledge had increased expressed interest. This would be an extremely positive situation if it were accompanied by efforts to improve community knowledge. The constraint is that only minimum agricultural extension services were provided in almost all study locations.

Table 8.3.2. Proportion of Agricultural Households Putting Increased Farming Knowledge into Practice (%)

Farming Knowledge	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Land management	21.6 (41.5)	63.9 (48.3)	47.8 (50.1)	5.4 (22.8)	43.0 (49.8)	24.3 (43.0)	34.2 (47.5)
Use of fertilizer	17.7 (38.5)	63.9 (48.3)	46.3 (50.0)	9.8 (29.9)	20.4 (40.5)	15.1 (36.0)	28.2 (45.1)
Use of pesticides	3.9 (19.6)	61.5 (49.0)	39.6 (49.1)	10.9 (31.3)	24.7 (43.4)	17.8 (38.4)	27.0 (44.4)
Marketing of products	21.6 (41.5)	47.0 (50.2)	37.3 (48.5)	5.4 (22.9)	15.1 (36.0)	10.3 (30.4)	21.6 (41.2)
Post-harvest handling of crops	11.8 (32.5)	44.6 (50.0)	32.1 (46.9)	3.3 (17.8)	15.1 (36.0)	9.2 (29.0)	18.8 (39.1)
N	51	83	134	92	93	185	319
Control households:							
Land management	15.4 (36.8)	35.4 (48.3)	28.4 (45.4)	4.6 (21.1)	19.2 (39.8)	12.1 (32.8)	19.4 (40.0)
Use of fertilizer	15.4 (36.8)	43.8 (50.1)	33.8 (47.6)	0.0 (0.0)	10.6 (31.2)	5.5 (22.9)	18.2 (38.7)
Use of pesticides	7.7 (27.2)	41.7 (49.8)	29.7 (46.0)	2.3 (15.1)	21.3 (41.4)	12.1 (32.8)	20.0 (40.1)
Marketing of products	7.7 (27.2)	29.2 (46.0)	21.6 (41.4)	6.8 (25.5)	6.4 (24.7)	6.6 (25.0)	13.3 (34.1)
Post-harvest handling of crops	3.9 (19.6)	29.2 (46.0)	20.3 (40.5)	9.1 (29.1)	14.9 (36.0)	12.1 (32.8)	15.8 (36.5)
N	26	48	74	44	47	91	165
Difference between SAADP and control households:							
Land management	6.2 (9.3)	28.4** (28.5)	19.4** (6.8)	0.9 (3.9)	23.9** (7.8)	12.2** (4.7)	14.8** (4.1)
Use of fertilizer	2.3 (9.0)	20.1* (9.0)	12.5 (7.0)	9.8** (3.1)	9.8 (6.2)	9.7** (3.6)	10.0* (3.9)
Use of pesticides	-3.8 (6.0)	19.8* (9.0)	9.8 (6.8)	8.6* (4.0)	3.5 (7.5)	5.8 (4.4)	7.0 (4.0)
Marketing of products	13.9 (7.9)	17.8* (8.6)	15.7* (6.3)	-1.4 (4.5)	8.7 (5.2)	3.7 (3.4)	8.3* (3.5)
Post-harvest handling of crops	7.9 (6.0)	15.4 (8.6)	11.8 (6.2)	-5.8 (4.8)	0.2 (6.4)	-2.9 (4.0)	3.1 (3.6)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

The limited extension services available to communities are also reflected in the small proportion of households that use agricultural inputs in the form of fertilizer and pesticides in all areas except Tolitoli. In the other three districts, the majority of households do not use fertilizer or pesticides at all. In Konsel, the agricultural input most commonly used is herbicide. In Muna, fertilizer and pesticide are applied only to rice and, in very small quantities, to certain horticultural crops. Tree crops and corn, which are generally grown by most members of the community, are usually not given fertilizer or pesticide.

Although in general the use of fertilizer and pesticide has remained relatively limited, there are some households that increased their use of these inputs after the SAADP project was introduced. Table 8.3.3 shows that on the whole the proportion of farmers who did so is greater among SAADP households than among control households. SAADP had a positive impact on the use of green fertilizer (9.2%) and pesticide (11.6%) that is significant at 1 percent level, and on the use of chemical fertilizer (8.1%), which is significant at 5 percent level. The impact of SAADP on the use of these three types of agricultural input does not show any statistically significant values in Donggala and Konsel, while in Tolitoli and Muna all three are significant.

Table 8.3.3. Proportion of Agricultural Households That Increased their Use of Farm Inputs (%)

Agricultural Input	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Green fertilizer	2.0 (14.0)	27.7 (45.0)	17.9 (38.5)	5.4 (22.8)	8.6 (28.2)	7.0 (25.6)	11.6 (32.1)
Chemical fertilizer	11.8 (32.5)	62.7 (48.7)	43.3 (49.7)	6.5 (24.8)	12.9 (33.7)	9.7 (29.7)	23.8 (42.7)
Pesticide	9.8 (30.0)	62.7 (48.7)	42.5 (49.6)	10.9 (31.3)	30.1 (46.1)	20.5 (40.5)	29.8 (45.8)
N	51	83	134	92	93	185	319
Control households:							
Green fertilizer	0.0 (0.0)	6.3 (24.5)	4.1 (19.9)	0.0 (0.0)	2.1 (14.6)	1.1 (10.5)	2.4 (15.4)
Chemical fertilizer	15.4 (36.8)	39.6 (49.4)	31.1 (46.6)	0.0 (0.0)	6.4 (24.7)	3.3 (18.0)	15.8 (36.5)
Pesticide	11.5 (32.6)	35.4 (48.3)	27.0 (44.7)	2.3 (15.1)	19.2 (39.8)	11.0 (31.4)	18.2 (38.7)
N	26	48	74	44	47	91	165
Difference between SAADP and control households:							
Green fertilizer	2.0 (2.0)	21.5** (6.1)	13.9** (4.1)	5.4* (2.4)	6.5 (3.6)	5.9** (2.2)	9.2** (2.2)
Chemical fertilizer	-3.6 (8.5)	23.1* (8.9)	12.2 (6.9)	6.5* (2.6)	6.5 (5.0)	6.4* (2.9)	8.1* (3.7)
Pesticide	-1.7 (7.6)	27.2** (8.8)	15.5* (6.7)	8.6* (4.0)	11.0 (7.5)	9.6* (4.4)	11.6** (4.0)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at 1 percent level.
- * significant at 5 percent level.

In managing their land, many farmers clear land by burning trees and rotate the location of their fields. Burning is usually done at the time when land is cleared, whether it be tree-crop land or unused land that belongs to no one. Crop rotation is usually undertaken when secondary food crops (*palawija*) are planted and is usually done because farmers do not use agricultural inputs, especially fertilizer, which means that natural soil nutrients are soon depleted. Thus farmers have to clear more land every two or three years. Nevertheless, no cases were found in any of the sample locations of households that really practice shifting cultivation. Land that can no

longer be planted with *palawija* crops is normally used for tree crops or else is just abandoned with a few fruit trees or other trees left on it. If tree crops have not been planted, the land is replanted with *palawija* crops some five years later after natural fertility has been restored. For this reason, the proportion of households that practice only limited shifts in cultivated area is an indicator of the extent to which households apply fertilizer to food crops.

Table 8.3.4. Proportion of Households by System of Agricultural Land Management (%)

System of Land Management	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Before SAADP:							
- Rotation of land	13.7 (34.8)	3.6 (18.8)	7.5 (26.4)	37.0 (48.5)	2.2 (14.6)	19.6 (39.8)	14.5 (35.2)
- Clearing by burning	21.6 (41.5)	71.1 (45.6)	52.2 (50.1)	43.5 (49.8)	12.0 (32.5)	27.7 (44.8)	38.1 (48.6)
After SAADP							
- Rotation of land	11.8 (32.5)	1.2 (11.0)	5.2 (22.3)	22.8 (42.2)	0.0 (0.0)	11.4 (31.8)	8.8 (28.3)
- Clearing by burning	11.8 (32.5)	69.9 (46.2)	47.8 (50.1)	19.6 (39.9)	4.3 (20.4)	11.9 (32.4)	27.0 (44.4)
Changes:							
- Rotation of land	-2.0 (6.7)	-2.4 (2.4)	-2.2 (3.0)	-14.1 (6.7)	-2.2 (1.5)	-8.2 (3.7)	-5.7 (2.5)
- Clearing by burning	-9.8 (7.3)	-1.2 (7.1)	-4.5 (6.1)	-23.9 (6.7)	-7.7 (4.0)	-15.8 (4.1)	-11.1 (3.7)
N	51	83	134	92	93	185	319
Control households:							
Before SAADP:							
- Rotation of land	0.0 (0.0)	8.3 (27.9)	5.5 (22.9)	46.5 (50.5)	21.3 (41.4)	33.3 (47.4)	20.9 (40.8)
- Clearing by burning	0.0 (0.0)	62.5 (48.9)	41.1 (49.5)	52.3 (50.5)	31.9 (47.1)	42.2 (49.6)	41.7 (49.4)
After SAADP							
- Rotation of land	0.0 (0.0)	2.1 (14.4)	1.4 (11.7)	39.5 (49.4)	4.3 (20.4)	21.1 (41.0)	12.3 (32.9)
- Clearing by burning	0.0 (0.0)	54.2 (50.4)	35.6 (48.2)	47.7 (50.5)	8.5 (28.2)	27.5 (44.9)	31.1 (46.4)
Changes:							
- Rotation of land	0.0 (0.0)	-6.3 (4.5)	-4.1 (3.0)	-7.0 (10.7)	-17.0 (6.7)	-12.2 (6.6)	-8.6 (4.1)
- Clearing by burning	0.0 (0.0)	-8.3 (10.1)	-5.5 (8.1)	-4.6 (10.8)	-23.4 (8.0)	-14.8 (7.0)	-10.6 (5.3)
N	25	48	72	44	47	91	164
Difference between SAADP and control households:							
- Rotation of land	-2.0 (6.7)	3.8 (5.1)	1.9 (4.2)	-7.1 (12.6)	14.9* (6.9)	4.0 (7.6)	2.9 (4.8)
- Clearing by burning	-9.8 (10.5)	7.1 (12.3)	1.0 (10.1)	-19.3 (12.7)	15.7 (8.9)	-1.1 (8.1)	-0.5 (6.4)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * significant at 5 percent level.

In all sample areas, among both SAADP and control households, changes in land rotation and clearing by burning show figures that tend to be negative but are not statistically significant, as can be seen from Table 8.3.4. This indicates a tendency toward improvements in land management systems, with increasingly smaller numbers of households practicing rotation and burning. If the tendency is related to SAADP, the overall impact of SAADP is negative (-0.5%) on burning practices but positive (2.4%) on the rotation of land. Decreases in land rotation were relatively more common among control households while greater decreases in the burning of vegetation occurred among SAADP households.

8.4. Household Income

Table 8.4.1 shows that most SAADP respondents (74%) admit that their nominal household income had undergone an increase if compared with the situation before the SAADP project commenced. In Muna more than 90% of SAADP respondents claimed to have experienced a rise in income. Meanwhile, only 65.2% of control households said that their income had risen, while 23.3% stated that it had actually declined. As with SAADP households, the greatest number of control households that experienced an income increase occurred in Muna (82.7%). The increase in income in Muna is explained by production increases and high prices for agricultural commodities. Increases in the output of certain agricultural products were encouraged by the fact that a number of respondents extended the cultivated area to land that no one owned. At the present time that land is already productive. Besides that, farmers planted fruit trees like citrus and *rambutan*, which are now beginning to bear right at a time when prices for these commodities are high.

Table 8.4.1. Proportion of Households which Stated that They Have Experienced an Increase in Nominal Household Income (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	68.6 (46.6)	70.6 (45.8)	69.6 (46.1)	92.2 (26.9)	64.4 (48.1)	78.4 (41.2)	74.0 (43.9)
N	102	102	204	103	101	204	408
Control households	70.9 (45.8)	56.9 (50.0)	64.2 (48.2)	82.7 (38.2)	50.0 (50.5)	66.4 (47.5)	65.2 (47.7)
N	55	51	106	52	52	104	210
Difference between SAADP and control households	-2.3 (7.7)	13.7 (8.1)	5.5 (5.6)	9.5 (5.3)	14.4 (8.4)	12.1* (5.2)	8.8* (3.8)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * significant at 5 percent level.

Overall, the difference in the proportion of SAADP and control households that experienced an increase in nominal income was 8.8%, which is statistically significant at 5 percent level. At the provincial level, in South-east Sulawesi there was also a significant positive impact. This indicates that the number of SAADP households that experienced a rise in incomes is greater than the number of control households that did. The opposite happened in Donggala where the SAADP project tended to have a negative impact on improvements in nominal household income, even though the figure is not statistically significant. Among other things, this is related to a situation

that enabled control households to undertake diversification in their economic activities, as described in section 8.2.

In Konsel and at control households in Tolitoli, the proportion of respondents who stated that there was an increase in their nominal income was smaller than in the other areas. At those household groups, there were a lot of households experienced a decrease in their nominal income. Both in Konsel and Tolitoli, the decrease of nominal income can be traced to the decline in agricultural output as a consequence of the age of the tree or pests attacked. This condition parallel with the average changes in real per capita household income that have a negative value at those group, as shown in Table 8.4.2.

Table 8.4.2. Average Changes in Real Per Capita Monthly Household Income Before and After the SAADP Project (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	13.2 (94.9)	4.2 (93.7)	8.7 (94.2)	18.7 (40.9)	-1.8 (55.7)	8.6 (49.7)	8.6 (75.1)
N	100	101	201	103	100	203	404
Control households	20.9 (167.0)	-9.0 (80.9)	6.8 (133.8)	30.8 (96.7)	-11.8 (88.4)	9.5 (94.6)	8.1 (115.8)
N	55	49	104	51	51	102	206
Difference between SAADP and control households	-7.7 (21.0)	13.2 (15.6)	1.9 (13.2)	-12.1 (11.1)	10 (11.8)	-0.9 (8.3)	0.5 (7.8)

Note: Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.

Table 8.4.2 also shows that the difference of average changes in real per capita monthly income between SAADP and control households is small (0.5%) although positive, and not statistically significant. This means that the SAADP project tended to have no significant impact on real household income. Furthermore, in Donggala, Muna, and South-east Sulawesi, the average changes in real per capita income at SAADP households are smaller than control households, although again they are not statistically significant.

Table 8.4.3. Average Changes in Real Per Capita Monthly Household Expenditure Before and After the SAADP Project (%)

	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households	3.3 (66.7)	-5.4 (43.6)	-1.2 (56.0)	12.9 (64.7)	-5.0 (29.0)	4.5 (51.7)	1.7 (53.8)
N	84	90	174	96	86	182	356
Control households	-1.0 (36.7)	-12.9 (33.1)	-6.9 (35.3)	3.3 (32.1)	-6.1 (21.3)	0.0 (29.0)	-3.7 (32.6)
N	45	44	89	49	27	76	165
Difference between SAADP and control households	4.3 (10.7)	7.5 (7.5)	5.7 (6.5)	9.6 (9.8)	1.1 (6.0)	4.5 (6.31)	5.4 (4.5)

Note: Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.

In terms of expenditure, as shown in Table 8.4.3, data indicate that the average changes in real per capita household expenditure in most of households group are negative, with the exception in Muna, South-east Sulawesi, and at SAADP households in Donggala. As with real income, the difference for average changes in real expenditure between SAADP and control households shows an overall positive value (5.4%) but not statistically significant, which is also true for all areas. Again this indicates that SAADP has no significant impact on real household expenditure.

Table 8.5.1. Proportion of Households by Savings Behavior After the Introduction of the SAADP Project (%)

Savings Behavior	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Beginning to save	29.4 (45.8)	11.8 (32.4)	20.6 (40.5)	40.8 (49.4)	18.8 (39.3)	29.9 (45.9)	25.2 (43.5)
Increasingly active in saving	11.8 (32.4)	32.3 (47.0)	22.1 (41.6)	7.8 (26.9)	9.9 (30.0)	8.8 (28.4)	15.4 (36.2)
Have become unable to save	2.9 (17.0)	9.8 (29.9)	6.4 (24.5)	1.0 (9.9)	3.0 (17.1)	2.0 (13.9)	4.2 (20.0)
Have made no increase in savings	5.9 (23.6)	10.8 (31.2)	8.3 (27.7)	1.9 (13.9)	21.8 (41.5)	11.8 (32.3)	10.1 (30.1)
Still unable to save	50.0 (50.0)	35.3 (48.0)	42.6 (49.6)	48.5 (50.2)	46.5 (50.1)	47.5 (50.1)	45.1 (49.8)
N	102	102	204	103	101	204	408
Control households:							
Beginning to save	34.5 (48.0)	9.8 (30.0)	22.6 (42.0)	30.8 (46.6)	5.8 (23.5)	18.3 (38.8)	20.5 (40.4)
Increasingly active in saving	7.3 (26.2)	19.6 (40.1)	13.2 (34.0)	11.5 (32.3)	5.8 (23.5)	8.7 (28.3)	11.0 (31.3)
Have become unable to save	1.8 (13.5)	19.6 (40.1)	10.4 (30.6)	3.8 (19.4)	3.8 (19.4)	3.8 (19.3)	7.1 (25.8)
Have made no increase in savings	3.6 (18.9)	9.8 (30.0)	6.6 (25.0)	5.8 (23.5)	17.3 (38.2)	11.5 (32.1)	9.0 (28.8)
Still unable to save	52.7 (50.4)	41.2 (49.7)	47.2 (50.2)	48.1 (50.5)	67.3 (47.4)	57.7 (49.6)	52.4 (50.0)
N	55	51	106	52	52	104	210
Difference between SAADP and control households:							
Beginning to save	-5.1 (7.8)	2.0 (5.4)	-2.0 (4.9)	10.0 (8.2)	13.0* (5.9)	11.6* (5.3)	4.8 (3.6)
Increasingly active in saving	4.5 (5.1)	12.7 (7.7)	8.9 (4.7)	-3.7 (4.9)	4.1 (4.8)	0.2 (3.4)	4.5 (2.9)
Have become unable to save	1.1 (2.6)	-9.8 (5.8)	-4.0 (3.2)	-2.9 (2.4)	-0.9 (3.1)	-1.9 (1.9)	-3.0 (1.9)
Have made no increase in savings	2.3 (3.7)	1.0 (5.3)	1.7 (3.2)	-3.8 (3.0)	4.5 (6.9)	0.2 (3.9)	1.0 (2.5)
Still unable to save	-2.7 (8.4)	-5.9 (8.3)	-4.5 (6.0)	0.5 (8.6)	-20.8* (8.4)	-10.1 (6.0)	-7.3* (3.5)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * significant at 5 percent level.

8.5. Savings Behavior

Besides being a welfare indicator in the economic sense, savings behavior also constitutes an indicator of a household's financial management planning. A positive difference between household income and expenditure should be retained in the form of savings. As already discussed above, real per capita income in both SAADP and control households on the whole rose, although small, it supposed to provide an incentive for saving.

Table 8.5.2. Proportion of Households by Form of Savings (%)

Form of Savings	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Money only	41.2 (49.5)	50.0 (50.2)	45.6 (49.9)	37.9 (48.7)	38.6 (48.9)	38.2 (48.7)	41.9 (49.4)
Money and gold	3.9 (19.5)	1.0 (17.0)	2.5 (9.9)	4.9 (21.6)	10.9 (31.3)	7.8 (27.0)	5.2 (22.1)
Gold only	2.0 (13.9)	0.0 (0.0)	1.0 (13.9)	7.8 (26.9)	1.0 (10.0)	4.4 (20.6)	2.7 (16.2)
No savings	52.9 (50.2)	49.0 (50.2)	51.0 (50.1)	49.5 (50.2)	49.5 (50.2)	49.5 (50.1)	50.3 (50.1)
N	102	102	204	103	101	204	408
Control households:							
Money only	40.0 (49.4)	33.3 (47.6)	36.8 (48.5)	34.6 (48.0)	25.0 (43.7)	29.8 (46.0)	33.3 (47.3)
Money and gold	5.5 (22.9)	2.0 (14.0)	3.8 (19.1)	11.5 (32.3)	3.9 (19.4)	7.7 (26.8)	5.7 (23.3)
Gold only	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	5.8 (23.5)	0.0 (0.0)	2.9 (16.8)	1.4 (11.9)
No savings	54.5 (50.3)	64.7 (49.3)	59.4 (49.3)	48.1 (50.5)	71.2 (45.7)	59.6 (49.3)	59.5 (49.2)
N	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

Table 8.5.2 shows that at the time when the research was done, both SAADP and control households which save generally keep their savings in the form of money, with only a few choosing gold (jewelry). Unlike those in other districts, however, a significant proportion of respondents in Muna from both SAADP and control households prefer to keep savings in the form of gold (jewelry).

Most respondents in the two sample districts in Central Sulawesi save their money in a bank, whereas in the two districts in South-east Sulawesi most still keep money in their house, a habit that prevails among both SAADP and control households (see Table 8.5.3). This can be traced to the fact that community access to banks is better in Central Sulawesi than in South-east Sulawesi. Furthermore, the size of the sum of money that represents savings also influences individual decisions about whether to keep it in a bank or at home. Small sums are usually kept at home, whereas people tend to deposit large sums in a bank. A few respondents keep their savings in a cooperative or else they save in the form of an arisan (rotating savings) or insurance.

Table 8.5.3. Proportion of Households that Save Money by Location of Savings (%)

Location of Savings	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
In a bank	60.9 (49.3)	75.0 (43.7)	68.4 (46.7)	27.3 (45.1)	28.0 (45.4)	27.7 (45.0)	48.4 (50.1)
In a cooperative	0.0 (0.0)	1.9 (13.9)	1.0 (10.1)	2.3 (15.1)	0.0 (0.0)	1.1 (10.3)	1.0 (10.2)
At home	37.0 (48.8)	21.2 (41.2)	28.6 (45.4)	63.6 (48.7)	72.0 (45.4)	68.1 (46.9)	47.9 (50.1)
Other	4.3 (20.6)	7.7 (26.9)	6.1 (24.1)	4.5 (21.1)	0.0 (0.0)	2.1 (14.5)	4.2 (20.0)
N = number who save money	46	52	98	44	50	94	192
Control households:							
In a bank	56.0 (50.7)	94.4 (23.6)	72.1 (45.4)	47.8 (51.1)	26.7 (45.8)	39.5 (49.5)	56.8 (49.8)
In a cooperative	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
At home	52.0 (51.0)	0.0 (0.0)	30.2 (46.5)	73.9 (44.9)	73.3 (45.8)	73.7 (44.6)	50.6 (50.3)
Other	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	4.3 (20.9)	0.0 (0.0)	2.6 (16.2)	1.2 (11.1)
N = number who save money	25	18	43	23	15	38	81

Note: Figures in brackets are the standard deviations.

8.6. Household Facilities and Assets

Improvements in a family's level of welfare can be seen from, among other things, improvements in housing conditions and related facilities and the family's ownership of assets. In the following description, changes in the condition of certain household facilities and assets before and after the introduction of the SAADP project are analyzed to see whether they have improved/increased, are the same, or have worsened/decreased. The housing conditions and facilities that are analyzed include type of roof, walls and floors, source of lighting, clean water, type of fuel and bathroom/toilet facilities (MCK). Assets take in land, electronic goods, vehicles and livestock. Changes in the condition of houses and their facilities and in the assets that were owned before and after SAADP are presented in Appendix Tables 8.3a to 8.5c. Definitions of improvements or declines in the condition of facilities and houses are given in Appendix Table 8.6.

Condition of Houses and Facilities

There was very little change in the condition of the majority of houses and associated facilities owned by SAADP and control households. This is in line with qualitative information from a number of resource persons who said that there were generally very few apparent changes in the condition of houses and facilities owned by community members. Data in Appendix Tables 8.3a and 8.3b show that on the whole less than 10% of households undertook improvements to their houses and related facilities. The

exception was improvements, made by more than 20% of SAADP and control households, in their main source of home lighting.

More SAADP and control households in Tolitoli undertook improvements to their house and its facilities than in other districts. Home lighting was improved by 44.1% of SAADP households and 35.3% of control households. The provision of an electricity network by the State Electricity Company (PLN) encouraged community members in this district to improve sources of lighting. In Muna specifically, a number of households have purchased generators to produce electricity and a few even used SAADP credit for this purpose.

The differences in the changes between SAADP and control households are relatively very small (see Appendix Table 8.3c) and there is no clear pattern in values either in the overall sense or by district and province. For example, improvement and decline in the type of roof and the main type of fuel have positive values overall. By contrast, improvement and decline in house flooring and the main source of lighting have negative values. Statistical testing shows that the overall effects of SAADP on the majority of changes in houses and facilities are not statistically significant except in a few instances: a decline in the quality of house flooring (-3.3%), no change (-6.1%) and a worsening (1.2%) in main type of fuel, and a decline in the condition of MCK facilities, all of which are significant at 5 percent level.

The impact of SAADP on improvements, lack of change or a decline in roof conditions in Donggala shows a value that is statistically significant but not consistent. The same is true with the condition of house floors in Konsel. Meanwhile, in Tolitoli SAADP had an impact of 14.7%, which is significant at 5 percent level, on expansion in the size of houses. In Konsel the effect of SAADP (12.0%) on worsening conditions for MCK water supplies was also significant at 1 percent level.

Ownership of Assets

Changes in ownership of valuable goods such as electronic equipment, bicycles and motor-cycles by SAADP and control households are presented in Appendix Tables 8.4a and 8.4b. At the present time more than half of SAADP and control households do not own these items. Virtually all households (99%) do not own a telephone and 88.5% of households do not own a refrigerator. The valuable goods most commonly owned by households are radios and tape recorders.

Overall, the effects of SAADP or the differences in changes in ownership of the majority of valuable goods do not show a definite pattern. The same is found in each sample district, as shown in Appendix Table 8.4c. This too is supported by qualitative information from resource persons, who said that there had been no real changes in the condition of houses or related facilities.

Overall, SAADP had a significant impact on asset ownership among households that were able to obtain a radio or tape recorder (-6.9%) and those who still had one (9.3%), these figures being significant at 5 percent level. A similar effect occurred among those who still had a bicycle (14%) and those who still did not have one (-14%), the figures being significant at 1 percent level. An examination by district shows that in Muna SAADP had a significant effect at 1 percent level on the increase in households owning a television set

(10.7%). Meanwhile, statistical testing in other districts also showed significant values but in general they refer to situations that remained the same, that is households that still own a certain asset or that still do not own that asset.

Changes in land and livestock ownership by SAADP and control households are presented in Appendix Tables 8.5a and 8.5b. Data indicate that all respondents own a home-lot, whereas only a small number (on average less than 5%) own ponds of any kind for aquaculture. The proportion of respondents who experienced an increase in area for all kinds of land tends to be greater than the proportion who experienced a decrease among both SAADP and control households. The proportion of households that do not own any kind of land tends to be greater among control than among SAADP households, except in the case of ownership of tree-crop land.

In the case of livestock assets, more respondents own poultry than goats and cattle or water-buffaloes. In terms of change, quite a number of SAADP (21.3%) and control (20.5%) households have increased their ownership of poultry. The proportion of households that own no livestock tends to be greater among control households, except in the case of cattle and water-buffaloes in Tolitoli and goats in Donggala.

The SAADP project overall had a positive influence on increased ownership of tree-crop land, irrigated rice-land, home-lots, and fishponds, and also on increased ownership of cattle/water-buffaloes, goats, and poultry, but it is not statistically significant (see Appendix Table 8.5c). In the specific case of Konsel, the differences in the proportion of SAADP and control households that experienced an increase in their ownership of tree-crop land (15.2%) and irrigated rice-land (5.9%) are significant at 5 percent level.

Statistical testing of the difference in the proportion of SAADP and control households shows a significant result only for the "no change" situation as well as a steady decrease in the proportion who do not own any of these assets, especially irrigated rice-land and fishponds as well as poultry. Overall, the differences in the proportion of SAADP and control households that still own the same area of irrigated rice-land (11%) and that own none (-12.5%) are significant at 1 percent level. This is also true in Muna District and at the provincial level in South-east Sulawesi. Meanwhile, in Tolitoli and at the provincial level in Central Sulawesi it is significant in the "no change" situation, figures being 17.6% and 8.3% respectively at 5 percent level. In Konsel, the effect of SAADP on households that do not own irrigated rice-land (-17.8%) is significant at 5 percent level.

The differences in the proportion of SAADP and control households that own the same area of fishponds and that do not own fishponds show significant values in Konsel (4.0% and –5.0%), at provincial level in South-east Sulawesi (4.4% and –5.4%) and overall (2.8% and –3.3%). In Muna the difference in the proportion of households that still own the same area of land (4.8%) is significant at 1 percent level.

Meanwhile, in the case of livestock ownership SAADP has had a significant impact only on "no change" ownership of cattle and water-buffaloes in Donggala (3.9% at 5 percent level), while a significant effect on "no change" poultry ownership occurred in Konsel (13.2% at 5 percent level). A significant impact also occurred on the proportion of households that do not own poultry in Donggala (-11.5%) and overall (-11.5%), in each case at 5 percent and 1 percent levels respectively.

IX. THE IMPACT OF SAADP ON POVERTY INCIDENCE

Many countries and donor agencies have introduced micro-credit programs as a means of reducing the incidence of poverty, but research on this topic shows a wide range of results. Research in Bangladesh, for example, indicates that micro-credit can reduce poverty significantly (Khandker, 1998), but other research in the same country suggests that the impact of micro-credit on poverty incidence has been small (Morduch, 1998).

This chapter analyzes the effect of SAADP micro-credit on poverty incidence from two aspects. First, the community groups that have and have not benefited from the loans, and second, the role of SAADP credit in improving household welfare and reducing the incidence of poverty.

9.1. Groups That Have Benefited and Those That Have Not

The villages selected for participation in the SAADP project were villages in the 'poor' category according to program criteria outlined in Chapter III. These include villages with a rather large number of poor people, with dry and irrigated land that has potential for development, and with limited economic infrastructure. In Konsel and Muna Districts, for example, the villages selected were the ones that had been affected by drought and by economic crises, while those chosen in Tolitoli and Donggala had been IDT or left behind villages.

In keeping with the *juklak*, the targeted beneficiaries were poor families or poor community groups, in particular poor groups and poor farmers who had no source of livelihood, as well as groups of women and youth who were unemployed or did not have regular work. As also pointed out in Chapter III, World Bank staff stressed that in actual fact these criteria were not applied because emphasis was placed on the selection of persons who already had economic activities. The reason for this emphasis was that the program was economic and commercial in nature, which meant that funds lent to the community had to be returned. As a consequence, the beneficiaries, particularly at the revolving stage, were not the poorest groups in the community.

This is evident from research findings that show that poverty criteria did not form the main considerations in determining the target of the program. As indicated in section 4.3 above concerning SAADP Participants: the Selection Criteria and Process (Table 4.3.1), only 16.7% of households that participated in SAADP felt that they had been selected because they were regarded as poor, while 83.6% said they were chosen because they owned economic undertakings.

From the point of view of the education level of respondents, as discussed in section 2.3 concerning Respondents' Experiences in Obtaining Credit (Table 2.3.3), the majority of beneficiaries have a low level of education (have never attended school or have been only to elementary school or the equivalent). Even so, borrowers with a high school education constitute 22.3% of participants and generally represent the relatively well-off groups in the community.

From the point of view of frequency in borrowing, it was the relatively well-off households that tended to obtain loans more often than others, as Table 9.1.1 shows. The proportion of households that received one or two loans is spread fairly evenly over income groups. The majority of households (58.6%) that received three or more loans, however, come from the relatively better-off groups in the community (quintiles IV and V).

Table 9.1.1. Proportion of Income Groups among SAADP Beneficiaries by Frequency of Loans (%)

Frequency of Loans	SAADP Beneficiaries by Quintile of Per Capita Household Expenditure before SAADP					N
	I	II	III	IV	V	
1	20.2 (40.2)	21.0 (40.8)	20.6 (40.5)	18.95 (39.3)	19.35 (39.6)	248
2	20.0 (40.3)	18.7 (39.3)	22.5 (42.0)	23.7 (42.8)	15.0 (35.9)	80
$\geq$3	17.2 (38.4)	13.8 (35.1)	10.3 (31.0)	17.2 (38.4)	41.4 (50.1)	29

Note: Figures in brackets are the standard deviations.

Qualitative information obtained in the field strengthens this finding. At the beginning of the project, that is at the time when credit funds were first released, loans were given mainly to poor households. Problems appeared, however, when loans had to be repaid since many participants, in particular those who depended on agriculture or fishing for a livelihood, were unable to pay back the money.

Because of this experience, the determining factor in decisions about whether a household would have the opportunity to receive a loan at the next (revolving) stage was its reliability in returning the previous credit. This policy was adopted because the success of the project, and in particular of the UPKD as the financial manager, would be interpreted from, among other things, the increase in funds managed by the UPKD. The consequence was that poor members of the community were no longer given priority in the selection of beneficiaries. Instead, beneficiaries were those who had economic activities or who seemed capable of repaying the credit.

The result of this shift in target was that participants from poor or 'pre-prosperous' households declined in number and similarly loans to farmers were restricted. Poor community groups then complained that SAADP micro-credit was more to the advantage of the well-off groups. Even public servants and village officials, encountered during field research, had been able to obtain loans from the UPKD. The relatively large number of credit recipients with a high level of education is an indication that less well educated members of the village community, who on the whole had low incomes, had increasingly fewer opportunities to obtain loans.

From what has been said above, the conclusion can be drawn that at the beginning of the project the poor were the group that benefited from SAADP because they received priority in the granting of credit. The opposite occurred, however, at the revolving stage when the opportunity for the poor to obtain loans decreased steadily because ability to repay became the main criterion in selection of participants.

9.2. The Role of SAADP in Poverty Reduction

Qualitative information reveals that, after loans were channeled to beneficiaries at the beginning of the project, economic activities in SAADP villages increased. With the availability of the loans, persons who owned small shops or food stalls were able to increase their stock of goods, while many fishermen were able to equip their boats with outboard motors, which enabled them to travel further out to sea. The number of fishing platforms and of traders buying cocoa beans in the sample villages in Donggala also increased greatly. In Muna, participants in sample villages were able to clear new land, making their holdings under tree crops much larger, while stone quarrying and crushing in sample villages in Konsel expanded steadily.

Does this relative increase in economic activities among the community in SAADP villages indicate that the SAADP project played a role in poverty reduction? In answer to this question the influence of SAADP on certain aspects of community life will be considered, including the poverty transition and distribution of welfare.

The Poverty Transition

Table 9.2.1 presents data concerning the proportion of SAADP and control households by poverty status between the pre- and post-SAADP periods. Changes in poverty status have been divided into the following categories: still poor, still not poor, a shift from being poor to being not poor, and a shift from being not poor to being poor. Data show that on the whole SAADP had an impact that tended to be positive on household welfare. If a comparison is made with control households, the proportion of SAADP households that were "still poor" tended to be smaller, while the proportion of households that were "still not poor" tended to be higher, except in Konsel. The proportion of SAADP households that changed from "poor to not poor" was higher than the proportion among control households, while the change from "not poor to poor" tended to be smaller.

The overall difference in the proportion of SAADP and control households shows that for households that were "still poor" (-2.9%) and that changed from "not poor to poor" (-1.4%) values are negative, while the figures for "still not poor" (2.7%) and "poor to not poor" (1.5%) are positive. This means that SAADP tended to have a positive impact on poverty reduction, even though the figures are statistically insignificant.

If seen in terms of performance by province, the impact of SAADP on poverty tended to be greater in Central Sulawesi than in South-east Sulawesi. In South-east Sulawesi three of the four indicators of transition from poverty reveal trends that are worse among SAADP households than among control households. Statistical testing shows, however, that the impact of the four indicators at provincial level is also insignificant.

In Donggala the proportion of SAADP households in the "poor to not poor" category (1.9%) is lower than for control households. In other words, the change in control household welfare tends to be better than in SAADP households. This can be explained by qualitative information that more women in control households weave cloth as an economic activity. Even so, the impact of SAADP on poverty transition in this district is also statistically insignificant.

Table 9.2.1. Proportion of SAADP and Control Households by Change in Poverty Status between Pre- and Post-SAADP Periods (%)

Poverty Transition	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Still poor	39.2 (49.1)	29.4 (45.8)	34.3 (47.6)	38.8 (49.0)	52.5 (50.2)	45.6 (49.9)	40.0 (49.0)
Still not poor	47.1 (50.2)	46.1 (50.1)	46.6 (50.0)	50.5 (50.2)	38.6 (48.9)	44.6 (49.8)	45.6 (49.9)
Poor to not poor	10.8 (31.2)	19.6 (39.9)	15.2 (36.0)	10.7 (31.0)	6.9 (25.5)	8.8 (28.4)	12.0 (32.5)
Not poor to poor	2.9 (17.0)	4.9 (21.7)	3.9 (19.5)	0.0 (0.0)	2.0 (14.0)	1.0 (9.9)	2.4 (15.5)
N	102	102	204	103	101	204	408
Control households:							
Still poor	43.6 (50.0)	47.0 (50.4)	45.3 (50.0)	40.4 (49.5)	40.4 (49.5)	40.4 (49.3)	42.9 (49.6)
Still not poor	40.0 (49.4)	41.2 (49.7)	40.6 (49.3)	36.5 (48.6)	53.8 (50.3)	45.2 (50.0)	42.9 (49.6)
Poor to not poor	12.7 (33.6)	5.9 (23.8)	9.4 (29.4)	19.2 (39.8)	3.8 (19.4)	11.5 (32.1)	10.5 (30.7)
Not poor to poor	3.6 (18.9)	5.9 (23.8)	4.7 (21.3)	3.8 (19.4)	1.9 (13.9)	2.9 (16.8)	3.8 (19.2)
N	55	51	106	52	52	104	210
Difference between SAADP and control households:							
Still poor	-4.4 (8.3)	-17.6* (8.1)	-11.0 (5.8)	-1.6 (8.4)	12.1 (8.5)	5.2 (6.0)	-2.9 (4.2)
Still not poor	7.1 (8.4)	4.9 (8.6)	-6.0 (6.0)	14.0 (8.4)	-15.2 (8.4)	-0.6 (6.0)	2.7 (4.2)
Poor to not poor	-1.9 (5.4)	13.7* (6.1)	5.8 (4.1)	-8.5 (5.8)	3.1 (4.0)	-2.7 (3.6)	1.5 (2.7)
Not poor to poor	-0.7 (3.0)	-1.0 (3.8)	-0.8 (2.4)	-3.8* (1.9)	0.1 (2.4)	-1.9 (1.5)	-1.4 (1.4)

Note: - Poverty transition is calculated by using the poverty line for per capita monthly household consumption as calculated by SMERU, which Rp76,802 (1999) and Rp88,141 (2003) in the Province of Central Sulawesi and Rp80,279 (1999) and Rp93,511 (2003) in the Province of South-east Sulawesi.

- Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- * Significant at 5% level.

The poverty transition among SAADP households was better than among control households in Tolitoli. The impact of SAADP can be seen from the difference between the proportions of SAADP and control households that were “still poor” (-17.6%) and between the proportions that were “poor but became not poor” (13.7%). This is the greatest difference among the four districts and both figures are statistically significant at 5 percent level, making the effect of SAADP on poverty transition in this district is the most striking of all areas. Qualitative information obtained in Tolitoli indicates that SAADP loans led to increased use of fertilizer and pesticide on cocoa trees and this in turn raised production. Since farmers are generally poor, this had a positive impact on poverty incidence in this district.

The effects of SAADP on changes in poverty in Muna are somewhat inconsistent. The difference in the proportion of SAADP and control households that moved from "poor to not poor" is –8.5% but the figure is insignificant, while the difference from "not poor to poor" is –3.8%, which is significant at the 5 percent level. There are indications that the level of welfare in control households is higher than in SAADP households. According to qualitative information, increasingly more persons from the control village have gone to Malaysia over the past two or three years as migrant workers and are employed as plantation laborers or in the non-agricultural sector.

In Konsel the difference between SAADP and control households is such that three out of the four indicators for poverty transition are worse in the SAADP than in the control households. The proportion of SAADP households that are "still poor" is 12.1% higher than that of control households. At the same time the proportion of SAADP households that are "still not poor" is 15.2% lower than the proportion of control households. Apart from that, even though the difference is not very great, Konsel is the only district in which the proportion of SAADP households that moved "from not poor to poor" tends to be higher than among control households. It seems likely that this is related to the frequency of crop failure due to pests that attacked the tree-crop land of SAADP households. In addition, there is a sawmill in the control village that makes a contribution to the village economy.

The Distribution of Welfare

One of the objectives of SAADP was to reduce the gap in welfare within the community. It was hoped that this would be achieved by raising the standard of living of poor groups, so that the gap between them and better-off groups in the community would become smaller.

Table 9.2.2 shows changes in the Gini Ratio of household expenditure in SAADP and control households between the time before SAADP commenced and after its conclusion.[27] From this table it can be seen that of the four SAADP districts, only Muna in South-east Sulawesi experienced an increase in inequality after implementation of the SAADP program. In the other three districts there was a decrease, even though it was relatively small. This means that in Muna the welfare level of the gap had risen by the end of the program, while in Donggala, Tolitoli and Konsel there was a drop. Overall the Gini Ratio decreased by 0.0078.

Meanwhile, the figures for the Gini Ratio among control households in all four sample districts show an overall decrease of 0.0383. If figures for SAADP and control households in all districts except Muna are compared, it can be seen that in Donggala and Konsel the decrease in the Gini Ratio among SAADP households is greater than among control households. By contrast, in Tolitoli the decrease in the Gini Ratio is smaller in SAADP than in control households. On the whole, the decrease among control households is greater than among SAADP participants by 0.0305. This indicates that the decrease in the level of the welfare gap is smaller among SAADP participants than among control households.

[27] Gini Ratio is an indicator of welfare distribution and it ranges in value from 0 to 1. A Gini Ratio of 0 shows that there is a perfect equality, while a value of 1 shows that there is a very high inequality because only one person controls all resources.

Table 9.2.2. Changes in the Gini Ratio Before and After SAADP

Classification	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households:							
Before	0.4555	0.3958	0.4265	0.3820	0.3254	0.3620	0.3963
After	0.4228	0.3552	0.3902	0.4137	0.3091	0.3853	0.3885
Change	-0.0327	-0.0406	-0.0363	0.0317	-0.0163	0.0233	-0.0078
Control households:							
Before	0.3728	0.4553	0.4214	0.3058	0.2658	0.3061	0.3763
After	0.3490	0.3839	0.3671	0.2940	0.2538	0.2996	0.3380
Change	-0.0238	-0.0714	-0.0543	-0.0118	-0.0120	-0.0065	-0.0383
Difference in change between SAADP and control households	-0.0089	0.0308	0.0180	0.0435	-0.0043	0.0298	0.0305

Other Welfare Indicators

Other welfare indicators that can be used to examine the impact of SAADP on poverty incidence include changes in the capacity of the poor to "finance children's education", "access health facilities", "participate in traditional ceremonies" and "face economic shocks" (see Table 9.2.3). In this table, poor households are those that, prior to the beginning of SAADP, were below the poverty line in their provinces.

Capacity to finance children's education. On the whole, the proportion of poor SAADP households that experienced a rise in their ability to pay for children's education was 11.0% higher than the proportion of control households that were also poor, but this difference is statistically insignificant. Only in Konsel did the impact of SAADP on ability to finance education (33.0%) show an influence that was statistically significant at 1 percent level. In Donggala and Tolitoli, the effect of SAADP on the increased ability was positive, while in Muna it was negative. Statistically, however, these figures are not significant.

According to qualitative information, the educational facilities available in most villages in both Central and South-east Sulawesi are limitd to elementary schools (SD). With the increase in the number of households with greater economic capacity and supported by strong motivation on the part of parents, more and more children have been able to continue their education at a higher level (junior and senior high school and tertiary level). This trend has also been supported by the family culture and the spirit of mutual assistance, which are still strong in all villages and include help with education. Usually village children who wish to go on to a higher level of schooling are "entrusted" to relatives or friends in the district or provincial capital in order to reduce expenditure on accommodation.

Table 9.2.3. Proportion of Poor SAADP and Control Households That Have Experienced an Increase in Capacity (%)

Indicator of Capacity	Central Sulawesi			South-east Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP households in the poor category before SAADP:							
To finance children's education	56.9 (50.0)	60.0 (49.5)	58.4 (49.5)	58.8 (49.7)	41.7 (49.7)	49.5 (50.2)	53.8 (50.0)
To access health services	66.7 (47.6)	72.0 (45.4)	69.3 (46.4)	49.0 (50.5)	36.7 (48.6)	42.3 (49.6)	55.2 (49.8)
To participate in traditional ceremonies	47.0 (50.4)	60.0 (49.5)	53.5 (50.1)	52.9 (50.4)	36.7 (48.6)	44.1 (49.9)	48.6 (50.1)
To face economic shocks	74.5 (44.0)	68.0 (47.1)	71.3 (45.5)	41.2 (49.7)	40.0 (49.4)	40.5 (49.3)	55.2 (49.8)
N	51	50	101	51	60	111	212
Control households in the poor category before SAADP:							
To finance children's education	48.4 (50.8)	44.4 (50.6)	46.6 (50.3)	61.3 (49.5)	8.7 (28.8)	38.9 (49.2)	42.8 (49.7)
To access health services	67.7 (47.5)	37.0 (49.2)	53.4 (50.3)	58.1 (50.2)	8.7 (28.8)	37.0 (48.7)	45.5 (50.0)
To participate in traditional ceremonies	48.4 (50.8)	44.4 (50.6)	46.6 (50.3)	41.9 (50.2)	13.0 (34.4)	29.6 (46.1)	38.4 (48.9)
To face economic shocks	77.4 (42.5)	33.3 (48.0)	56.9 (50.0)	67.7 (47.5)	13.0 (34.4)	44.4 (50.2)	50.9 (50.2)
N	31	27	58	31	23	54	112
Difference between SAADP and control households:							
To finance children's education	8.5 (11.5)	15.6 (11.9)	11.8 (8.2)	-2.5 (11.3)	33.0** (11.0)	10.6 (8.3)	11.0 (5.8)
To access health services	-1.0 (10.8)	35.0* (11.2)*	15.9* (7.9)	-9.1 (11.5)	28.0* (10.8)	5.3 (8.2)	9.7 (5.8)
To participate in traditional ceremonies	-1.4 (11.5)	15.6 (11.9)	6.9 (8.3)	11.0 (11.5)	23.7* (11.1)	14.5 (8.1)	10.2 (5.8)
To face economic shocks	-2.9 (9.9)	34.7** (11.3)	14.4 (7.8)	-26.5* (11.1)	27.0* 11.2)	-3.9 (8.2)	4.3 (5.8)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** Significant at 1% level.
- * Significant at 5% level.

Capacity in access to health services. On the whole, the proportion of poor SAADP households that said that their ability to access health services had risen was 9.7% greater than among control households but the figure is statistically insignificant. In Tolitoli and Konsel the effects of SAADP on increased capacity to obtain health services were respectively 35.0% (significant at 1 percent level) and 28.0% (significant at 5 percent level). At the provincial level in Central Sulawesi the impact (15.9%) was statistically significant at 5 percent level. By contrast, for households in Donggala and Muna, the effect of SAADP on this capacity tended to be negative, even though the figures are statistically insignificant.

Capacity to participate in traditional ceremonies. Overall, the proportion of poor SAADP households that experienced a rise in their ability to participate in traditional ceremonies was 10.2% higher than among control households that were also poor, but the figure is statistically insignificant. The same was found at provincial level. Only in

Konsel did this indicator show a statistically significant figure at 5 percent level (23.7%). Meanwhile, in Donggala the impact of SAADP tended to show a negative influence that was insignificant.

Capacity to face economic shocks. The proportion of poor SAADP households that have experienced increased capacity to face economic shocks is 4.3% higher than the proportion of poor control households, but the figure is again statistically insignificant. In Donggala and Muna the proportion of control households with greater capacity to face economic shocks is higher than among SAADP households. In Muna, the effect (-26.5%) is statistically significant at 5 percent level, while in Donggala (-2.9%) it is insignificant.

On the whole, it can be said that the effect of SAADP on the poverty transition, although positive, is small and insignificant. If each district is examined, influences are inconsistent; the greatest effect, however, occurred in Tolitoli. The impact of SAADP on reductions in the gap in household welfare is also small and in fact is less than in control households.

The effect of SAADP on other welfare indicators is generally statistically insignificant although positive. Only in Konsel has SAADP had a significant impact on the four additional welfare indicators, while in Tolitoli it has had an effect only on increased capacity in two of the four indicators.

BIBLIOGRAPHY

Badan Pusat Statistik. *Data Potensi Desa Tahun 2000*. Jakarta: 2000.

Badan Pusat Statistik Kabupaten Donggala, Sulawesi Tengah. *Kecamatan Banawa dalam Angka*. Donggala: 2000-2002.

Badan Pusat Statistik Kabupaten Donggala, Sulawesi Tengah. *Kabupaten Donggala dalam Angka*. Donggala: 2000-2002.

Badan Pusat Statistik Kabupaten Kendari, Sulawesi Tenggara. *Kecamatan Moramo dalam Angka*. Kendari: 2000-2002.

Badan Pusat Statistik Kabupaten Kendari, Sulawesi Tenggara. *Kabupaten Kendari dalam Angka*. Kendari: 2000-2002.

Badan Pusat Statistik Kabupaten Muna, Sulawesi Tenggara. *Kecamatan Parigi dalam Angka*. Raha: 2000-2002.

Badan Pusat Statistik Kabupaten Muna, Sulawesi Tenggara. *Kabupaten Muna dalam Angka*. Raha: 2000-2002.

Badan Pusat Statistik Kabupaten Tolitoli, Sulawesi Tengah. *Kecamatan Baolan dalam Angka*. Tolitoli: 2000-2002.

Badan Pusat Statistik Kabupaten Tolitoli, Sulawesi Tengah. *Kabupaten Tolitoli dalam Angka*. Tolitoli: 2000-2002.

Bina Swadaya. *Executive Summary: Due Diligence and Performance Audit of Village Financial Management Unit (UPKD), the Sulawesi Agricultural Area Development Project (SAADP) and Nusa Tenggara Agricultural Area Development Project (NTADP)*. Jakarta: September 2002.

---. *Laporan Audit Keuangan dan Manajemen UPKD Sulawesi Agricultural Area Development Project (SAADP)*. Jakarta: Agustus 2002.

Direktorat Jenderal Pembangunan Daerah (Ditjen Bangda), Departemen Dalam Negeri (Depdagri). *Petunjuk Pelaksanaan dan Panduan Teknis Operasional IMS-SAADP*. Jakarta: 2000.

Direktorat Pembinaan Pengembangan Wilayah, Ditjen Bangda, Depdagri. *Laporan Konsultan SAADP Bulan Juni-Juli 1997*.

Khandker, S. *Fighting Poverty with Microcredit: Experience of the Grameen Bank and Other Programs in Bangladesh*. Poverty and Social Policy Department, The World Bank, Washington D.C.: 1996.

Lembaga Penelitian SMERU. *Beberapa Laporan tentang Kredit Kecil di Kupang, Minahasa, Tanggamus, Cirebon, dan Yogyakarta*. Jakarta: 2002.

Morduch, J. *Does Microfinance Really Help the Poor: New Evidence from Flagship Programs in Bangladesh*. Department of Economics and HIID, Harvard University and Hoover Institution, Stanford University: 1998.

PPA Consultants. *Draft Laporan Akhir Technical Assistance for Implementation of the Sulawesi Agricultural Area Development Project (SAADP) IBRD Loan No. 4007 IND*. Ditjen Bangda, Depdagri, Jakarta: Desember 2003.

PPA Consultants. *Lampiran Draft Laporan Akhir Technical Assistance for Implementation of the Sulawesi Agricultural Area Development Project (SAADP) IBRD Loan No. 4007 IND*. Ditjen Bangda, Depdagri, Jakarta: Desember 2003.

PT Laras Respati Utama. *Final Report Studi Dampak NTAADP*. Ditjen Bangda, Depdagri, Jakarta.

PT Sumaplan Adicipta Persada. *Laporan Akhir Studi Dampak Proyek the Sulawesi Agricultural Area Development Project (SAADP)-IBRD Loan No. 4007 IND*. Ditjen Bangda, Depdagri, Jakarta: 2003.

World Bank. *Loan 4007-IND: Sulawesi Agricultural Area Development Project (Mid-Term Review Mission, January/February, 1999)*. Washington, D.C: March 15, 1999.

APPENDIX

APPENDIX 1. RESEARCH LOCATIONS

1. Donggala District, Province of Central Sulawesi

The four sample villages, which consist of three SAADP villages (Surumana, Tosale, and Salubomba) and one control village (Towale), are located in Banawa Subdistrict. All were once part of the left behind village (IDT) program. Geographically, the four villages are on the coast and stretch along the Strait of Makassar. A provincial road that forms part of the Trans-Sulawesi highway (which links Central and South Sulawesi) passes through the four villages, making road communications and transport facilities relatively easy for village communities.[1] The parts of the villages that border on the sea are occupied by fishermen and their households, while further inland the flat to hilly land is used for tree crops. In recent years many of the homes and fish-ponds owned by people along the coast have been threatened by floods at times when there is an unusually high tide because the mangroves that once protected the shore have been destroyed. Of the four sample villages, Surumana is the furthest from the district capital (77km); it is located very close to the boundary between Donggala District and Mamuju District in the adjacent Province of South Sulawesi. Towale is the closest to the district capital, which is only 11 km away (see Table 2.1.1).

Data from the 2003 *Podes* (Village Potential) indicate that Tosale, which covers an area of 23.5 sq. km, is the largest of the four sample villages. Surumana covers 14 sq. km, Towale 3.5 sq. km, and Salubomba 2.6 sq. km. Towale has the largest number of people (2,005 persons) and is the most densely populated (576 persons per sq. km). Tosale has a density of only 76 persons per sq. km, while Surumana and Salubomba have 94 persons and 423 persons per sq. km respectively.

Most of the residents of the sample villages obtain their livelihood mostly from the cultivation of tree crops, yet the four villages are known as fishing villages. Some households raise fish and shrimp in brackish-water ponds close to the sea as a source of income, while others earn a living as laborers, for example as construction workers, coconut harvesters, agricultural laborers, boat repairers, and the like. Many households in the four villages also make house roofing (*rumbia*) from the fronds of sago palms. This plaited material, which is also used for sheds in which livestock are kept, is sold in the town of Donggala and even in Palu, the provinces capital. Some of the people who live along the main road have established small shops (*warung*) that sell daily necessities, while others work as itinerant fish-sellers, traveling on foot, by bicycle or by motor-cycle from hamlet to hamlet.

The major tree-crop products in this area are cacao, coconuts, sago, cloves and cashew nuts. A small number of farmers cultivate irrigated rice. Almost all households grow other food crops such as sweet potatoes, corn, sago, bananas, and vegetables, although very largely for their own consumption. Some of the land in the four villages is still covered in trees and scrub. In each village, livestock, mainly cattle, can be seen grazing freely on tree-crop land and on home-lots.

[1] Public transport between villages and from villages to towns consists of minibuses, taxis and long-distance inter-provincial buses that operate 24 hours a day.

On the whole, local fishermen still use very simple equipment such as small boats with fishing lines, boats with 2-horsepower outboard motors (ketinting), or boats with medium-sized dragnets. Some use fishing platforms constructed from bamboo, empty drums, or small boats. At times when they cannot go to sea, many fishermen seek an income from one of the occupations mentioned above.

Most (around 60%) of the land in Surumana consists of smallholdings planted with cacao. Most of the households in this village were originally fishermen, but in the 1980s a series of very big storms destroyed their homes and belongings. They then rebuilt their homes on the low hills further inland, a move that encouraged the majority to change their source of livelihood and become cacao smallholders. In Salubomba, the majority of the people in one hamlet are also smallholders or else cultivate secondary food crops, while in other hamlets the people earn a living as fishermen and also at the same time as smallholders, petty traders, laborers, or artisans (construction workers, boat repairers, and the like).

Most of the people of Tosale are smallholders and fishermen. The main tree crops in this village are coconuts and cacao. In many of the hamlets of Tosale, women also work as hand-weavers. Marketing of their products presents no problems but production is still limited. A silk Donggala-style sarong worth Rp250,000 to Rp350,000, which normally takes two to three months to complete because weaving is done manually. In Towale village, the majority of households (75%) obtain a living as fishermen and as coconut, cacao, and sago smallholders. One relatively remote hamlet that protrudes out into the sea is a 'sea-centered' tourist area. As in Tosale, the weaving of Donggala cloth has expanded in Towale also. Most weavers are women because they have had more experience in this type of home industry and can work much faster than men.

Houses, in particular those along the coast and near the hills, are built on raised platforms, while those along the road are not. Most have roofs from corrugated iron or *rumbia*, while walls are made from brick and timber or from the stalks and ribs of sago palms. The floors of houses on platforms are made from boards while in other houses floors are of concrete. The government once provided building materials in the form of corrugated iron and cement to improve the condition of local houses in Salubomba and Towale.

The majority of households use river water for their daily needs. In Salubomba, the source of clean water is relatively better than in the other three villages since it comes from a mountain spring and is channeled through pipes installed as part of a clean-water project. Most people use the river or a community well for bathing, washing, and latrine purposes. Only a very small proportion of households have their own bathroom with a covered well. Electricity is now available in all sample villages. The Village Electricity Credit project (KLP) proved extremely beneficial to the community because costs were low. Those households that do not yet have electricity usually obtain it from neighbors in adjacent houses. Those who live in remote hamlets still use kerosene lamps that are attached to the wall or else lanterns for home lighting.

Households can purchase their daily needs from small warung or else from local markets, which operate on certain days in Towale and Tosale. Otherwise they can go to the market in a neighboring village. There are also itinerant vegetable vendors who come from Donggala and Palu by motor-cycle to sell their merchandise. They are

known locally by the Javanese term of address '*mas*' because most of them are men of Javanese origin who have lived in Central Sulawesi for many years.

Before the SAADP project was introduced, the itinerant 'cooperative' *Sangkakala*, which operates on a system of daily interest, was the only source of credit for local communities. Managers of the 'cooperative' used to come to people's houses to offer credit and at the same time to collect daily installments of loans. They had many customers despite the fact that interest rates on loans were extremely high at around 30% a month or 360% a year. Since the SAADP project commenced, community members have tended to borrow money only from the UPKD.

Educational facilities in the sample villages consist of one or two government primary schools (SDs) in each village. In both Tosale and Towale there is also a Madrasah Tsanawiyah, which is of the same level as a junior high school (SLTP). Towale also has a Madrasah Ibtidaiyah, which is equivalent to SD. Most households can afford to educate their children to senior high school level, even though this means that the children have to go to the subdistrict town. Health facilities at village level consist of an Auxiliary Community Health Center (*Puskesmas Pembantu*) in Towale and a Village Polyclinic (*Polindes*) in the other three villages. A *Puskesmas* located in the nearby village of Tolongano can be easily reached by the communities of the four sample villages as transport is always available.

2. Tolitoli District, Province of Central Sulawesi

As in Donggala, the three SAADP villages (Oyom, Salugan, and Dadakitan) and the control village (Tambun) in Tolitoli District are located in the same subdistrict, Baolan. Access from the district and subdistrict towns to Dadakitan and Tambun is relatively easy, whereas access to Salugan and Oyom is much more difficult because these two villages are situated on hilly land and the road is in poor condition, although currently under repair. Oyom is located at the greatest distance (32 km) from the district town, while Tambun, the closest, is only 6 km from the town. The journey to each village from the district town takes no more than one hour by public transport.

Public transport between villages and from villages to the subdistrict and district towns consists of passenger vehicles or *angkot*. The availability of these vehicles is important for those who wish to purchase or sell goods, especially in the town of Tolitoli. Another type of transport is the motorcycles carrying passanger or *ojek*, which is particularly important for communications with places that vehicles with four wheels have difficulty in reaching. On the whole, the surface of roads consists of earth and stones. Since the year 2000 electricity has been available in all four villages. Households depend on springs, wells, and rivers for water for daily domestic purposes. In all four villages water from springs has been channeled to settlements through a network of pipes. In Tambun, piped water from PDAM is also available.

Dadakitan, with an area of 157 sq. km, is the largest of the four villages. Oyom covers 146 sq. km, Salugan 68 sq. km, and Tambun 33 sq. km. Besides having the smallest area, Tambun also has the greatest number of people (6,306 persons), which gives it a population density of 191 persons to the sq. km. Density in the other villages is less than 16 persons per sq. km.

The main source of livelihood in the villages is agriculture, with smallholders cultivating cacao and cloves and food-crop farmers growing irrigated rice. They do not rely on only one crop, however. Besides having land under cacao, smallholders also plant other tree crops as well as vegetables, peanuts, corn, and the like. In addition to farming, many undertake work in other sectors. In Salugan ojek driving, stone collecting, and selling through *warung* provide alternative employment. In Oyom, many people, especially newcomers, are employed in the making of furniture such as cupboards and beds. In Dadakitan, *ojek* driving has been an alternative source of income for cacao and cloves producers for the past year. In many cases the income that they earn as ojek drivers is greater than their income from agriculture.

Those who do not own land or whose income from tree-crop land is insufficient usually work as wage labourers on land owned by other members of the community but for very low returns. Many of these people have sought a source of credit, one such source being SAADP, to finance the clearing of forests or other land to plant cacao in the hope that their income will rise.

Unpredictable natural conditions and seasonal fluctuations are the main constraint on agriculture. During 2003 and at the beginning of 2004 Tolitoli District received a considerable amount of rain, causing floods that damaged houses, tree-crop land and rice-fields. Cloves and cacao trees were submerged to the point where they could not produce good yields, while the lack of sunshine prevented farmers from drying their harvested crops in an optimum manner. Traces of the floods could still be seen when the SMERU team visited the areas concerned. In addition to constraints imposed by natural disasters, farmers have the problem of frequent fluctuations in prices for agricultural commodities, especially cacao and cloves. The fact that prices for these two commodities can be very high for a time and then fall drastically causes uncertainty about the size of household income.

Kiosks and warung represent the type of economic activity that is most stable in its development. Because of this stability the economic situation of households involved in this business is far better than that of farm households. Problems arise, however, when the number of people interested in establishing kiosks increases. This causes greater competition among them as there is relatively little expansion in the number of customers. Among the four sample villages, Salugan has the greatest number of kiosks. Unlike those in the other three villages, the kiosks in Salugan are large in scale and have a relatively wide range of the goods needed for daily life.

Only a few people in Oyom have had experience in obtaining credit from formal institutions, in this case the BRI village unit, despite the fact that Oyom is the most distant from the district capital of the four villages. It would seem that distance as such is not a problem or a limiting factor where banking services are concerned.

3. Muna District, Province of South-east Sulawesi

The villages chosen as research locations in Muna District are Wasolangka and Labulu-bulu in Parigi Subdistrict and Marobo and Wadolao in Bone Subdistrict. All are SAADP villages except Wadolao (the control village). Before subdivision was carried out in 2002, the four sample villages were all part of the same subdistrict of

Parigi, which is a part of Muna Island. All four are coastal villages and are located right on the sea.

Wasolangka has 1,513 people and covers an area of 14.5 sq. km, which makes it the largest in size and population of the four sample villages. It is located in the center of Parigi Subdistrict at a distance of approximately 55 km from the district capital and is closer to the town than the other three villages. Even so, it conveys a rural impression, since the majority of people still depend on wall lamps as their source of lighting and the use of electricity is very limited. The asphalt-surfaced road that passes though the village appears quiet because a passenger vehicle travels along it only once in a half an hour or an hour. These vehicles operate only until late afternoon. The road is even quieter on non-market days.

The village of Labulu-bulu, which is 7 km from the subdistrict town and 62 km from the district capital, was established only in 1993. This village is smaller in area and population than the other sample villages. It began to develop in 2001 with the arrival of Javanese and Balinese families.[2] At the present time Labulu-bulu consists of three hamlets, two of which are occupied by local Muna people and people from Java and one by people from Bali. The village covers an area of 5.5 sq. km and has 670 people or a population density of 122 persons per sq. km. The earth roads have been surfaced with stones but small vehicles have trouble in traversing them when there is rain. Public transport vehicles with four wheels are available only on days when markets are held in a neighboring village, that is, twice a week. If local people wish to go to the district town, they normally use a bicycle as far as the subdistrict town and then continue their journey by public transport.

Marobo village is located about 26 km from the former subdistrict capital (Parigi) but with division of the subdistrict the village has become the administrative center of Bone Subdistrict. It is 81 km from the district capital, to which it is connected by an asphalt road in a somewhat damaged condition. The village can be reached by public transport vehicles but their frequency is very limited. The village covers 12.3 sq. km and has 930 people, implying a population density of 75 persons per sq. km. Meanwhile, Wadolao, the fourth village, has an area of 8.79 sq. km and 948 people, implying a population density of 108 to the sq. km. The unpaved road linking it to the capital of Bone Subdistrict, a distance of 7 km, consists of stones. Four-wheeled public transport is available only on market days.

For the majority of households in the four sample villages, the main source of livelihood is agriculture, although small numbers of people are engaged in fishing. Many people obtain additional income from trade, or else from employment as artisans, labourers, *ojek* drivers, makers of fish-paste (*terasi*), producers of *rumbia* roofing material and timber-cutters in forests. The majority of households in Wasolangka, Marobo, and Wadolao cultivate food crops, especially corn, and tree crops, in particular cashew nuts. In their farming activities most cultivators in the three villages are not yet

[2] Formation of the village as a settlement area was pioneered by ten young university graduates because of soil fertility. Prior to that it was empty land along the sea coast. Because the pioneers were young people, it became known as Karang Taruna Labulu-bulu. Karang Taruna is the official village level youth organization in Indonesia. It was officially inaugurated by Hayono Isman, who at that time was Minister for Youth and Sport. His visit was used as an opportunity to encourage people to open up land and settle in the area.

familiar with the use of inputs like fertilizer and pesticides but rely on the generosity of nature. In the case of food crops, farmers practice field rotation in order to maintain yields.[3] In Labulu-bulu, the fourth village, farmers on the whole cultivate dry rice and annual crops. Because of the influence of Javanese and Balinese residents, the farming system in this village includes the use of fertilizer and pesticide and rotation of land is not practiced. Farmers also grow fruit-trees like citrus and *rambutan* on their home-lots. According to the village head, people in this village generally cultivate 1 to 2 ha of land.[4] Meanwhile, households that obtain their livelihood from fishing generally use very simple equipment and are unable to go very far from the shore.

Field observations and interviews with a number of respondents indicate that, apart from the similarity in livelihoods, the four sample villages have a number of other social and economic characteristics in common. The condition of houses is much the same, with most consisting of a house on a platform; the floor and walls are made of boards and the roof from leaves, *rumbia* or corrugated iron. Water for domestic purposes is drawn by hand from one's own or a neighbor's well. Facilities for bathing, washing, and latrine purposes are very simple and are located outside houses. House lighting is generally provided by wall lamps while wood is used as cooking fuel. Food crops are normally used for immediate consumption needs, while tree-crop products are generally sold to a local intermediate trader. Households usually sell other products like bananas, *sirsak* fruit, sweet potatoes and chickens in the nearest market on market days. The food consumption pattern within the community consists of rice or corn and whatever vegetables and fish are available. If households have sufficient money, they eat rice as their staple food but otherwise they replace it with corn or cassava. Vegetables for daily consumption are obtained from their own land or else are requested from a neighbor.

The three SAADP villages also received PPK assistance. Whereas SAADP loans could be obtained for a range of undertakings including agriculture at the beginning of the project, on the whole PPK was lent only to those with a fixed or daily income, such as traders and public servants. PPK also gave priority to persons who were not SAADP participants. In Wasolangka there is an itinerant cooperative from outside the village that extends loans to traders, *terasi*-makers and fishermen. The amounts are relatively small, normally ranging from Rp100,000 to Rp200,000, with an interest rate of 20% per month and daily repayments every day of the month. In Labulu-bulu there is a revolving cattle project conducted by the Agricultural Service. Some 90 cattle have been lent to the community, with four cows per household at the most. People in all four villages can access credit from banking institutions (usually the BRI), certain

[3] The rotation cycle is as follows. After land (new or unused land or unproductive tree-crop land) is cleared, food crops are usually planted, sometimes in conjunction with *jambu mete* trees, which produce cashew nuts. When soil fertility decreases (usually after two or three planting seasons), the cultivator abandons the fields and clears new land. If the land has not been planted with tree crops, it is cleared again and replanted with food crops after a minimum period of five years. But if tree crops have been planted, it is retained until trees are no longer productive. With this rotation system households need at least three pieces of land for food crops. If they do not have sufficient land, or if the land has been left under tree crops, they usually move on to unused land. The area needed for food crops for one family is between 0.5 and 1 ha. Even though the area can be extended because there is still plenty of unused land, lack of labour is a major constraint since generally only household labour is used.

[4] Members of the community can ask the village head for additional land if the land that they control has already been well cultivated. The village head gives priority to those who have only 1 ha of arable land but limits expansion in holdings to 3 ha.

cooperatives (such as the public servants' cooperative) and motor-cycle dealers, located in the towns of other subdistricts or in the district capital. Usually credit of this kind is given only to persons with a fixed income such as public servants and persons receiving a pension. Other forms of credit available in all villages consist of informal loans from relatives, friends, or neighbors.

4. Konawe Selatan (Konsel) District[5], Province of South-East Sulawesi

The SAADP sample villages consist of Amohola, Tambosupa, and Lamokula, which are situated in Moramo Subdistrict.[6] Because of difficulty in identifying a control village in the same subdistrict, Lamotau village in Kolono Subdistrict was chosen for control purposes.

Moramo Subdistrict lies to the south-east of Kendari, the provincial capital. The distance from the district capital to the subdistrict capital is approximately 50 km. All the sample SAADP villages are located on the asphalt-surfaced district road that links the administrative capitals of Moramo and Kolono Subdistricts with Kendari. As the road approaches Kolono, it deteriorates in quality. The surface of a section that is not yet asphalted consists of stones. Also, it is quite steep in a number of hilly places. Kolono is some 40 km to the south of Moramo. The journey from Kendari to Moramo takes about one and a half hours by public minibus or Damri bus, while from Moramo to Kolono it takes about one hour.

Tambosupa village, which consists of three hamlets, has an area of 41 sq. km and a population of 689 persons. Amohola village, which is also made up of three hamlets, is 65 sq. km in area and has 728 people. Lamokula village, with four hamlets, covers 55 sq. km and has a population of 784. This village was originally part of Amohola until the latter was subdivided. A further subdivision of Amohola occurred, leading to the formation of Wawodengi village. This explains the proximity of the three villages to one another. The distance from these villages to the subdistrict capital is no more than three kilometers and transport is available in the form of minibuses or buses.

The control village of Lamotau in Kolono Subdistrict is two kilometers from the subdistrict capital. The distance to the district capital is around 100 km and public transport can be used. In fact, there is a short cut of about ten kilometers but the road is in an extremely poor condition. This village consists of three hamlets, covers 48 sq. km, and has a population of only 378 persons.

---

[5] In 2003 Kendari District was divided into two districts, namely, Konawe District and Konawe Selatan (South Konawe) District. The name 'Kendari' is now used only for Kendari City, which is the capital of the Province of South-east Sulawesi. The capital of Konawe District is Unaaha, which had previously been the capital of Kendari District. It is situated about 70 km to the south-west of the city of Kendari. The capital of Konawe Selatan District is Andoolo, which is some 60 km to the south of Kendari. The subdistricts of Moramo and Kolono, in which the sample villages are located, are part of Konawe Selatan (Konsel) District.

[6] Moramo Subdistrict was subdivided into the Subdistricts of Moramo and Laonti. The former consists of 22 villages, of which 18 received SAADP assistance. Moramo subdistrict is located on the coastal plain; part of it extends to the sea. Laonti Subdistrict consists of 18 villages, of which only two participated in SAADP. All of these 18 villages are located on the sea.

Livelihoods in the four sample villages have both similarities and differences. The main similarity lies in the fact that the majority of people obtain a living from the cultivation of tree crops like cacao, cashew nuts and coconuts, the raising of cattle, the production of sago flour, and the management of *warung* that sell daily necessities. Differences, however, are found in each village. People in Tambosupa own rain-fed rice-fields in which they cultivate rice in the wet season and soya beans and mung beans in the dry season. Rice-fields are located around settlements, which means that people are usually at home or else close by. The people of Amohola have no rice-fields but own dry fields which are located between three and five kilometers from the village and are usually planted with dry rice and soya beans. Cultivators and their wives normally stay on this land and return home to the village only once a week for Friday prayers. The people of Lamokula have small businesses that involve the crushing of rocks from the nearby mountains. Only a few households cultivate land. Some people cut wood in forests for sale as building material. This is done with a timber-felling permit issued by the regional government but in many cases it takes the form of illegal logging.

Lamotau village is located close to mountains. Some of its people earn a living from tree-crop cultivation. They obtain permission from the village head to clear forested land, which they then plant with cacao. Others search through forests for rattan and timber suitable for building purposes. Approximately July 2003, a sawmill was established in the village by a timber entrepreneur from Kendari. A number of local men are employed in the sawmill where, after felling trees and carrying the wood from the forest, they cut it into suitable lengths. The timber company, which also purchases wood taken illegally from forests, has a logging permit from the regional government. According to information from local people, some of the trees that are being felled are teak and were planted during a reforestation program several decades ago, but some of the timber comes from illegal felling in Muna.

For the past five years, production of cacao and cashew nuts in Moramo Subdistrict has decreased. The period between 1998 – 1999 was the time of glory for local cultivators of these two crops because prices were high and yields were good. The period that followed is regarded as a time of decline. Certain sources of information say that the drop in output of cashew nuts can be traced to the fact that the trees are old and should have been replaced. Others say that the reason is the lack of attention given to the trees by cultivators when prices fell. Fertilizer is usually not applied because cultivators believe that the soil is still fertile and fields are rarely weeded and cleaned because maintenance of this kind is expensive. In the case of cacao, the drop in yields is very largely due to pests that damage the pods.

At the present time many farmers are reluctant to raise cattle because of a regulation which says that if livestock damage the crops of other people, the owner will be fined. In this area cattle are not kept in stalls but are allowed to roam freely. A case occurred in Tambosupa where an owner had to pay a fine of Rp25,000 and had to give compensation that covered the extent of the crop damage. Apart from livestock, wild pigs cause disturbance and even destruction to tree and food crops planted by farmers. To prevent this, farmers put fences around their fields. One cultivator in Amohola planted 200 coconut trees but only 50 survived the damage done by cattle and wild pigs.

Not many of the respondents who were encountered have obtained credit outside SAADP. Several have borrowed small sums of money from the 'cooperative' (money-lender) in Moramo Subdistrict for a period of one month. Repayment is done on a daily installment basis, at an interest rate of 20% per month. A very small number, mainly public servants, have borrowed from the bank to cover the cost of house construction or from a motor-cycle dealer to purchase a motor-cycle. A few have borrowed money from a *warung* or from relatives and have paid interest of 5% to 10% per month.

APPENDIX II

Table 1.1. SAADP Fund Allocation in Sample Villages

District/ Sub-district	Sample Village	Fiscal Year	Credit Funds	P4-IMS Funds	BOP Funds	Total
Konsel[1]/ Moramo	Amohola	Amount	143,699,700	20,142,750	6,728,550	170,571,000
		1999/2000	87,300,000	0	2,700,000	90,000,000
		2000	56,399,700	20,142,750	4,028,550	80,571,000
	Tambosupa	Amount	137,500,000	28,750,000	8,750,000	175,000,000
		2000	78,000,000	7,500,000	4,500,000	90,000,000
		2001	59,500,000	21,250,000	4,250,000	85,000,000
	Lamokula	Amount	68,000,000	22,250,000	4,750,000	95,000,000
		2001	68,000,000	22,250,000	4,750,000	95,000,000
Muna[2]/ Parigi	Wasolangka	Amount	150,000,000	35,850,000	6,500,000	192,350,000
		1999/2000	70,000,000	18,850,000	2,500,000	91,350,000
		2002	80,000,000	17,000,000	4,000,000	101,000,000
	Labulu-bulu	Amount	83,800,000	58,700,000	7,500,000	150,000,000
		2000	7,800,000	58,700,000	3,500,000	70,000,000
		2001	76,000,000	0	4,000,000	80,000,000
	Marobo	Amount	52,900,000	13,600,000	3,500,000	70,000,000
		2000	52,900,000	13,600,000	3,500,000	70,000,000
Donggala[2]/ Banawa	Salubomba	Amount	192,000,000	0	8,000,000	200,000,000
		2000	97,000,000	0	3,000,000	100,000,000
		2002	95,000,000	0	5,000,000	100,000,000
	Surumana	Amount	192,000,000	0	8,000,000	200,000,000
		2000	97,000,000	0	3,000,000	100,000,000
		2002	95,000,000	0	5,000,000	100,000,000
	Tosale	Amount	96,000,000	0	4,000,000	100,000,000
		2000	48,500,000	0	1,500,000	50,000,000
		2003	47,500,000	0	2,500,000	50,000,000
Tolitoli[3]/ Baolan	Oyom	Amount	N/A	N/A	N/A	159,566,900
		2000	N/A	N/A	N/A	67,066,900
		2001	N/A	N/A	N/A	92,500,000
	Salugan	Amount	N/A	N/A	N/A	173,859,100
		2000	N/A	N/A	N/A	78,859,100
		2001	N/A	N/A	N/A	95,000,000
	Dadakitan	Amount	N/A	N/A	N/A	172,688,550
		2000	N/A	N/A	N/A	77,688,550
		2001	N/A	N/A	N/A	95,000,000

Data source: [1] Cluster Project Leader.
[2] UPKD Leader.
[3] Central Sulawesi Bappeda.

Appendix Table 4.1. SAADP Credit whose Realization was Less than Proposed (%)

Activity/Business Type	Central Sulawesi						Southeast Sulawesi						Total	
	Donggala		Tolitoli		Total		Muna		Konsel		Total			
	Proportion	N	Proportion	N	Proportion	N	Proportion	N	Proportion	N	Proportion	N	Proportion	N
Farming	5.0 (22.4)	20	27.2 (44.8)	70	22.2 (41.8)	90	63.3 (48.7)	49	67.3 (47.4)	55	65.4 (47.8)	104	45.4 (49.9)	194
Sea Fishing	15.8 (37.5)	19	- -	0	15.8 (37.5)	19	40.0 (54.8)	5	100.0 (0.0)	1	50.0 (54.8)	6	24.0 (43.6)	25
Animal Husbandry/ Aquaculture	12.5 (35.4)	8	20 (42.2)	10	16.7 (38.4)	18	38.5 (50.6)	13	90.9 (30.2)	11	62.5 (49.4)	24	42.9 (50.1)	42
Home Industry	26.1 (44.9)	23	25.0 (50.0)	4	25.9 (44.7)	27	0.0 (0.0)	2	53.3 (51.6)	15	47.1 (51.4)	17	34.1 (48.0)	44
Trade	10.4 (30.8)	67	16.2 (37.4)	37	12.5 (33.2)	104	13.1 (34.0)	61	69.6 (47.0)	23	28.6 (45.4)	84	19.7 (39.9)	188
Others	0.0 (0.0)	6	0.0 (0.0)	1	0.0 (0.0)	7	0.0 (0.0)	4	69.2 (48.0)	13	52.9 (51.4)	17	37.5 (49.4)	24
Home Improvement	0.0 (0.0)	1	40 (54.8)	7	25.0 (46.3)	8	0.0 (0.0)	24	0	0	0.0 (0.0)	24	6.3 (24.6)	32
Cultivate Unused Land	- -	0	0.0 (0.0)	1	0.0 (0.0)	1	71.4 (48.8)	7	0	0	71.4 (48.8)	7	62.5 (51.8)	8
N		144		130		274		165		118		283		557

Note: Figures in brackets are the standard deviations.

Appendix Table 8.1. Proportion of SAADP Credit by Proposed Activity and Actual Use (%)

Activity/Business Type	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Proposed:							
- Farming	13.9 (34.7)	55.4 (49.9)	33.6 (47.3)	29.7 (45.8)	45.8 (50.0)	36.4 (48.2)	35.0 (47.7)
- Sea Fishing	13.2 (34.0)	0.0 (0.0)	6.9 (25.5)	3.0 (17.2)	0.8 (9.2)	2.1 (14.4)	4.5 (20.7)
- Animal Husbandry/Aquaculture	5.6 (23.0)	7.7 (26.8)	6.6 (24.8)	9.7 (29.7)	9.3 (29.2)	9.5 (29.4)	8.1 (27.3)
- Home Industry	16.0 (36.8)	4.6 (21.1)	10.6 (30.8)	1.8 (13.4)	12.7 (33.5)	6.4 (24.4)	8.4 (27.8)
- Trade	46.5 (50.0)	33.1 (47.2)	40.1 (49.1)	37.6 (48.6)	19.5 (39.8)	30.0 (45.9)	35.0 (47.7)
- Others	4.2 (20.0)	1.5 (12.4)	2.9 (16.9)	3.6 (18.8)	11.0 (31.4)	6.7 (25.1)	4.8 (21.5)
- Cultivate Unused Land	0.0 (0.0)	0.8 (8.8)	0.4 (6.0)	7.3 (26.0)	0.0 (0.0)	4.2 (20.2)	2.3 (15.1)
- Purchase/Repair Equipment	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.8)	0.0 (0.0)	0.4 (5.9)	0.2 (0.2)
- Educational Expenses	2.1 (14.3)	0.0 (0.0)	1.1 (10.4)	10.3 (30.5)	0.0 (0.0)	6.0 (23.8)	3.6 (18.6)
- Health Expenses	0.0 (0.0)	0.8 (8.8)	0.4 (6.0)	1.2 (11.0)	0.0 (0.0)	0.7 (8.4)	0.5 (7.3)
- Home Improvement	0.7 (8.3)	3.8 (19.3)	2.2 (14.7)	2.4 (15.4)	0.0 (0.0)	1.4 (11.8)	1.8 (13.3)
- Consumption	0.0 (0.0)	0.8 (8.8)	0.4 (6.0)	1.2 (11.0)	0.0 (0.0)	0.7 (8.4)	0.5 (7.3)
- TKI fees	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.8)	0.0 (0.0)	0.4 (20.2)	0.2 (4.2)
Actual Use:							
- Farming	16.0 (36.8)	60.0 (49.2)	36.9 (48.3)	28.5 (45.3)	53.4 (50.1)	38.9 (48.8)	37.9 (48.6)
- Sea Fishing	13.2 (34.0)	0.0 (0.0)	6.96 (25.5)	3.0 (17.2)	0.0 (0.0)	1.8 (13.2)	4.3 (20.3)
- Animal Husbandry/Aquaculture	5.6 (23.0)	6.9 (25.5)	6.2 (24.2)	10.3 (30.5)	5.9 (23.7)	8.5 (27.9)	7.4 (26.1)
- Home Industry	16.7 (37.4)	5.4 (22.7)	11.3 (31.7)	1.8 (13.4)	12.7 (33.5)	6.4 (24.4)	8.8 (28.4)
- Trade	46.5 (50.0)	33.8 (47.5)	40.5 (49.2)	33.9 (47.5)	16.1 (36.9)	26.5 (44.2)	33.4 47.2)
- Others	3.5 (18.4)	1.5 (12.4)	2.6 (15.8)	4.8 (21.5)	10.2 (30.4)	7.1 (25.7)	4.8 (21.5)
- Cultivate Unused Land	0.0 (0.0)	1.5 (12.4)	0.7 (8.5)	7.9 (27.0)	0.0 (0.0)	4.6 (21.0)	2.7 (16.2)
- Purchase/Repair Equipment	0.0 (0.0)	0.8 (8.8)	0.4 (6.0)	0.6 (7.8)	0.0 (0.0)	0.4 (5.9)	0.4 (6.0)
- Educational Expenses	4.9 (21.6)	0.0 (0.0)	2.6 (15.8)	10.9 (31.3)	6.8 (25.2)	9.2 (28.9)	5.9 (23.6)
- Health Expenses	2.8 (16.5)	2.3 (15.1)	2.6 (15.8)	1.2 (11.0)	1.7 (13.0)	1.4 (11.8)	2.0 (13.9)
- Home Improvement	4.9 (21.6)	4.6 (21.1)	4.7 (21.3)	7.9 (27.0)	1.7 (13.0)	5.3 (22.4)	5.0 (21.9)
- Consumption	2.8 (16.5)	3.8 (19.3)	3.3 (17.9)	3.6 (18.8)	4.2 (20.2)	3.9 (19.4)	3.6 (18.6)
- TKI fees	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.6 (7.8)	0.0 (0.0)	0.4 (5.9)	0.2 (4.2)
N SAADP Credit	144	130	274	165	118	283	557

Note: -Figures in brackets are the standard deviations.
-Respondents can provide more than one answer.

Appendix Table 8.2. Proportion of Households by Changes in Amount/Type of Economic Activity (%)

Change in Amount/Type of Economic Activity	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
SAADP Household:							
Increased	18.6 (39.1)	26.5 (44.3)	22.5 (41.9)	47.6 (50.2)	22.8 (42.1)	35.3 (47.9)	28.9 (45.4)
No change	61.8 (48.8)	59.8 (49.3)	60.8 (48.9)	48.5 (50.2)	67.3 (47.1)	57.8 (49.5)	59.3 (49.2)
Decreased	8.8 (28.4)	8.8 (28.4)	8.8 (28.4)	1.9 (13.9)	5.9 (23.8)	3.9 (19.5)	6.4 (24.5)
Change in Type	10.8 (31.2)	4.9 (21.7)	7.8 (27.0)	1.9 (13.9)	4.0 (19.6)	2.9 (16.9)	5.4 (22.6)
N	102	102	204	103	101	204	408
Control Household:							
Increased	27.3 (44.9)	25.5 (44.0)	26.4 (44.3)	38.5 (49.1)	13.5 (34.5)	26.0 (44.1)	26.2 (44.1)
No change	52.7 (50.4)	43.1 (50.0)	48.1 (50.2)	46.1 (50.3)	67.3 (47.4)	56.7 (49.8)	52.4 (50.1)
Decreased	5.5 (22.9)	5.9 (23.8)	5.7 (23.2)	7.7 (26.9)	3.8 (19.4)	5.8 (23.4)	5.7 (23.3)
Change in Type	14.5 (35.6)	25.5 (44.0)	19.8 (40.0)	7.7 (26.9)	15.4 (36.4)	11.5 (32.1)	15.7 (36.5)
N	55	51	106	52	52	104	210
Difference between SAADP and Control:							
Increased	-8.7 (7.2)	1.0 (7.6)	-3.9 (5.2)	9.1 (8.4)	9.3 (6.4)	9.3 (5.5)	2.7 (3.8)
No change	9.1 (3.9)	16.7 (8.5)	12.7* (6.0)	2.4 (8.6)	0.0 (8.1)	1.1 (6.0)	6.9 (4.2)
Decreased	3.3 (4.1)	2.9 (4.3)	3.1 (3.0)	-5.8 (4.0)	2.1 (3.6)	-1.9 (2.7)	0.7 (2.0)
Change in Type	-3.7 (5.7)	-20.6** (6.5)	-12.0** (4.3)	-5.8 (4.0)	-11.4* (5.4)	-8.6* (3.4)	-10.3** (2.8)

Note: - Figures in brackets are the standard deviations; in the case of differences, figures indicate the standard errors.
- ** significant at the 1 percent level.
- * significant at the 5 percent level.

Appendix Table 8.3a. Proportion of SAADP Households by Changes in Condition of Residence(%)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Roof:							
Improved	11.8 (32.4)	3.9 (19.5)	7.8 (27.0)	17.5 (38.2)	5.9 (23.8)	11.8 (32.3)	9.8 (29.8)
The same	83.3 (37.5)	88.2 (32.4)	85.8 (35.0)	81.5 (39.0)	94.1 (23.8)	87.7 (32.9)	86.8 (33.9)
Worsened	4.9 (21.7)	7.8 (27.0)	6.4 (24.5)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	3.4 (18.2)
Wall:							
Improved	14.7 (35.6)	3.9 (19.5)	9.3 (29.1)	1.0 (9.9)	7.9 (27.1)	4.4 (20.6)	6.9 (25.3)
The same	83.3 (37.5)	96.1 (19.5)	89.7 (30.5)	99.0 (9.9)	92.1 (27.1)	95.6 (20.6)	92.6 (26.1)
Worsened	2.0 (13.9)	0.0 (0.0)	1.0 (9.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (7.0)
Floor:							
Improved	6.9 (25.4)	11.8 (32.4)	9.3 (29.1)	5.8 (23.5)	5.0 (21.8)	5.4 (22.6)	7.3 (26.1)
The same	91.1 (28.5)	88.2 (32.4)	89.7 (30.5)	94.2 (23.5)	95.0 (21.8)	94.6 (22.6)	92.2 (26.9)
Worsened	2.0 (13.9)	0.0 (0.0)	1.0 (9.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (7.0)
Building area:							
Increased	22.5 (42.0)	26.5 (44.3)	24.5 (43.1)	9.7 (29.8)	10.9 (31.3)	10.3 (30.5)	17.4 (38.0)
The same	75.5 (43.2)	73.5 (44.3)	74.5 (43.7)	88.3 (32.2)	88.1 (32.5)	88.2 (32.3)	81.4 (39.0)
Decreased	2.0 (13.9)	0.0 (0.0)	1.0 (9.9)	1.9 (13.9)	1.0 (10.0)	1.5 (12.1)	1.2 (11.0)
Main source of light:							
Improved	16.7 (37.5)	44.1 (49.9)	30.4 (46.1)	7.8 (26.9)	15.8 (36.7)	11.8 (32.3)	21.1 (40.8)
The same	82.3 (38.3)	54.9 (50.0)	68.6 (46.5)	92.2 (26.9)	84.2 (36.7)	88.2 (32.3)	78.4 (41.2)
Worsened	1.0 (9.9)	1.0 (9.9)	1.0 (9.9)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (7.0)
Type of cooking fuel:							
Improved	13.7 (34.6)	22.5 (42.0)	18.1 (38.6)	9.7 (29.8)	7.9 (27.1)	8.8 (28.4)	13.5 (34.2)
The same	84.3 (36.5)	75.5 (43.2)	79.9 (40.2)	89.3 (31.0)	92.1 (27.1)	90.7 (29.1)	85.3 (35.5)
Worsened	2.0 (13.9)	2.0 (13.9)	2.0 (13.9)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	1.2 (11.0)
Water source for drinking and cooking:							
Improved	5.9 (23.6)	11.8 (32.4)	8.8 (28.4)	1.9 (13.9)	3.0 (17.1_	2.5 (15.5)	5.6 (23.1)
The same	94.1 (23.6)	84.3 (36.5)	89.2 (31.1)	98.1 (13.9)	78.2 (41.5)	88.2 (32.3)	88.7 (31.7)
Worsened	0.0 (0.0)	3.9 (19.5)	2.0 (13.9)	0.0 (0.0)	18.8 (39.3)	9.3 (29.1)	5.6 (23.1)

Appendix Table 8.3a. (continued)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Water source for bathing and washing:							
Improved	5.9 (23.6)	10.8 (31.2)	8.3 (27.7)	2.9 (16.9)	3.0 (17.1)	2.9 (16.9)	5.6 (23.1)
The same	94.1 (23.6)	88.2 (32.4)	91.2 (28.4)	97.1 (16.9)	81.2 (39.3)	89.2 (31.1)	90.2 (30.0)
Worsened	0.0 (0.0)	1.0 (9.9)	0.5 (7.0)	0.0 (0.0)	15.8 (36.7)	7.8 (27.0)	4.2 (20.0)
Type of bathing and washing facilities:							
Improved	3.9 (19.5)	8.8 (28.5)	6.4 (24.5)	3.9 (19.4)	1.0 (10.0)	2.4 (15.5)	4.4 (20.6)
The same	95.1 (21.7)	91.2 (28.5)	93.1 (25.3)	96.1 (19.4)	98.0 (14.0)	97.1 (16.9)	95.1 (21.6)
Worsened	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	0.0 (0.0)	1.0 (10.0)	0.5 (7.0)	0.5 (7.0)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Appendix Table 8.3b. Proportion of Control Households by Changes in Condition of Residence (%)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Roof:							
Improved	3.6 (18.9)	9.8 (30.0)	6.6 (25.0)	19.2 (39.8)	5.8 (23.5)	12.5 (33.2)	9.5 (29.4)
The same	96.4 (18.9)	78.4 (41.5)	87.7 (33.0)	80.8 (39.8)	94.2 (23.5)	87.5 (33.2)	87.6 (33.0)
Worsened	0.0 (0.0)	11.8 (32.5)	5.7 (23.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.9 (16.7)
Wall:							
Improved	10.9 (31.5)	2.0 (14.0)	6.6 (25.0)	1.9 (13.9)	11.5 (32.3)	6.7 (25.2)	6.7 (25.0)
The same	89.1 (31.5)	98.0 (14.0)	93.4 (25.0)	98.1 (13.9)	82.7 (38.2)	90.4 (29.6)	91.9 (27.3)
Worsened	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	5.8 (23.5)	2.9 (16.8)	1.4 (11.9)
Floor:							
Improved	5.5 (22.9)	5.9 (23.8)	5.7 (23.2)	1.9 (13.9)	19.2 (39.8)	10.6 (30.9)	8.1 (27.3)
The same	94.5 (94.5)	88.2 (32.5)	91.5 (28.0)	98.1 (13.9)	71.2 (45.7)	84.6 (36.3)	88.1 (32.5)
Worsened	0.0 (0.0)	5.9 (23.8)	2.8 (16.7)	0.0 (0.0)	9.6 (29.8)	4.8 (21.5)	3.8 (19.2)
Building area:							
Increased	16.4 (37.3)	11.8 (32.5)	14.2 (35.0)	5.8 (23.5)	19.2 (39.8)	12.5 (33.2)	13.3 (34.1)
The same	81.8 (38.9)	80.4 (40.1)	81.1 (39.3)	92.3 (26.9)	76.9 (42.5)	84.6 (36.3)	82.9 (37.8)
Decreased	1.8 (13.5)	7.8 (27.2)	4.7 (21.3)	1.9 (13.9)	3.9 (19.4)	2.9 (16.8)	3.8 (19.2)
Main source of light:							
Improved	10.9 (31.5)	35.3 (48.3)	22.6 (42.0)	15.4 (36.4)	25.0 (43.7)	20.2 (40.3)	21.4 (41.1)
The same	89.1 (31.5)	64.7 (48.3)	77.4 (42.0)	84.6 (36.4)	69.2 (46.6)	76.9 (42.3)	77.2 (42.1)
Worsened	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	5.8 (23.5)	2.9 (16.8)	1.4 (11.9)
Type of cooking fuel :							
Improved	12.7 (33.6)	15.7 (36.7)	14.2 (35.0)	3.8 (19.4)	1.9 (13.9)	2.9 (16.8)	8.6 (28.1)
The same	87.3 (33.6)	84.3 (36.7)	85.8 (35.0)	96.2 (19.4)	98.1 (13.9)	97.1 (16.8)	91.4 (28.6)
Worsened	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Water source for drinking and cooking:							
Improved	0.0 (0.0)	17.6 (38.5)	8.5 (28.0)	0.0 (0.0)	3.8 (19.4)	1.9 (13.8)	5.2 (22.3)
The same	96.4 (18.9)	76.5 (42.8)	86.8 (34.0)	100.0 (0.0)	90.4 (29.8)	95.2 (21.5)	91.0 (28.8)
Worsened	3.6 (18.9)	5.9 (23.8)	4.7 (21.3)	0.0 (0.0)	5.8 (23.5)	2.9 (16.8)	3.8 (19.2)

Appendix Table 8.3b. (continued)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Water source for bathing and washing:							
Improved	1.8 (13.5)	17.6 (38.5)	9.4 (29.4)	0.0 (0.0)	3.8 (19.4)	1.9 (13.8)	5.7 (23.3)
The same	94.6 (22.9)	76.5 (42.8)	85.8 (35.0)	100.0 (0.0)	92.3 (26.9)	96.2 (19.3)	91.0 (28.8)
Worsened	3.6 (18.9)	5.9 (23.8)	4.7 (21.3)	0.0 (0.0)	3.8 (19.4)	1.9 (13.8)	3.3 (18.0)
Type of bathing and washing facilities:							
Improved	3.6 (18.9)	9.8 (30.0)	6.6 (25.0)	1.9 (13.9)	3.9 (19.4)	2.9 (16.8)	4.8 (21.3)
The same	90.9 (29.0)	86.3 (34.8)	88.7 (31.8)	96.2 (19.4)	94.2 (23.5)	95.2 (21.5)	91.9 (27.3)
Worsened	5.5 (22.9)	3.9 (19.6)	4.7 (21.3)	1.9 (13.9)	1.9 (13.9)	1.9 (13.8)	3.3 (18.0)
N	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

Appendix Table 8.3c. Difference in Proportion of SAADP and Control Households by Changes in Condition of Residence (%)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Roof:							
Improved	8.2* (4.1)	-5.9 (4.6)	1.2 (3.1)	-1.7 (6.7)	0.1 (4.0)	-0.7 (4.0)	0.3 (2.5)
The same	-13.1** (4.5)	9.8 (6.6)	-1.9 (4.0)	0.7 (6.7)	-0.1 (4.0)	0.2 (4.0)	-0.8 (2.8)
Worsened	4.9* (2.1)	-4.0 (5.3)	0.7 (2.8)	1.0 (1.0)	0.0 (0.0)	0,5 (0.5)	0.5 (1.5)
Wall:							
Improved	3.8 (5.5)	1.9 (2.8)	2.7 (3.2)	-0.9 (2.2)	-3.6 (5.2)	-2.3 (2.9)	0.2 (2.1)
The same	-5.8 (5.6)	-1.9 (2.8)	-3.7 (3.2)	0.9 (2.2)	9.4 (5.9)	5.2 (3.2)	0.7 (2.3)
Worsened	2.0 (1.4)	0.0 (0.0)	1.0 (0.7)	0.0 (0.0)	-5.8 (3.3)	-2.9 (1.6)	-0.9 (0.9)
Floor:							
Improved	1.4 (4.0)	5.9 (4.6)	3.6 (3.0)	3.9 (3.0)	-14.2* (5.9)	-5.2 (3.4)	-0.8 (2.3)
The same	-3.4 (13.0)	0.0 (5.6)	-1.8 (3.5)	-3.9 (3.0)	23.8** (6.7)	10.0* (3.9)	4.1 (2.6)
Worsened	2.0 (1.4)	-5,9 (3.3)	-1.8 (1.8)	0.0 (0.0)	-9.6* (4.1)	-4.8* (2.1)	-3.3* (1.4)
Building area:							
Increased	6.1 (6.5)	14.7* (6.32)	10.3* (4.5)	3.9 (4.4)	-8.3 (6.3)	-2.2 (3.9)	4.1 (3.0)
The same	-6.3 (6.8)	-6.9 (7.1)	-6.6 (4.9	-4.0 (4.9)	11.2 (6.7)	3.6 (4.2)	-1.5 (3.2)
Decreased	0.2 (2.3)	-7.8* (3.8)	-3.7 (2.2)	0.0 (2.4)	-2.9 (2.9)	-1.4 (1.9)	-2.6 (1.4)
Main source of light:							
Improved	5.8 (5.6)	8.8 (8.4)	7.8 (5.2)	-7.6 (5.7)	-9.2 (7.1)	-8.4 (4.6)	-0.3 (3.5)
The same	-6.8 (5.7)	-9.8 (8.4)	-8.8 (5.2)	7.6 (5.7)	15.0* (7.4)	11.3* (4.7)	1.2 (3.5)
Worsened	1.0 (1.0)	1.0 (1.0)	1.0 (0.7)	0.0 (0.0)	-5.8 (3.3)	-2.9 (1.6)	-0.9 (0.9)
Type of cooking fuel:							
Improved	1.0 (5.7)	6.8 (6.6)	3.9 (4.3)	5.9 (4.0)	6.0 (3.3)	5.9* (2.6)	4.9 (2.6)
The same	-3.0 (5.8)	-8.8 (6.7)	-5.9 (4.4)	-6.9 (4.1)	-6.0 (3.3)	-6.4* (2.6)	-6.1* (2.6)
Worsened	2.0 (1.4)	2.0 (1.4)	2.0* (1.0)	1.0 (1.0)	0.0 (0.0)	0.5 (0.5)	1.2* (0.5)
Water source for drinking and cooking:							
Improved	5.9* (2.3)	-5.8 (6.3)	0.3 (3.4)	1.9 (1.4)	-0.8 (3.2)	0.6 (1.7)	0.4 (1.9)
The same	-2.3 (3.5)	7.8 (7.0)	2.4 (4.0)	-1.9 (1.4)	-12.2* (5.8)	-7.0 (3.1)	-2.3 (2.5)
Worsened	-3.6 (2.5)	-2.0 (3.8)	-2.7 (2.3)	0.0 (0.0)	13.0 (5.0)	6.4* (2.6)	1.8 (1.8)

Appendix Table 8.3c. (continued)

Condition of Residence	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Water source for bathing and washing:							
Improved	4.1 (3.0)	-6.8 (6.2)	-1.1 (3.5)	2.9 (1.7)	-0.8 (3.2)	1.0 (1.7)	-0.1 (2.0)
The same	-0.5 (3.9)	11.7 (6.8)	5.4 (3.9)	-2.9 (1.7)	-11.1* (5.4)	-7.0* (2.9)	-0.8 (2.5)
Worsened	-3.6 (6.2)	-4.9 (3.5)	-4.2 (2.1)	0.0 (0.0)	12.0** (4.5)	5.9 (2.3)	0.9 (1.6)
Type of bathing and washing facilities:							
Improved	0.3 (3.2)	-1.0 (5.1)	-0.2 (2.9)	2.0 (2.7)	-2.9 (2.8)	-0.5 (1.9)	-0.4 (1.8)
The same	4.2 (4.5)	4.9 (5.6)	4.4 (3.6)	-0.1 (3.3)	3.8 (3.5)	1.9 (2.4)	3.2 (2.2)
Worsened	-4.5 (3.2)	-3.9 (2.7)	-4.2 (2.1)	-1.9 91.9)	-0.9 (2.1)	-1.4 (1.4)	-2.8* (1.3)

Note: - Figures in brackets are the standard errors.
- ** significant at the 1 percent level.
- * significant at the 5 percent level.

Appendix Table 8.4a. Proportion of SAADP Household by Changes in Asset Ownership (%)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Radio/tape recorder:							
Not owned ⇒ owned	7.8 (27.0)	11.8 (32.4)	9.8 (29.8)	10.7 (31.0)	3.0 (17.1)	6.9 (25.3)	8.3 (27.7)
The same (owned)	25.5 (43.8)	36.3 (48.3)	30.9 (46.3)	29.1 (45.7)	45.5 (50.0)	37.2 (48.5)	34.1 (47.5)
The same (not owned)	63.7 48.3)	36.3 (48.3)	50.0 (50.1)	58.3 (49.6)	49.5 (50.2)	53.9 (50.0)	52.0 (50.0)
Owned ⇒ not owned	2.9 (17.0)	15.7 (36.5)	9.3 (29.1)	1.9 (13.9)	2.0 (14.0)	2.0 (13.9)	5.6 (23.1)
Television:							
Not owned ⇒ owned	8.8 (28.5)	27.4 (44.8)	18.1 (38.6)	12.6 (33.4)	7.9 (27.1)	10.3 (30.5)	14.2 (35.0)
The same (owned)	17.7 (38.3)	15.7 (36.5)	16.7 (37.4)	11.6 (32.2)	19.8 (40.0)	15.7 (36.5)	16.2 (36.9)
The same (not owned)	73.5 (44.3)	52.0 (50.2)	62.7 (48.5)	74.8 (43.7)	68.3 (46.8)	71.6 (45.2)	67.2 (47.0)
Owned ⇒ not owned	0.0 (0.0)	4.9 (21.7)	2.5 (15.5)	1.0 (9.9)	4.0 (19.6)	2.4 (15.5)	2.4 (15.5)
Video/cd/vcd/ld player:							
Not owned ⇒ owned	8.8 (28.5)	19.6 (39.9)	14.2 (35.0)	6.8 (25.3)	5.0 (21.8)	5.9 (23.6)	10.0 (30.1)
The same (owned)	2.9 (17.0)	8.8 (28.5)	5.9 (23.6)	9.7 (29.8)	5.0 (21.8)	7.3 (26.2)	6.6 (24.9)
The same (not owned)	88.2 (32.4)	69.6 (46.2)	78.9 (40.9)	83.5 (37.3)	88.1 (32.5)	85.8 (35.0)	82.4 (38.2)
Owned ⇒ not owned	0.0 (0.0)	2.0 (13.9)	1.0 (9.9)	0.0 (0.0)	1.9 (14.0)	1.0 (9.9)	1.0 (9.9)
Telephone/handphone:							
Not owned ⇒ owned	0.0 (0.0)	2.0 (13.9)	1.0 (9.9)	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	0.7 (8.6)
The same (owned)	0.0 (0.0)	1.0 (9.9)	0.5 (7.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.3 (5.0)
The same (not owned)	100.0 (0.0)	97.0 (17.0)	98.5 (12.1)	99.0 (9.9)	100.0 (0.0)	99.5 (7.0)	99.0 (9.9)
Owned ⇒ not owned	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Refrigerator:							
Not owned ⇒ owned	2.9 (17.0)	13.7 (34.6)	8.3 (27.7)	3.9 (19.4)	4.0 (19.6)	3.9 (19.5)	6.1 (24.0)
The same (owned)	8.8 (28.5)	3.9 (19.5)	6.4 (24.5)	3.9 (19.4)	4.9 (21.8)	4.4 (20.6)	5.4 (22.6)
The same (not owned)	87.3 (33.5.)	81.4 (39.1)	84.3 (36.5)	91.2 (28.4)	90.1 (30.0)	90.7 (29.1)	87.5 (33.1)
Owned ⇒ not owned	1.0 (9.9)	1.0 (9.9)	1.0 (9.9)	1.0 (9.9)	1.0 (10.0)	1.0 (9.9)	1.0 (9.9)

Appendix Table 8.4a. (continued)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Bicycle:							
Not owned ⇒ owned	10.8 (31.2)	13.7 (34.6)	12.3 (32.9)	7.8 (26.9)	4.0 (19.6)	5.9 (23.6)	9.1 (28.8)
The same (owned)	30.4 (46.2)	31.4 (46.6)	30.9 (46.3)	58.2 (49.6)	50.5 (50.2)	54.4 (49.9)	42.6 (49.5)
The same (not owned)	57.8 (49.6)	47.1 (50.2)	52.4 (50.1)	34.0 (47.6)	35.6 (48.1)	34.8 (47.8)	43.6 (49.7)
Owned ⇒ not owned	(1.0) (9.9)	7.8 (27.0)	4.4 (20.6)	0.0 (0.0)	9.9 (30.0)	4.9 (21.6)	4.7 (21.1)
Motorcycle:							
Not owned ⇒ owned	4.9 (21.7)	14.7 (35.6)	9.8 (29.8)	4.9 (21.6)	7.9 (27.1)	6.4 (24.5)	8.1 (27.3)
The same (owned)	17.7 (38.3)	18.6 (39.1)	18.1 (38.6)	12.6 (33.4)	17.8 (38.5)	15.2 (36.0)	16.7 (37.3)
The same (not owned)	74.5 (43.8)	62.8 (48.6)	68.6 (46.5)	80.6 (39.7)	72.3 (45.0)	76.4 (42.5)	72.5 (44.7)
Owned ⇒ not owned	2.9 (17.0)	3.9 (19.5)	3.4 (18.2)	1.9 (13.9)	2.0 (14.0)	2.0 (13.9)	2.7 (16.2)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Appendix Table 8.4b. Proportion of Control Households by Changes in Asset Ownership (%)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Radio/tape recorder:							
Not owned ⇒ owned	9.1 (29.0)	17.7 (38.5)	13.2 (34.0)	23.1 (42.5)	11.5 (32.3)	17.3 (38.0)	15.2 (36.0)
The same (owned)	32.7 (47.4)	29.4 (46.0)	31.1 (46.5)	21.2 (41.2)	15.4 (36.4)	18.3 (38.8)	24.8 (43.3)
The same (not owned)	56.4 (50.1)	43.1 (50.0)	50.0 (50.2)	53.8 (50.3)	65.4 (48.0)	59.6 (49.3)	54.8 (49.9)
Owned ⇒ not owned	1.8 (13.5)	9.8 (30.0)	5.7 (23.2)	1.9 (13.9)	7.7 (26.9)	4.8 (21.5)	5.2 (22.3)
Television:							
Not owned ⇒ owned	10.9 (31.5)	29.4 (46.0)	19.8 (40.0)	1.9 (13.9)	11.5 (32.3)	6.7 (25.2)	13.3 (34.1)
The same (owned)	16.4 (37.3)	19.6 (40.1)	17.9 (38.5)	21.2 (41.2)	7.7 (26.9)	14.4 (35.3)	16.2 (36.9)
The same (not owned)	72.7 (44.9)	47.1 (50.4)	60.4 (49.1)	75.0 (43.7)	75.0 (43.7)	75.0 (43.5)	67.6 (46.9)
Owned ⇒ not owned	0.0 (0.0)	3.9 (19.6)	1.9 (13.7)	1.9 (13.9)	5.8 (23.5)	3.9 (19.3)	2.9 (16.7)
Video/cd/vcd/ld player:							
Not owned ⇒ owned	5.4 (22.9)	21.6 (41.5)	13.2 (34.0)	3.8 (19.4)	13.5 (34.5)	8.6 (28.3)	10.9 (31.3)
The same (owned)	7.3 (26.2)	7.8 (27.2)	7.6 (26.5)	15.4 (36.4)	0.0 (0.0)	7.7 (26.8)	7.6 (26.6)
The same (not owned)	87.3 (33.6)	68.6 (46.9)	78.3 (41.4)	80.8 (39.8)	84.6 (36.4)	82.7 (38.0)	80.5 (39.7)
Owned ⇒ not owned	0.0 (0.0)	2.0 (14.0)	0.9 (9.7)	0.0 (0.0)	1.9 (13.9)	1.0 (9.8)	1.0 (9.7)
Telephone/handphone:							
Not owned ⇒ owned	1.8 (13.5)	2.0 (14.0)	1.9 (13.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.0 (9.7)
The same (owned)	0.0 (0.0)	2.0 (14.0)	0.9 (9.7)	0.0 (0.0)	1.9 (13.9)	1.0 (9.8)	1.0 (9.7)
The same (not owned)	98.2 (13.5)	96.0 (19.6)	97.2 (16.7)	100.0 (0.0)	98.1 (13.9)	99.0 (9.8)	98.0 (13.7)
Owned ⇒ not owned	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Refrigerator:							
Not owned ⇒ owned	3.6 (18.9)	11.8 (32.5)	7.5 (26.5)	0.0 (0.0)	3.9 (19.4)	1.9 (13.8)	4.8 (21.3)
The same (owned)	3.6 (18.9)	3.9 (19.6)	3.8 (19.1)	3.8 (19.4)	1.9 (13.9)	2.9 (16.8)	3.3 (18.0)
The same (not owned)	92.8 (26.2)	80.4 (40.1)	86.8 (34.2)	96.2 (19.4)	94.2 (23.5)	95.2 (21.5)	91.0 (28.8)
Owned ⇒ not owned	0.0 (0.0)	3.9 (19.6)	1.9 (13.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.9 (9.7)

Appendix Table 8.4b. (continued)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Bicycle:							
Not owned ⇒ owned	9.1 (29.0)	11.8 (32.5)	10.4 (30.6)	7.7 (26.9)	5.8 (23.5)	6.7 (25.2)	8.6 (28.1)
The same (owned)	16.4 (37.3)	23.5 (42.8)	19.8 (40.0)	34.6 (48.0)	40.4 (49.5)	37.5 (48.6)	28.6 (45.3)
The same (not owned)	70.9 (45.8)	58.8 (49.7)	65.1 (47.9)	53.9 (50.3)	46.1 (50.3)	50.0 (50.2)	57.6 (49.5)
Owned ⇒ not owned	3.6 (18.9)	5.9 (23.8)	4.7 (21.3)	3.8 (19.4)	7.7 (26.9)	5.8 (23.4)	5.2 (22.3)
Motorcycle:							
Not owned ⇒ owned	10.9 (31.5)	23.5 (42.8)	17.0 (37.7)	3.8 (19.4)	5.8 (23.5)	4.8 (21.5)	10.9 (31.3)
The same (owned)	12.7 (33.6)	9.8 (30.0)	11.3 (31.8)	13.5 (34.5)	5.8 (23.5)	9.6 (29.6)	10.5 (30.7)
The same (not owned)	76.4 (42.9)	62.8 (48.8)	69.8 (46.1)	78.9 (41.2)	84.6 (36.4)	81.7 (38.8)	75.7 (43.0)
Owned ⇒ not owned	0.0 (0.0)	3.9 (19.6)	1.9 (13.7)	3.8 (19.4)	3.8 (19.4)	3.9 (19.3)	2.9 (16.7)
N	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

Appendix Table 8.4c. Difference in Proportion of SAADP and Control Households by Changes in Asset Ownership (%)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Radio/tape recorder:							
Not owned ⇒ owned	-1.3 (4.7)	-5.9 (6.3)	-3.4 (3.9)	-12.4 (6.6)	-8.5 (4.8)	-10.4* (4.1)	-6.9* (2.8)
The same (owned)	-7.2 (7.7)	6.9 (8.0)	-0.2 (5.6)	7.9 (7.3)	30.1** (7.1)	18.9** (5.1)	9.3* (3.8)
The same (not owned)	7.3 (8.3)	-6.8 (8.5)	0.0 (6.0)	4.4 (8.5)	-15.9 (8.3)	-5.7 (6.0)	-2.8 (4.2)
Owned ⇒ not owned	1.1 (2.5)	5.9 (5.5)	3.7 (3.0)	0.0 (2.4)	-5.7 (4.0)	-2.8 (2.3)	0.4 (1.9)
Television:							
Not owned ⇒ owned	-2.1 (5.1)	-2.0 (7.8)	-1.7 (4.7)	10.7** (3.8)	-3.6 (5.2)	3.6 (3.3)	0.9 (2.9)
The same (owned)	1.3 (6.3)	-3.9 (6.7)	-1.2 (4.6)	-9.6 (6.5)	12.1* (5.5)	1.3 (4.3)	-0.0 (3.1)
The same (not owned)	0.8 (7.5)	4.9 (8.6)	2.3 (5.8)	-0.2 (7.4)	-6.7 (7.6)	-3.4 (5.3)	-0.4 (4.0)
Owned ⇒ not owned	0.0 (0.0)	1.0 (3.5)	0.6 (1.7)	-0.9 (2.2)	-1.8 (3.8)	-1.5 (2.2)	-0.5 (1.4)
Video/cd/vcd/ld player:							
Not owned ⇒ owned	3.4 (4.2)	-2.0 (7.0)	1.0 (4.1)	3.0 (3.7)	-8.5 (5.3)	-2.7 (3.2)	-0.9 (2.6)
The same (owned)	-4.4 (3.9)	1.0 (4.7)	-1.7 (3.1)	-5.7 (5.8)	5.0* (2.2)	-0.4 (3.2)	-1.0 (2.2)
The same (not owned)	0.9 (5.6)	1.0 (8.0)	0.6 (4.9)	2.7 (6.6)	3.5 (6.0)	3.1 (4.5)	1.9 (3.3)
Owned ⇒ not owned	0.0 (0.0)	0.0 (2.4)	0.0 (1.2)	0.0 (0.0)	0.1 (2.4)	0.0 (1.2)	0.0 (0.8)
Telephone/handphone:							
Not owned ⇒ owned	-1.8 (1.8)	0.0 (2.4)	-0.9 (1.5)	1.0 (1.0)	0.0 (0.0)	0.5 (0.5)	0.3 (0.8)
The same (owned)	0.0 (0.0)	-1.0 (2.2)	-0.4 (1.1)	0.0 (0.0)	-1.9 (1.9)	-1.0 (1.0)	-0.7 (0.7)
The same (not owned)	1.8 (1.8)	1.0 (3.2)	1.3 (1.8)	-1.0 (1.0)	1.9 (1.9)	0.5 (1.1)	1.0 (1.1)
Owned ⇒ not owned	0.0 (1.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Refrigerator:							
Not owned ⇒ owned	-0.7 (3.1)	1.9 (5.7)	0.8 (3.2)	3.9 (1.9)	0.1 (3.3)	2.0 (1.9)	1.3 (1.9)
The same (owned)	5.2 (3.8)	0.0 (3.4)	2.6 (2.5)	0.1 (3.3)	3.0 (2.9)	1.5 (2.2)	2.1 (1.7)
The same (not owned)	-5.5 (4.8)	1.0 (6.8)	-2.5 (4.2)	5.0 (3.9)	-4.1 (4.4))	-4.5 (2.9)	-3.5 (2.6)
Owned ⇒ not owned	1.0 (1.0)	-2.9 (2.9)	-0.9 (1.5)	1.0 (1.0)	1.0 (1.0)	1.0 (0.7)	0.1 (0.8)

Appendix Table 8.4c. (continued)

Asset Type and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Bicycle:							
Not owned ⇒ owned	1.7 (5.0)	1.9 (5.7)	1.9 (3.8)	0.1 (4.6)	-1.8 (3.8)	-0.8 (2.9)	0.5 (2.4)
The same (owned)	14.0* (6.8)	7.9 (7.6)	11.1 (5.1)	23.6** (8.3)	10.1 (8.5)	16.9** (5.9)	14.0** (4.0)
The same (not owned)	-13.1 (7.9)	-11.7 (8.6)	-12.7* (5.8)	-19.9 (8.4)	-10.5 (8.5)	-15.2* (6.0)	-14.0** (4.2)
Owned ⇒ not owned	-2.6 (2.7)	1.9 (4.3)	-0.3 (2.5)	-3.8 (2.7)	2.2 (4.8)	-0.9 (2.7)	-0.5 (1.9)
Motorcycle:							
Not owned ⇒ owned	-6.0 (4.8)	-8.8 (7.0)	-7.2 (4.2)	1.1 (3.4)	2.1 (4.2)	1.6 (2.7)	-2.8 (2.5)
The same (owned)	5.0 (5.9)	8.8 (5.7)	6.8 (4.1)	-0.9 (5.8)	12.0* (5.0)	5.6 (3.8)	6.2 (2.8)
The same (not owned)	-1.9 (7.2)	0.0 (8.4)	-1.2 (5.5)	1.7 (6.9)	-12.3 (6.7)	-5.3 (4.8)	-3.2 (3.7)
Owned ⇒ not owned	2.9 (1.7)	0.0 (3.4)	1.5 (1.8)	-1.9 (3.0)	-1.8 (3.0)	-1.9 (2.1)	-0.2 (1.4)

Note: - Figures in brackets are the standard errors.
- ** significant at the 1 percent level.
- * significant at the 5 percent level.

Appendix Table 8.5a. Proportion of SAADP Households by Changes in Land and Livestock Ownership (%)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Dry farmland:							
The same	41.2 (49.5)	50.0 (50.2)	45.6 (49.9)	35.9 (48.2)	67.3 (47.1)	51.5 (50.1)	48.5 (50.0)
Increased	21.5 (41.3)	41.2 (49.5)	31.4 (46.5)	32.0 (46.9)	24.8 (43.4)	28.4 (45.2)	29.9 (45.8)
Decreased	2.0 (13.9)	3.9 (19.5)	2.9 (16.9)	0.0 (0.0)	2.0 (14.0)	1.0 (9.9)	2.0 (13.9)
Not owned	35.3 (48.0)	4.9 (21.7)	20.1 (40.2)	32.0 (46.9)	5.9 (23.8)	19.1 (39.4)	19.6 (39.8)
Wet farmland:							
The same	2.0 (13.9)	33.3 (47.4)	17.7 (38.2)	22.3 (41.8)	43.6 (49.8)	32.8 (47.1)	25.3 (43.5)
Increased	0.0 (0.0)	6.9 (25.4)	3.4 (18.2)	7.8 (26.9)	5.9 (23.8)	6.9 (25.3)	5.1 (22.1)
Decreased	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.0 (10.0)	0.5 (7.0)	0.2 (5.0)
Not owned	98.0 (13.9)	59.8 (49.3)	78.9 (40.9)	69.9 (46.1)	49.5 (50.2)	59.8 (49.2)	69.4 (46.2)
Home-lot:							
The same	93.1 (25.4)	84.3 (36.5)	88.7 (31.7)	99.0 (9.9)	98.0 (14.0)	98.5 (12.1)	93.6 (24.4)
Increased	5.9 (23.6)	13.7 (34.6)	9.8 (29.8)	1.0 (9.9)	2.0 (14.0)	1.5 (12.1)	5.6 (23.1)
Decreased	1.0 (9.9)	2.0 (13.9)	1.5 (12.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.7 (8.6)
Not owned	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Pond:							
The same	3.9 (19.5)	3.9 (19.5)	3.9 (19.5)	4.8 (21.6)	4.0 (19.6)	4.4 (20.6)	4.2 (20.0)
Increased	0.0 (0.0)	1.0 (9.9)	0.5 (7.0)	4.8 (21.6)	1.0 (10.0)	2.9 (16.9)	1.7 (13.0)
Decreased	1.0 (9.9)	0.0 (0.0)	0.5 (7.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.2 (5.0)
Not owned	95.1 (21.7)	95.1 (21.7)	95.1 (21.6)	90.4 (29.8)	95.0 (21.8)	92.7 (26.2)	93.9 (24.0)
Ownership of Cattle:							
The same	3.9 (19.5)	2.9 (17.0)	3.4 (18.2)	1.9 (13.9)	13.9 (34.7)	7.8 (27.0)	5.7 (23.1)
Increased	3.9 (19.5)	2.0 (13.9)	2.9 (16.9)	16.5 (37.3)	16.8 (37.6)	16.7 (37.4)	9.8 (29.8)
Decreased	3.9 (19.5)	2.0 (13.9)	2.9 (16.9)	6.8 (25.3)	11.9 (32.5)	9.3 (29.1)	6.1 (24.0)
Not owned	88.3 (32.4)	93.1 (25.4)	90.7 (29.1)	74.8 (43.7)	57.4 (49.7)	66.2 (47.4)	78.4 (41.2)

Appendix Table 8.5a. (continued)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Ownership of sheep:							
The same	1.0 (9.9)	2.0 (13.9)	1.5 (12.1)	0.0 (0.0)	2.0 (14.0)	1.0 (9.9)	1.2 (11.0)
Increased	2.0 (13.9)	5.9 (23.6)	3.9 (19.5)	1.9 (13.9)	2.0 (14.0)	1.9 (13.9)	2.9 (16.9)
Decreased	1.0 (9.9)	7.8 (27.0)	4.4 (20.6)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	2.2 (14.7)
Not owned	96.0 (19.5)	84.3 (36.5)	90.2 (29.8)	98.1 (13.9)	96.0 (19.6)	97.1 (16.9)	93.6 (24.5)
Ownership of poultry:							
The same	4.9 (21.7)	27.4 (44.8)	16.2 (36.9)	2.9 (16.9)	22.8 (42.1)	12.8 (33.4)	14.5 (35.2)
Increased	7.8 (27.0)	20.6 (40.6)	14.2 (35.0)	53.4 (50.1)	3.0 (17.1)	28.4 (45.2)	21.3 (41.0)
Decreased	7.8 (27.0)	19.6 (39.9)	13.7 (34.5)	25.2 (43.7)	21.8 (41.5)	23.5 (42.5)	18.6 (39.0)
Not owned	79.4 (40.6)	32.4 (47.0)	55.9 (49.8)	18.5 (39.0)	52.4 (50.2)	35.3 (47.9)	45.6 (49.9)
N	102	102	204	103	101	204	408

Note: Figures in brackets are the standard deviations.

Appendix Table 8.5b. Proportion of Control Households by Changes in Land and Livestock Ownership (%)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Dry farmland:							
The same	47.3 (50.3)	41.2 (49.7)	44.3 (49.9)	48.1 (50.5)	75.0 (43.7)	61.5 (48.9)	52.9 (50.0)
Increased	12.7 (33.6)	37.3 (48.8)	24.5 (43.2)	32.7 (47.4)	9.6 (29.8)	21.2 (41.0)	22.9 (42.1)
Decreased	3.6 (18.9)	13.7 (34.8)	8.5 (28.0)	0.0 (0.0)	3.8 (19.4)	1.9 (13.8)	5.2 (22.3)
Not owned	36.4 (48.5)	7.8 (27.2)	22.6 (42.0)	19.2 (39.8)	11.5 (32.3)	15.4 (36.3)	19.0 (39.4)
Wet farmland:							
The same	3.6 (18.9)	15.7 (36.7)	9.4 (29.4)	5.8 (23.5)	32.7 (47.4)	19.2 (39.6)	14.3 (35.1)
Increased	0.0 (0.0)	9.8 (30.0)	4.7 (21.3)	3.8 (19.4)	0.0 (0.0)	1.9 (13.8)	3.3 (18.0)
Decreased	0.0 (0.0)	2.0 (14.0)	0.9 (9.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.5 (6.9)
Not owned	96.4 (18.9)	72.5 (45.1)	84.9 (36.0)	90.4 (29.8)	67.3 (47.4)	78.9 (41.0)	81.9 (38.6)
Home-lot:							
The same	98.2 (13.5)	84.3 (36.7)	91.5 (28.0)	100.0 (0.0)	94.2 (23.5)	97.1 (16.8)	94.3 (23.3)
Increased	1.8 (13.5)	13.7 (34.8)	7.5 (26.5)	0.0 (0.0)	3.8 (19.4)	1.9 (13.8)	4.8 (21.3)
Decreased	0.0 (0.0)	2.0 (14.0)	0.9 (9.7)	0.0 (0.0)	1.9 (13.9)	1.0 (9.8)	1.0 (9.7)
Not owned	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Pond:							
The same	1.8 (13.5)	3.9 (19.6)	2.8 (16.7)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.4 (11.9)
Increased	0.0 (0.0)	2.0 (14.0)	0.9 (9.7)	3.8 (19.4)	0.0 (0.0)	1.9 (13.8)	1.4 (11.9)
Decreased	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Not owned	98.2 (13.5)	94.1 (23.8)	96.3 (19.1)	96.2 (19.4)	100.0 (0.0)	98.1 (13.8)	97.2 (16.7)
Ownership of Cattle:							
The same	0.0 (0.0)	5.9 (23.8)	2.8 (16.7)	3.8 (19.4)	11.5 (32.3)	7.7 (26.8)	5.2 (22.3)
Increased	1.8 (13.5)	0.0 (0.0)	0.9 (9.7)	17.3 (38.2)	9.6 (29.8)	13.5 (34.3)	7.1 (25.8)
Decreased	3.6 (18.9)	2.0 (14.0)	2.8 (16.7)	3.8 (19.4)	15.4 (36.4)	9.6 (29.6)	6.2 (24.2)
Not owned	94.6 (22.9)	92.1 (27.2)	93.4 (25.0)	75.0 (43.7)	63.5 (48.6)	69.2 (46.4)	81.4 (39.0)

Appendix Table 8.5b. (continued)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Ownership of sheep:							
The same	3.6 (18.9)	2.0 (14.0)	2.8 (16.7)	0.0 (0.0)	1.9 (13.9)	1.0 (9.8)	1.9 (13.7)
Increased	1.8 (13.5)	5.9 (23.8)	3.8 (19.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.9 (13.7)
Decreased	1.8 (13.5)	5.9 (23.8)	3.8 (19.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.9 (13.7)
Not owned	92.7 (26.2)	86.2 (34.8)	89.6 (30.6)	100.0 (0.0)	98.1 (13.9)	99.0 (9.8)	94.3 (23.3)
Ownership of poultry:							
The same	1.8 (13.5)	25.5 (44.0)	13.2 (34.0)	7.7 (26.9)	9.6 (29.8)	8.7 (28.3)	11.0 (31.3)
Increased	5.5 (22.9)	15.7 (36.7)	10.4 (30.6)	50.0 (50.5)	11.5 (32.3)	30.8 (46.4)	20.5 (40.4)
Decreased	1.8 (13.5)	11.8 (32.5)	6.6 (25.0)	15.4 (36.4)	17.3 (38.2)	16.3 (37.2)	11.4 (31.9)
Not owned	90.9 (29.0)	47.0 (50.4)	69.8 (46.1)	26.9 (44.8)	61.5 (49.1)	44.2 (49.9)	57.1 (49.6)
N	55	51	106	52	52	104	210

Note: Figures in brackets are the standard deviations.

Appendix Table 8.5c. Difference in Proportion of SAADP and Control Households by Changes in Land and Livestock Ownership (%)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Dry farmland:							
The same	-6.1 (8.4)	8.8 (8.6)	1.3 (6.0)	-12.2 (8.5)	-7.7 (7.7)	-10.0 (5.9)	-4.4 (4.2)
Increased	8.8 (6.1)	3.9 (7.1)	6.9 (4.5)	-0.7 (8.0)	15.2* (6.0)	7.2 (5.1)	7.0 (3.7)
Decreased	-1.6 (2.9)	-9.8 (5.2)	-5.6 (3.0)	0.0 (0.0)	-1.8 (3.0)	-0.9 (1.5)	-3.2 (1.7)
Not owned	-1.1 (8.1)	-2.9 (4.4)	-2.5 (5.0)	12.8 (7.2)	-5.6 (5.1)	3.7 94.5)	0.6 (3.4)
Wet farmland:							
The same	-1.6 (2.9)	17.6* (7.0)	8.3* (3.9)	16.5** (5.3)	10.9 (8.2)	13.6** (5.1)	11.0** (3.2)
Increased	0.0 (0.0)	-2.9 (4.9)	-1.3 (2.4)	4.0 (3.8)	5.9* (2.4)	5.0 (2.2)	1.8 (1.6)
Decreased	0.0 (0.0)	-2.0 (2.0)	-0.9 (0.9)	0.0 (0.0)	1.0 (1.0)	0.5 (0.5)	-0.3 (0.5)
Not owned	1.6 (6.2)	-12.7 (8.0)	-6.0 (4.5)	-20.5** (6.1)	-17.8* (8.3)	-19.1** (5.3)	-12.5** (3.5)
Home-lot:							
The same	-5.1 (3.1)	0.0 (6.3)	-2.8 (3.5)	-1.0 (1.0)	3.8 (3.5)	1.4 (1.9)	-0.7 (2.0)
Increased	4.1 (3.0)	0.0 (6.0)	2.3 (3.3)	1.0 (1.0)	-1.9 (3.0)	-0.4 (1.6)	0.9 (1.9)
Decreased	1.0 (1.0)	0.0 (2.4)	0.5 (1.3)	0.0 (0.0)	-1.9 (1.9)	-1.0 (1.0)	-0.2 (0.8)
Not owned	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Pond:							
The same	2.1 (2.6)	-0.0 (3.4)	1.1 (2.1)	4.8** (2.1)	4.0* (2.0)	4.4** (1.4)	2.8* (1.3)
Increased	0.0 (0.0)	-1.0 (2.2)	-0.4 (1.1)	1.0 (3.4)	1.0 (1.0)	1.0 (1.8)	0.3 (1.0)
Decreased	1.0 (1.0)	0.0 (0.0)	0.5 (0.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.2 (0.2)
Not owned	-3.1 (2.8)	1.0 (4.0)	-1.2 (2.4)	-5.8 (4.0)	-5.0* (2.2)	-5.4* (2.3)	-3.3* (1.7)
Ownership of Cattle:							
The same	3.9* (1.9)	3.0 (3.7)	0.6 (2.1)	-1.9 (3.0)	2.4 (5.7)	0.1 (3.2)	0.5 (1.9)
Increased	2.1 (2.7)	2.0 (1.4)	2.0 (1.5)	-0.8 (6.4)	7.2 (5.6)	3.2 (4.3)	2.7 (2.3)
Decreased	0.3 (3.2)	0.0 (2.4)	0.1 (2.0)	3.0 (3.7)	-3.5 (6.0)	-0.3 (3.5)	-0.1 (2.0)
Not owned	-6.3 (4.5)	1.0 (4.6)	-2.7 (3.2)	-0.2 (7.4)	-6.1 (8.4)	-3.0 (5.6)	-3.0 (3.4)

Appendix Table 8.5c. (continued)

Type of Land/Livestock and Change in Ownership	Central Sulawesi			Southeast Sulawesi			Total
	Donggala	Tolitoli	Total	Muna	Konsel	Total	
Ownership of sheep:							
The same	-2.6 (2.7)	0.0 (2.4)	-1.3 (1.8)	0.0 (0.0)	0.1 (2.4)	0.0 (1.2)	-0.7 (1.1)
Increased	0.1 (2.3)	0.0 (4.1)	0.1 (2.3)	1.9 (1.4)	2.0 (1.4)	2.0 (1.0)	1.0 (1.3)
Decreased	-0.8 (2.1)	2.0 (4.3)	0.6 (2.3)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.3 (1.2)
Not owned	3.3 (4.0)	-2.0 (6.1)	0.6 (3.6)	-1.9 (1.4)	-2.0 (2.7)	-2.0 (1.5)	-0.7 (2.0)
Ownership of poultry:							
The same	3.1 (2.8)	1.9 (7.6)	3.0 (4.2)	-4.8 (4.1)	13.2* (5.9)	4.1 (3.6)	3.5 (2.8)
Increased	2.3 (4.1)	4.9 (6.5)	3.8 (3.9)	3.4 (8.6)	-8.5 (4.8)	-2.4 (5.5)	0.8 (3.4)
Decreased	6.0 (3.2)	7.8 (6.0)	7.1 (3.4)	9.8 (6.6)	4.5 (6.7)	7.2 (4.7)	7.2 (2.9)
Not owned	-11.5* (5.6)	-14.6 (8.5)	-13.9 (5.7)	-8.4 (7.3)	-9.1 (8.4)	-8.9 (5.9)	-11.5** (4.2)

Note: - Figures in brackets are the standard error.
- ** significant at the 1 percent level.
- * significant at the 5 percent level.

Appendix Table 8.6. Condition of Residence and Its Facilities*)

	Material/Source				
	1	2	3	4	5
1. Roof	Concrete	Roof tile	Zinc	Leaves	
2. Wall	Concrete	Wood	Bamboo		
3. Floor	Ceramics	Floor tile	Cement	Wood	Dirt
4. Main source of light	Electricity	Oil lamp	Candle		
5. Type of cooking fuel	Gas	Oil	Wood/charcoal		
6. Water source for drinking and cooking	Piped	Protected well	Unprotected well/spring	River/rain water	
7. Water source for bathing and washing	Piped	Protected well	Unprotected well/spring	River/rain water	
8. Bathing and Washing Facilities	Private	Public	River		

Note: *) Residence condition and facilities are considered improved if they move to column on the left side. If they move to the right, they are considered worsened.