

**ASSESSMENT OF THE UPLAND DEVELOPMENT PROGRAM IN
SARANGANI AND SOUTH COTABATO PROVINCES**

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Rationale

Background

The Upland Development Programme in Southern Mindanao (UDP) is a special programme of the Department of Agriculture (DA) jointly funded by the Government of the Philippines (GOP) and the European Commission (EC). The programme was initiated in 1999 with the aim to develop models for the enhancement of community-based resource management and sustainable market-led agriculture and enterprise development in the uplands. In order to achieve its purpose, UDP undertakes and supports a large number of activities that contribute towards the attainment of the following three main results:

- strengthened institutional capacity to support and manage natural resources and sustainable agriculture
- improved implementation and adoption of resource management and sustainable agriculture at field level
- improved services and capacity for enterprise development.

The UDP established monitoring system and MIS on major activities and outputs. In addition, the programme undertook some internal assessments and case studies that provided useful data on the processes, clientele response and physical results in the field.

Urgency of assessment

The urgency of this assessment was based on the following considerations:

1. The UDP monitoring and MIS systems, as they generated useful quantitative data on the supported activities and outputs, have not provided adequate information on the actual quality, results and effects of the interventions. The internal assessments and case studies also have not provided solid basis for drawing general conclusions on the outcomes at the community level.
2. As the programme approaches its final year of operation, an assessment of its achievements and effects in relation to the logical framework is needed. Hence this assessment shall close gaps of information about the impacts of the program.

3. Assessment findings are needed to provide timely information to reinforce the mainstreaming UDP models with the LGU systems.

Scope of Assessment

The scope of the assessment project was set to cover the critical aspects of UDP intervention in the field. It included the study of inputs, activities and outputs, physically and behaviorally. Specifically, the assessment covered the following aspects of the UDP:

- effects of environmental awareness campaigns (knowledge, attitude, concrete action)
- effects of community level training activities
- implementation and effects of land use planning, CWP and BDP – extent to which plans have been actually implemented, institutionalized and policies have been enforced
- adoption and effects of DFS (including STOP and SWC) with respect to productivity and income generation and influence of extension activities
- implementation, quality and effects of RM activities (protection/conservation, reforestation)
- access and utilization of savings and credit
- level of enterprise development and marketing in the community
- effects of infrastructure support
- level and effectiveness of community organization to support upland development activities.

The scope of the assessment, however, was affected by actual developments in the field. More assessment efforts were made on UDP activities which demonstrated impacts and less for those which did not show otherwise.

Assessment Procedure

The assessment work started on December 26, 2004 and the initial findings were presented at a UDP forum on March 23, 2005. It involved the following tasks: (1) review of UDP documents (2) fieldwork to collect on-site data and related information (3) data analysis and (4) report writing.

Data Collection

Data were gathered from UDP documents and from interviews and observation in the field. Field data were gathered thru questionnaires which were constructed to attain the objectives of the assessment TOR and administered as follows:

1. Interviews with respondents who are beneficiaries and non-beneficiaries of the program to obtain basic information about the household, farm and the community.
2. Interviews with key informants such as the barangay officials , community leaders, some farmer trainees, DFS model farmers, and some UDP field personnel to augment information gathered.
3. Focus group discussions at the community to validate information gathered.
4. Field observation to augment and validate information gathered.

Sampling of Study Areas and Respondents

The study areas, the sample size and sampling of respondents were determined during the two conferences with UDP officials at the Project Management Office (PMO) Davao City. They were set to achieve quality results with the budget allotted for the assessment project. The study areas were set at one sitio for each of the first and third barangays of the six municipalities in Sarangani and the three municipalities in South Cotabato. The sample size was set at 12 for the program beneficiaries and 5 for the non-beneficiaries for each sitio and the respondents were taken through purposive sampling.

Table 1 shows the location of the study areas with the respective number of respondents, the number of interviews and focus group discussions.

Table 1. Location of study areas, respondents and number of interviews and focus group discussions.

Municipality	Brgay /Sitio	No of Interviews		No. of KIs	No of FGDs
		Beneficiary	Non-Beneficiary		
Sarangani					
Glan	Sufatubo-Kampao	12	5	1	1
	Laguimit-Mabisa	12	5	1	1
Malapatan	Daan Suyan-Kamaging				
	Libi - Sitio Klambog & Sitio Rancho	12	5	1	1
Malungon	Upper Lumabat - Sitio Inumpaang	12	5	1	1
	Kinabalan - Sitio Proper	12	5	1	1
Maasim	Amsipit A - Sitio Tahakayo	12	5	1	1
	Nomoh – Sitio Maknit	12	5	1	1
Kiamba	Tablao – Sitio Banawag	12	5	1	1
	Maligang - Sitio Malayo	12	5	1	1
Maitum	Zion - Sitio Kabuacay	12	5	1	1
	Upo - Sitio Sugpang	12	5	1	1
South Cotabato					
Tupi	Kablon – Sitio Glandang	12	5	1	1
	Linan - Sitio Upper Linan	12	5	1	1
Tampakan	Palo 19 - Sitio Bonglawaan	12	5	1	1
	Albagan - Sitio Visminsue	12	5	1	1
Tantangan	Dumadalig – Sitio Upper Matimos	12	5	1	1
	Maibo - Sitio Paghidaet & Sitio Paglaum	12	5	1	1
Total		216	90	18	18

Assessment Findings

This section of the report presents the demographic characteristics of the respondents and the program inputs and impacts of the components such as the SAD, RM CIDE, RFS, MED and AIS. This section's discussions respond to the scope of the assessment which were set at the start of the project.

Demographic Characteristics of Respondents

Table 2 show the respondents' ethnic groupings, gender, civil status, educational attainment and average family size. Respondents' characteristics on those indicators carry some policy and program implications.

Ethnic Groupings- Parallel with earlier studies on populations in Mindanao by Man 1990 and Rodil 1994, this study noted mixed communities in both provinces. In Sarangani, 60% were IPs, 29% were migrants and 11% born in the sitio. In South Cotabato, 50% were IPs, 38% migrants, and 12% born in the sitio. The IPs were mostly Blaans and Muslims who lived in close proximity with the Christians. The presence of 29 to 38 percent migrants in the upland areas may increase with time and imply stronger campaign for proper resource management through extension service.

Table 2 Demographic Characteristics of Respondents

Indicators		Sarangani		South Cotabato	
		freq (n=144)	%	freq (n=72)	%
Ethnic Grouping	Born in Sitio	16	11	25	12
	Migrant	42	29	82	38
	IPs	86	60	109	50
Civil Status	Single	7	4.9	7	10
	Married	135	93.8	64	89
	Widowed	1	0.7	0	0
	Separated	1	0.7	1	1
Gender of respondents	Male	93	64.6	54	75
	Female	51	35.4	18	25
Education Status	Elementary Level	110	76.4	41	58.6
	High School Level	26	18.1	20	28.6
	College Level	8	5.6	9	12.9
Mean Family Size		6.5		6.4	

Civil Status, Family Size, Gender and Education – In Table 2, respondents in both provinces showed similar characteristics as to civil status, family size, gender and educational attainment. In Sarangani, 93.8 percent of the household heads were married maintaining an average family size of 6.5. In South Cotabato, 89% were married with a family size of 6.4 members in the household. Almost 65% percent in Sarangani and 75% percent in South Cotabato were males. As to educational attainment, majority of the respondents in both provinces reached only elementary level; few attained high school and college education. Respondents with high school or college education were often made as community leaders.

Sustainable Agriculture Development (SAD)

This section of the report presents the inputs and impacts of the activities under the SAD component. It is focused on the DFS being the activity-thrust of this component. It discusses the following areas: inputs received, extent of the application of the diversified farming system (DFS); changes in farming practices brought about by the program intervention; comparative application of multiple cropping practices between program beneficiaries and non-beneficiaries; impact of the intervention on multiple cropping practices; and impact of the intervention on surplus production and income.

The SAD component introduced the diversified farming system which combined soil conservation with better cropping systems thru planting several crops simultaneously or in succession along weather changes and raising livestock as part of the system. The SAD component also conducted trainings on soil conservation and crop/livestock production including farm visits to well-established small farms in other municipalities.

The assessment on DFS revealed some under-performance in the field. However, the DFS brought emerging changes in cropping systems, soil conservation and agribusiness among the program beneficiaries as presented in the following reports.

Inputs Received, Used and Appreciation. Table 3 summarizes the material inputs considered by farmers as important contributions of UDP. Seedlings for fruit trees, seeds for food and cash crops and farm tools were among the major inputs received by farmers. Other inputs included seeds for hedgerows, seedlings for forest trees, fertilizers, and livestock. Most planting materials were given to the first batch of model farmers in the barangays.

Table 3. Material Inputs Considered Important by Respondents

INPUTS	Sarangani	South Cotabato	Total
	Freq	Freq	
Fruit Tree seedlings	27	17	44
Food and cash crop seeds	18	26	44
Farm Tools	1	8	9
Hedgerow Materials	8	0	8
Forest Trees	2	2	4
Fertilizers	2	0	2
Livestocks	0	2	2

Table 4 shows the training inputs considered by the respondents as important to their farming enterprise. The respondents considered the rationale of DFS, contour farming, food production and entrefarm trainings as most useful. The trainings which included exposure trips to good farms reinforced learnings from discussions.

During FGDs, farmers regard the trainings as opportunities to learn new farm practices and developments in other farm. According to the participants, traveling to new places was unforgettable and staying in hotels a great experience. The learnings from the exposure trips appeared to be fresh from their memories, and they wanted to implement the program in their areas. However, they lack necessary inputs and/or capital to substantially apply what they learned from the trainings.

Table 4. Trainings Considered Important By The Respondents

	Sarangani	South Cotabato	Total
Types of Trainings	freq	Freq	
DFS	29	26	83
Contour Farming	41	11	52
Entrefarm	10	0	10
Food Production	2	0	2

Table 5 presents the most common problems mentioned by the respondents regarding material input assistance. The assessment team noted that most of the problems were clustered around the insufficient and delayed delivery of materials vis-à-vis the planting calendar. Other frequently cited problems were absence of, and unfair distribution, of materials. Probing for these problems during discussions, the team noted that the farmers misunderstood the concept of modeling. The UDP's intention was to establish model farms for other farmers to emulate; thus, support was limited to model farmers. The misconception of farmers on input assistance to model farms is a clear indication of inadequate extension service in the program.

Table 5 Pervasive Problems Cited by Respondents on Input Assistance

	Sarangani	South Cotabato	Total
Insufficient Materials	16	11	27
Delayed Delivery	13	4	17
No Materials Received	10	1	11
Unfair Distribution of Materials	8	2	10
High Mortality of Materials	2		2

Application of the Diversified Farming System_– The interview and field observation revealed that only five beneficiaries in some sitios were recipients of material inputs for DFS since 2002. On the farms of the model farmers, the fruit tree seedlings were not yet fully grown with some short-season crops planted and recently harvested. The guidelines for DFS establishment were not fully followed with hedgerows partially established on designated areas, nor perfectly along contours and very limited commodities in the cropping system either planted simultaneously or in succession.

There was also partial application of DFS by other farmers as observed in the field. The second cycle of would-be DFS cooperators did not qualify due to lack of understanding on the Slope Treatment Oriented Practices (STOP) which made them perceived STOP as a stringent requirement.

Changes in the Application of Soil Conservation Practices Before and After DFS Introduction - Assessment on the application of basic soil conservation measures is important as it measures the indicator of one of the major goals of the UDP. Some

farmers applied few elements of the DFS, particularly hedgerow establishment using economic plants, rocks and natural vegetation. The assessment however did not look into the extent of application but on some evidence in the field. In Table 6, there were 79 percent in Sarangani who planted hedgerows (usually renzoni and madre de cacao) after the introduction of DFS while only 4.9 percent applied prior to introduction of the DFS. Likewise, South Cotabato registered 90.3 percent who planted hedgerows after introduction of DFS while no respondent applied hedgerow system before DFS introduction. Some respondents in South Cotabato used rockwall and natural vegetative strips as protective hedgerows after the introduction of DFS. There was no evidence of hedgerow established by the non-beneficiaries before and after the introduction of DFS.

Table 6. Changes in the Application of Hedgerows by the Respondents After Introduction of DFS

Province	Sarangani				South Cotabato			
Period	Before		After		Before		After	
Type of Hedgerows	freq	%	freq	%	freq	%	freq	%
None	136	95.1	22	15.4	71	0	10	14.1
Planted hedgerows	7	4.9	113	79.0	-	-	57	90.3
Rockwall	-	-	-	-	-	-	3	4.2
NVS	-	-	8	5.6	-	-	1	1.4
Total		100.		100.		10		100.
	143	0	143	0	71	0	71	0

The quality of hedgerows were assessed in the field based on the DFS guidelines. As previously mentioned in this report, there were partial application of hedgerows in the designated areas of the model farms, nor they were perfectly along the contours. Some better-established hedgerows were observed in Malapatan, Sarangani (Daan Suyan and Libi); in Tampakan (Palo 19 and Albagan) and Tupi (Kablon), South Cotabato Province. There were but limited establishment of hedgerows by farmers who were not designated as model farmers and farmers not covered in the program.

The quality of hedgerow establishment were influenced by the following factors:

- Lack of appreciation among farmers on the benefits from hedgerows as

an erosion control measure and for farm productivity;

- Lack of understanding on the concept of modeling wherein all farmers expected input assistance for the establishment of hedgerows.
- Lack of technical support by the LGU-UDP technicians;
- Delayed delivery of hedgerow seeds to model farmers in time for the rainy season.
- Poor monitoring by the ATs and BEWs on the establishment of hedgerows in the model farms.

Multiple Cropping by Beneficiaries and Non-beneficiaries__- One of the objectives of the DFS is the practice of planting two or more crops simultaneously or in succession during the crop year. The categories used in this assessment were: the practice of planting multiple crops and the practice of planting one crop over time, say continuous planting of corn.

In Sarangani, there were 52 percent of the beneficiaries and 27 percent of the non-beneficiaries who practiced multiple cropping, while in South Cotabato, there were only 48 percent of the beneficiaries and 78 percent of the non-beneficiaries who practice mono-cropping, depicting the impact of DFS to the beneficiaries on multiple cropping. More beneficiaries than non-beneficiaries practiced multiple cropping after DFS introduction (Table 7). In South Cotabato, there were 38 percent of the beneficiaries and 17 percent of the non-beneficiaries who practiced multiple cropping while there were 68 percent of the beneficiaries and 88 percent of the non-beneficiaries who practiced mono cropping (Table 7). Common crops used in multiple cropping were corn, vegetables , mungo and rootcrops.

Table 7. Multiple cropping practices by beneficiaries and non-beneficiaries

Sarangani	Beneficiary		Non-Beneficiary	
	freq	%	freq	%
Multi-cropping	75	52.08	15	27.27
Monocropping	69	47.92	40	72.73
Total	144	100.00	55	100.00
South Cotabato				
Multi-cropping	27	37.50	5	16.67
Monocropping	45	62.50	25	83.33
Total	72	100.00	30	100.00

Changes in Cropping Systems. Performance on DFS was also assessed in terms of changes in cropping systems by the respondents. Table 8 shows the changes in farm commodity categories before and during the introduction of DFS. The figures in Table 8 are summarized as follows:

Sarangani

There is a considerable change in farm composition among the respondents before and during UDP intervention.

- **Cash/Short season crops.** Farmers planting cash crops increase from 94 to 144 representing a 34.7% increase from pre-program levels. This includes food crops consumed by the household and surplus sold for cash.
- **Long term crops.** Farmers starting to plant long term crops rose from 36 to 144 or 75% percent increase. This includes fruit and forest trees.
- **Livestocks.** Farmers maintaining livestock rose from 2 to 142 or 98.61 percent.

South Cotabato

- **Cash crops.** Farmers planting cash crops increase from 48 to 72 representing a 33% increase from pre-program levels. This includes food crops consumed by the household and surplus sold for cash.
- **Long term crops.** Farmers starting to plant long term crops rose from 16 to 56 or 77.7 % percent increase. This includes fruit and forest trees
- **Livestocks.** Farmers maintaining livestock rose from 0 to 100 percent increase.

Table 8. Changes in Cropping System Before and During UDP

	Before	After	Difference	% change
Sarangani	n-144			
Cash/Short Season Crop	94	144	50	34.72
Long Term Crop	36	144	108	75.00
Livestock	2	144	142	98.61
South Cotabato	N=72			
Cash Crop	48	72	24	33.33
Long Term Crop	16	72	56	77.78
Livestock	0	72	72	100.00

Impact of SAD: Emerging Farm Practices – Impact of the SAD is measurable on application of DFS and the use of farm plans. The assessment found out that farmers started application of DFS and used the farm plans which they formulated at the start of UDP implementation. Although the application of DFS and use of the farm plans are not massive and spectacular, the initial application are emerging farm practices and are indicators of learning which when reinforced by extension services, will be regularly practiced at finer levels.

Table 9 shows that 69 to 78 percent for beneficiaries in Sarangani and South Cotabato, respectively, started to apply the DFS and 68 to 70 percent of the two provinces operated according to farm plans. Field observation and interview with non-beneficiaries revealed otherwise, with no intention of applying DFS and operating their farms with farm plans.

The above findings clearly indicated the impact on the farmers exposed to UDP intervention. During FGDs, farmers revealed that the farm plans which were formulated during workshops at the start of program implementation served as guide in their farm

activities.

Impact of DFS on Income – Data on income were based on recall and at times revealed by wives of respondents. Table 9 shows the income changes by farmers before and during UDP. The data indicates a consistent decrease of income on crops for both Sarangani and South Cotabato and consistent increase in income from livestock for the two provinces. The decrease in income from crops may be the indication fertility loss due to soil erosion since the farmers were just starting conservation farming thru DFS. In the absence of an in-depth economic analysis that would look at market changes, opportunity costs, and price elasticity, it would be difficult to attribute the cause of the decrease to DFS. We note however that actual income figures do not account the future incomes that will be derived from DFS’ combination of farm commodities

Table 9. Income Changes Before and During Intervention

	Before	During	Difference
Sarangani	n-144		
Cash Crop	7481	5757	-1724
Long Term Crop	5672	3160	-2512
Livestock	600	1163	563
South Cotabato	N=72		
Cash Crop	15414	9829	-5585
Long Term Crop	5511	1875	-3636
Livestock	0	916	916

The income changes on cash crop, long term crops and livestock before and during DFS implementation are summarized by provinces as follows:

Sarangani

- **Cash crops.** Average annual income from cash crops decrease by P1724.
- **Long term crops.** Average income from long term crops drop by P2512. This could be attributed to the shift of production to high value fruit trees such as durian and mango instead of the usual coconut trees.
- **Livestocks.** Livestock income increase to to P563.

South Cotabato

- **Cash crops.** Average annual income from cash crops decrease by P5,585. This huge decrease could be caused by pests attacking peanut plantations in Albagan and Palo 19 in Tampakan, and setbacks in vegetable production in Glandang, Tupi.
- **Long term crops.** Average income from long term crops dropped by P3636, a similar phenemona with Sarangani that could be explained by the shift of production to high value fruit trees such as durian and mango.
- **Livestocks.** Livestock income increase to P563.

Security Derived From DFS and Farmers' Attraction on DFS = DFS is regarded as an economic farm model which provides several household sources of income from short-term and long-term crop-livestock commodities. In this vein, respondent-beneficiaries were asked whether DFS gave them the feeling of security wherein more than 65 percent in both provinces said so. During the FGDs, they revealed that their long term crops (fruit and forest trees) gave them hopes for higher incomes in the future and the short-term crops (grains, vegetables, goats and chickens) provided them food with some surplus sold for cash requirements of the family. Hereunder are some of their revelations during the FGDs:

- *A pastor in Barangay Libi recalled those days when he only relied on the income of his corn. He said life was very hard. When he joined UDP programs, he started planting bananas. Now, he proudly said he had weekly earnings of PHP500 to 700 from his bananas.*
- *An IP in Daan Suyan, Malapatan, Sarangani Province recalled that his farm used to be constantly eroded after heavy rains. When he learned about contouring in DFS, he reported that not only did he minimize soil erosion, but also maintained the fertility productivity of his farm.*
- *In Albagan, Tampakan, South Cotabato, respondents proudly showed their variety of vegetables in their bagsakan centers. They said that diversified farming helped them produce multiple crops which in turn gave them multiple incomes.*

The beneficiaries were also asked whether the DFS attracted attention to other farmers. The question was responded by the DFS cooperators as well as those who just started to implement the system, wherein majority responded affirmatively. In the interview with non-beneficiaries and key informants, DFS farms attracted their attention but many lacked the adequate understanding and the inputs to apply DFS.

Table 10. Farmer’s Perception on the Impact of DFS

Indicators		Sarangani (n=114)	South Cotabato (n=72)
Farmers starting to apply DFS	Yes	69%	78%
	No	31%	22%
Farmers operating according to farm plan	Yes	68%	70%
	No	32%	30%
Farmers who think DFS increased their income	Yes	50%	55%
	No	50%	45%
Farmers who think DFS increased surplus	Yes	53%	55%
	No	47%	45%
Farmers who think DFS gave them security	Yes	64%	67%
	No	36%	33%
Farmers who think DFS invited attention on other farmers	Yes	63%	66%
	No	37%	24%

Sustainability: Spillover of DFS Practices to Non-Beneficiaries. Did non-beneficiaries adopt DFS, too? Table 11 shows that there are indications that this maybe the case. Of the 55 non-beneficiaries interviewed in Sarangani, 7 or 13% started to copy DFS methods. In South Cotabato, 3 out of 30 or 10% did the same thing. Eleven or 20% in Sarangani have already farm plans. Two farmers in South Cotabato started to establish hedgerows.

While the numbers were not great (10% to 13% new adaptors), adoption of conservation methods by non-beneficiaries has some potentials for project sustainability based on the following counts:

- Contiguous sitios are usually bounded by the same farming practices where new technologies immediately catch the attention of farmers;
- They are likely supervised by the same agricultural technicians recommending the same technology;
- They are likely culturally bound (Blaans, Tbolis, etc. tend to share the same beliefs and concerns and will most likely learn from each other).

Table 11. Non-Beneficiaries who Applied DFS Methods

	Sarangani (n=55)	South Cotabato (n=28)	Total N=83
Applied DFS	7	3	10
Used Farm Plan	11	0	11
Started Hedgerows	0	2	2

The above points are further reinforced by the responses of the non-beneficiaries about DFS in Table 12. In Sarangani, close to forty two percent said that DFS is an attractive farming method. In South Cotabato, 20% thought the same thing. Forty five to fifty percent in both provinces believe DFS gives security. Twenty seven percent in Sarangani think that it will give production surplus while only 10% in South Cotabato thought so. As to whether the method will increase income, 25.5% in Sarangani said it will, while only 13.3% agree in South Cotabato.

The data indicates important insights on the impact of DFS to non-beneficiaries:

- Despite the low quality of DFS application by beneficiaries, non-beneficiaries heard of the technology and are willing to practice the methods introduced.
- Non-beneficiaries tend to consider DFS as a means in increasing income.

Table 12. Perception of Non-Beneficiaries on DFS

Indicators	Sarangani (n=55)		South Cotabato (n=30)	
	Freq	%	Freq	%
Invites Attention	23	41.8	6	20.0
Gives Security	25	45.5	15	50.0
Creates Surplus in production	15	27.3	3	10.0
Increases income	14	25.5	4	13.3

Resource Management

UDP's approach to resource management is focused on the formulation of watershed management schemes and strengthening the capacities of LGUs and communities for sustainable watershed management. This approach was supported by the following strategies:

- Development of Barangay Land Use Plan
- Training of community leaders on soil and water conservation in coordination with the SAD
- Establishment of Geographical Information Systems in coordination with LGUs
- Tenurial instruments

Resource management are mostly done thru communal or collective efforts of the communities. In this assessment, information on resource management were taken from interviews with key informants and focus group discussion. Basic information are presented in Table 13.

Table 13. Resource Management Activities (GIS, Land Use Planning, CBFM Surveys, and other RM activities)

Town	Barangay	Sitio	GIS Maps	Land Use Plan	CBFM surveyed (Based on HH Interviews)	Other RM Activities
Glan	Sufatobo	Kampao	Yes	Yes	67%	Riverbank stabilization started with planting of seedlings at the head of water source. Contour farming helped river bank stabilization. Enacted barangay ordinance enhanced environmental protection and other RM activities
	Laguimit	Mabisa	Yes	Yes	42%	Riverbank stabilization already in place supported by municipal and barangay ordinance. Strong political will evident in stopping further encroachment of forest lands. Environmental awareness is strong among participants. Cutting of trees no longer feasible because there are no trees to cut.
Malapatan	Daan Suan	Kamaging	Yes	Yes	25%	No riverbank stabilization started. While policies prohibiting cutting of trees present, these were not properly enforced.
	Libi	Klambog & Rancho	Yes	Yes	8%	Community started planting forest trees in their watershed areas but these efforts were not sustained. Environmental protection measures enforced.

Table 13 continued.....

Town	Barangay	Sitio	Existence of GIS Maps	Existence of Land Use Plan	Surveyed under CBFM (Based on HH Interviews)	Other RM Activities
Malungon	Upper Lumabat	Inumpaan	Yes	Yes	42%	Riverbank stabilization started with planting of seedlings at head of water source. The need of contour farming felt by the community to reinforce riverbank stabilization activity. Enactment and implementation of barangay ordinance needed to support resource management.
	Kinabalan	Proper	Yes	Yes	8%	Community started planting forest trees in their water shed areas, but these efforts were not sustained. Some environmental protection measures enforced.
Maasim	Amsipit	Tahakayo	Yes	Yes	25%	Planting of forest trees started at water source with about 20% survival rates.
	Nomoh	Maknit	Yes	Yes	17%	No planting in watershed areas and riverbanks done.
Kiamba	Tablao	Banawag	Yes	Yes	25%	No planting of trees in critical areas of the watershed and in the riverbanks.
	Maligang	Malayo	Yes	Yes	8%	No riverbank and watershed planting done. Informants said planting materials delivered to the area but no instruction given what to do with them. Cutting of trees still noted in the remaining forest reserves, and laws were not properly enforced.

Table 13 continued...

Maitum	Zion	Kabuacay	Yes	Yes	25%	Community started planting forest trees in their water shed areas, but these efforts were not sustained. Some environmental protection measures enforced.
	Upo	Sugpang	Yes	Yes	42%	No support received for riverbank rehabilitation although several requests made by UBA chair.
Tupi	Kablon	Glandang	Yes	Yes	17%	Started planting bamboo and fruit tree seedlings for forest and riverbank stabilization.
	Linan	Upper Linan	Yes	Yes	42%	Started planting bamboo and fruit tree seedlings for forest and riverbank stabilization.
Tampakan	Palo 19	Bonglawaan	Yes	Yes	75%	Started planting bamboo and fruit tree seedlings for riverbank stabilization. Cutting of trees along river banks existed and policy measures not properly enforced due to charcoal making activities of some farmers.
	Albagan	Visminsue	Yes	Yes	33%	Started planting bamboo and fruit tree seedlings. Watershed protection efforts were evident.
Tantangan	Dumadalig	Upper Matimos	Yes	Yes	67%	Started planting bamboo and fruit tree seedlings for river bank stabilization. Watershed protection effort not evident. Many IPs subsist on selling charcoal to support family.
	Maibo	Pahigdaet/Paglaum	Yes	Yes	58%	Few trees were planted for riverbank stabilization. Community members not supportive.

Quality and Effects of RM (Protection, conservation and reforestration) .

Basing on interview with key informants and FGDs, the RM activities resulted in the following:

- Heightened community awareness to police the remaining forest covers. During FGDs, respondents said that they immediately report *kaingeros* to the barangay officials who would promptly arrest violators. Such cases have been reported in Glan, Malungon, Malapatan, and Kiamba in Sarangani as well as in Tupi and

Tantangan in South Cotabato. In Maitum, Sarangani Province, the municipal office has delineated a huge portion of public lands as forest reserves and has assigned municipal employees to guard these areas.

- Introduction of watershed management program at water source. The planting of trees at water sources has started in some municipalities in Sarangani (Glan, Malapatan, Malungon, and Maitum) as well as in South Cotabato (Tupi, Tampakan, and Tantangan).
- Clear watershed management plans which were developed by UDP staff in consultation with the beneficiaries. The plans were already presented and approved by the barangay council for implementation.
- Stoppage of slash and burn techniques. Farmers mentioned during FGDs that this method of clearing farms have been stopped as a result of massive education campaign during UDP intervention.

Constraints in Resource Management Activities. The following constraints to pursue resource management activities were mentioned:

- Insufficient and untimely delivery of planting materials. These have been mentioned as constraints to vigorously pursue RM activities. The forest tree seedlings were inadequate and there was no clear delineation of authority as to who provides and delivers them for planting.
- Low survival rates of forest tree seedlings. There were poor handling of the seedlings and in many barangays, the trees did not survive after a drought hit the areas. Moreover, some beneficiaries failed to monitor the trees after the communal planting activities.
- Inadequate instruction on what to do with the planting materials. In Maligang, trees were delivered without any instruction as to what to do with them. These were left at the nursery for sometime until the AT by chance instructed planting of the seedlings.
- Weak barangay leadership in pushing policy for resource management.

While barangays are quick to pass ordinances to protect forest lands, they tend to be slow in implementing them.

- Rampant charcoal making activities due the absence of alternative livelihood . Some farmers rely on charcoals for their daily sustenance. In our visits, most households of the barangays have sacks of charcoals nearby indicating the prevalence of this livelihood.

Community and Institutional Development Extension (CIDE)

Several activities were carried out by the CIDE component in the UDP areas, foremost of which were: community organizing; value reorientation; leadership training, development planning within the framework of community watersheds, training the barangay extension workers (BEWs); and, organizing and strengthening the Upland Barangay Associations (UBA). However, this assessment set the focus on examining the functionality of the UBA, BEW and the Agricultural Technicians (ATs) which were critical outputs of the CIDE component.

The assessment of the UBA used the following indicators, namely: frequency of UBA meetings, existence of written policies and documentation , representation in the barangay development council, which were rated by the key informants and participants in the Focus Group Discussions. The indicators were weighted to come up ratings such as: strong, weak, and inactive.

The UBAs in Sarangani Province - The state of the UBAs in Sarangani is presented in Table 14.

Table 14. The UBA Organizations in Sarangani Province

Glan	Sufatubo- Sitio Kampao	Strong UBA with support from the BLGU
	Laguimit- Sitio Mabisa	Strong UBA with support from the BLGU. Efficient documentation noted.
Malapatan	Daan Suyan Sitio K'maging	Weak UBA with very few members attending meetings
	Libi – Sitio Klambog & Sitio Rancho	Strong UBA with support from the BLGU
Malungon	Upper Lumabat – Sitio Inumpan	Strong UBA with support from the BLGU.
	Kinabalan – Sitio Proper	Inactive UBA. Lack of support from the BLGU.
Maasim	Amsipit A – Sitio Tahakayo	Inactive UBA. Lack of support from the BLGU. Misunderstanding of members.
	Nomoh – Sitio Maknit	Inactive UBA. Lack of support from the BLGU.
Kiamba	Tablao – Sitio Banawag	Inactive UBA. Lack of support from the BLGU. Barangay center inaccessible for regular meetings.
	Maligang - Sitio Malayo	Active UBA despite weak support from the BLGU.
Maitum	Zion - Sitio Kabuacay	Inactive UBA. Lack of support from the BLGU.
	Upo – Sitio Sugpang	Active UBA. UBA is merged with FSC and registered in CDA named UBAMOLCO.

The UBAs in South Cotabato – The state of the UBAs in South Cotabato are presented in

Table 15. Status of UBA Organizations in South Cotabato

Tupi	Kablon – Sitio Glandang	Strong UBA with BLGU support. Competition with other cooperative groups in the barangay observed.
Tampakan	Linan - Sitio Upper Linan	Strong UBA with BLGU support.
	Palo 19 - Sitio Bonglawaan	Strong UBA with BLGU support.
Tantangan	Albagan - Sitio Visminsue	Strong UBA with BLGU support.
	Dumadalig – Sitio Upper Matimos	Inactive UBA . Members no longer attend meetings.
	Maibo Sitio Paghidaet & Sitio Paglaum	Strong UBA with BLGU support.

Effectiveness of UBA. The potentials of UBA as an important key player in the development in the uplands cannot be underemphasized. Of the 216 households interviewed, 180 or 83.3% said they were active members of the UBA. We noted that many of the UBAs in both provinces enjoy the support of the barangay leaders. In the community such organizations were welcomed by the farmers as opportunities to bond themselves for protection and loan purposes, a point that will be discussed in the latter portion of this report. From resource management point of view, the UBA could be harnessed in the development of communal watershed programs and in joint efforts in forest protection in the area.

Constraints. The UBAs however suffer the following constraints:

- Lack of organization skills of officers to promote UBA interests in the barangay and municipal levels. With the exception of a few (e.g. Upo in Maitum, Albagan in Tampakan, Sufatubo and Laguimit in Glan, and Libi in Malapatan), UBAs presence in the municipality are not strongly felt. .
- **Absence of resources to sustain activities.** The team observed that UBA activities such as meetings, workshops, and communal work were UDP initiated and led. There is no indication that the same level of activities could be pursued independently by most UBAs (except in Albagan in South Cotabato and Upo in

Maitum, where UBAs have evolved into enterprising organizations).

- **Distance of UBA Centers from the sitios.** Many UBA centers are located far from many sitios, making it difficult for the UCOs to coordinate their activities with the UBAs. For instance in Libi, farmers from Rancho and Klambog have to walk for 2 to 3 hours to attend meetings. In Tablao, farmers would have to cross a creek and take a motorcycle (habal-habal) to reach the UBA office. The same situation is noted in almost all of the barangays included in this assessment.

Technical Support to the UBAs: ATs and BEWs__ The Agricultural Technicians(ATs) and Barangay Extension Workers (BEWs) are tasked to coordinate the upland development program. As point persons of UDP in the community, they are expected to support the UBAs in hastening the adoption of conservation methods, formulation of policy support, and implementation of key tasks and functions of the programme.

Table 16 presents farmers' ratings on the performance of the ATs and BEWs. In their communities. The ratings were based on frequency of visits, quality of support, and training inputs provided to the farmers.

In Sarangani, 57.6% of the agricultural technicians were rated as good while 34% of the BEWs got the same ratings. In South Cotabato, 80.6% percent of the ATs and 66.7% of the BEWs were rated good.

Farmers' rating on the ATs and BEWs may be subjective and their good ratings do not relate to increased farm production and massive application of soil conservation measures.

Table 16. Farmers' Ratings of the Agricultural Technicians and BEWs

	Province			
	Sarangani		South Cotabato	
Ratings	Freq	%	freq	%
Agricultural Technician				
Poor	35	24.3	10	13.9
Good	83	57.6	58	80.6
Very Good	26	18.1	4	5.6
Total	144	100.0	72	100.0
Barangay Extension Worker				
Poor	84	58.3	19	26.4
Good	49	34.0	48	66.7
Very Good	11	7.6	5	6.9
Total	144	100.0	72	100.0

Rural Finance Services (RFS)

UDP seeks to establish a savings-based credit delivery system to upland households. Implemented at the start of the program, the RFS seeks to provide saving services and small loans to upland farmers through the formation of Saving Loans Group and Financial Service Centers (FSCs) in cooperation with the Partner Financial Institutions.

The Loan System. In the sitio level, farmers were encouraged to form Savings and Loans Group (usually composed of five members). To be a member, a farmer has to save about P200 to form his capital build-up. The Savings and Loans Group is then attached to the Financial Service Center (FSC) which grants the loans to qualified farmers in partnership with the Partner Financial Organization (e.g., the Rural Banks). Depending on the amount raised by the FSCs, UDP doubles its counterpart for the loan fund. Qualified loan applicants are then given the amount loaned, after subtracting processing fees. Weekly collection of payments were made thereafter.

Access and Utilisation of Credit. Did farmers avail of the loan services established under UDP initiative? In Sarangani province, 45 households or more than a quarter (31%) have actually availed of loans. Of this number 32 or 71% were IPs. The other 29% were either born in the sitio or migrants.

The figures in South Cotabato did not depart from the levels in Sarangani with only about 38% of the households availing of loans. Of this figure, 36 or 50% were IPs. Most common loan amount is PHP 2000 which represented the first cycle of the loan system.

Usage of Loans. While farmers generally apply for loans for microfinance purposes which is the basis in the approval of loans, there were several borrowers who admitted that they used their loans for other purposes. For instance in Sarangani, more than a third of the farmers used their loans for farm production while in South Cotabato more than a half of those who loaned used the amount for the same purpose, leaving some of the loan proceeds to other purposes.

Farmers said that micro-enterprise activities may not be appropriate in remote upland communities where market opportunities are nil. Moreover, the policy of financial groups to collect the payment on a weekly basis discouraged many farmers from pursuing further loans under the SLG and FSCs.

Table 17 summarizes the status of the FSCs based on key informant interviews. The team however, noted that it was difficult to verify the records of the FSCs and in some barangays key informants were not fully informed about the FSC. Thus, information about the amounts of the FSC funds are based on the recall of the informants at the time of interviews.

Table 17. Status of FSCs in Sarangani and South Cotabato

Town	Barangay	State of FSCs	Capital Build-up
Glan	Sufatobo	FSC organized in 2003 with many of the farmers availing of micro-finance loans. However, among those interviewed very few have actually borrowed money because of their inability to pay.	Obtained 100,000 seed capital.
	Laguimit	FSC organized in 2003. 5 SLGs reported in the area with most farmers (20/30) availing microfinance loans. However farmers complained they cannot pay on weekly basis.	Obtained PhP 74,000 seed capital from UDP.
Malapatan	Daan Suan	FSC organized in 2002. Only 1 out of 60 members loaned. FSC controlled by businesses and farmers do not have access to loans.	Raised P50,000 start-up capital.
	Libi	FSC discontinued in 2003 as farmers stopped borrowing for fear of being unable to pay.	No funds established. Records not available.
Malungon	Upper Lumabat	FSC organized in 2003 with some of the farmers availing of microfinance loans. However, among those interviewed very few have actually borrowed money because of their inability to pay.	FSC secretary not available during visit.
	Kinabalan	FSC organized in 2003 most members availed loans for micro enterprise.	No records available during visit.
Maasim	Amsipit	FSC organized in 2000. Few however availed of the loans because of lack of livelihood opportunities for weekly payments.	FSC raised PhP 37,000, with P50,000 UDP counterpart. Records on fund disbursement are not available.
	Nomoh	FSC organized in 2003 with many farmers availing of loans. However this has been discontinued due to inability of others to pay.	Informant did not give exact amount of FSC funds. Thirteen members were able to avail of loans, but only 7 paid.
Kiamba	Tablao	FSC organized in 2002 and many have availed loans. FSC has been discontinued as most members withdrew their savings.	Obtained PhP 84,000 from UDP. About 50% of those who loaned failed to pay. The FSC has 42 members, but the informant did not know the financial status of the group.
	Maligang	FSC organized in 2001, but suffered heavy losses when its money (P100,000) was reported missing by the bookkeeper. A court litigation is underway to recover the funds.	Only 50% of the farmers were able to repay loans.
Maitum	Zion	FSC organized in 2000. Few however availed of the loans because of lack of livelihood opportunities to pay weekly.	No information on funds given.
	Upo	FSC organized 2003 with most farmers availing microfinance loans.	Obtained P100,000 capital from UDP and raised PhP 74,000 from CBU and savings.

Table 17. continued.....

South Cotabato

Town	Barangay	State of FSC	Fund Status
Tupi	Kablon	FSC organized 2002 with few members availing loans.	Obtained Php 100,000 counterpart from UDP. The fund grew with about PHP 200,000 and 80,000 collectibles.
	Linan	FSC organized 2003 with almost Php 190,000 capital, about Php138,000 collectibles.	Obtained Php 100,000 counterpart from UDP. The fund grew with about PHP 138,000 collectibles and PHP 50,000 collectibles. About 60% of the members were delinquent payers.
Tampakan	Palo 19	FSC organized in 2001 with most members availing of loans, but the FSC failed during the second loan cycle due to collection problems and faulty recording.	Able to raise PHP 38,000 and UDP counterpart PHP 100,000. Farmers failed to pay most of the loans after failure of peanut production during the second loan cycle.
	Albagan	FSC orgnaized in 2003 with most members having savings, but did not avail of loans.	Obtained PHP 50,000 counterpart from UDP and raised PHP 26,000 from the SLGs. No loans were however availed by farmers because they do not have the capacity to pay.
Tantangan	Dumadalig	No records available.	Only 5 out of 34 or 14% are FSC members. There are no files provided or interviews given by the FSC
	Maibo	FSC organized 2002 with most members availing loans.	Had a seed capital of PHP 33,000, and obtained UDLF Loan of P48,000. Has still to collect about PHP 200,000 of loans.

Table 17 indicates that loan services have already been initiated in most of the barangays under the SLG /FSC umbrella. Whenever FSCs qualify, UDP provided counterpart funds for the program. The amount ranged from P50,000 to P100,00. The system appeared to work well at the early stage of the FSC operation, but encountered problems in fund management later.

The underlying philosophy of the loan fund which is anchored in micro-finance may not fit to upland communities. The team found the communities heavily dependent

on agricultural production with no clear access to small-scale business enterprise. Farmers were apprehensive of the loans because they could not pay their loans on short-term basis as harvests were usually seasonal.

FSCs were faced with following challenges, to wit:

- **Poor recording.** Key informants failed to provide researchers sufficient evidence of mastery or working knowledge of how FSC finances are managed. Bank reconciliation and records are often left under the control of one person, usually the bookkeeper or FSC chairman, leaving many of the stakeholders unaware of the state of the funds.
- **No accountability among finance officials resulting to financial losses.** Poor management of funds have led to demise of some FSCs. The absence of control in collection, deposits, and bank records led to opportunities of mismanagement of the fund.
- **Poor collection.** The lack of micro-finance activities in the area led to the inability of the farmers to repay their loans.
- Infighting among members resulting to the dissolution of some FSCs
- Lack of transparency in the financial transactions.

Market Enterprise Development

To help farmers develop their farms, UDP embarked on major activities designed to support the upland village enterprises. These included the provision of entrefarm trainings to the UBA and DFS cooperators providing skills on market linkage and entrepreneurial capacity building.

UDP also provided assistance to the formation of producers' group such as organizational development, production and marketing, and financial requirements. Developing market information and forging linkages with major producers were deemed to increase income in the upland communities.

Level of Enterprises Established. Table 19 shows the state of the formation of

producer and processor groups in both provinces. The data indicates that that development of this area in the upland communities is still in its infancy stage. Of the 18 barangays visited in both provinces, five have started to forge themselves into producer groups, e.g abaca farmers in Maligang Kiamba, and Upo Maitum, peanut planters in Palo 19, and vegetable planters in Glandang and Albagan.

The team found that the activities of the producers' groups were not dynamic. In Maligang, Kiamba, abaca production and processing were affected by low quality and lack of supply to the Davao markets. Many abaca farmers shortcut the abaca weaving process resulting to rejections of delivery in Davao. In turn, this resulted to heavy losses of the barangay organizations. In Glandang and Palo 19, South Cotabato the construction of bagsakan centers seemed to show the best promise for communal marketing of crops. However, because of poor production outputs and weak market linkages in these areas the formation of the producer group was temporarily shelved.

The team also found the bagsakan centers closed at the time of assessment. Key informants said these centers encountered heavy losses when production failed to link with markets and with the low production outputs. .

This report will highlight the initial success of Barangay Albagan (Tampakan, South Cotabato) as to collective marketing of vegetables. The barangay farmers producing similar crops (carrots, potatoes, etc), gather their produce at the UBA center where whole-sale buyers from Marbel and General Santos City buy their produce in bulk. With this marketing system, the UBA established a social security system providing financial assistance to members who got sick or dead. The Albagan experience could be attributed to the following factors:

- Strong local leadership
- Support from local leaders
- Active membership
- Strong linkage to institutional markets and bulk buyers.
- Successful production

Table 18. Formation of Producer and Processor Groups

Mun	Brgay /Sitio	Sitio	Producer Group	Processor Group
Sarangani				
Glan	Sufatobo	Kampao	None	None
	Laguimit	Mabisa	None	None
Malapatan	Daan Suan	Kamaging	None	None
	Libi	Klambog & Rancho	None	None
Malungon	Upper Lumabat	Inumpaang	None	None
	Kinabalan	Proper	None	None
Maasim	Amsipit	Tahakayo	None	None
	Nomoh	Maknit	None	None
Kiamba	Tablao	Banawag	None	None
	Maligang	Malayo	Abaca producers group formed. The Farmers formed a coop that buys and sells abaca. They received a stripping machine from the Congressman. However, they suffer problems on quality control and quota production.	Yes
Maitum	Zion	Kabuacay	No producers group. Informants said their main problem is lack of production. No planting materials were available.	None
	Upo	Sugpang	Abaca producers group formed. The Farmers formed a coop that buys and sells abaca. They received a stripping machine from the Congressman. However, they suffer problems on quality control and quota production.	Yes

Table 18. continued.....

South Cotabato

Tupi	Kablon	Glandang	No producers group but after failure of Bagsakan center to market carrots..	None
	Linan	Upper Linan	No producers group.	None
Tampakan	Palo 19	Bonglawaan	Defunct producers group after peanut production failed.	None
	Albagan	Visminsue	Strong producers group through UBA chairman.	None
Tantangan	Dumadalig	Upper Matimos	None	None
	Maibo	Pahigdaet/ Paglaum	None	None

Impact on Marketing Practices Despite UDP’s efforts to establish strong market linkages, 67 percent of the farmers in Sarangani still sold their goods at the nearest market centers, 20 percent of the middle men and 9 percent to bagsakan centers (Table 19). Marketing practices in South Cotabato was quite different with about 38% selling at the nearest market centers, 37% middlemen and 24% at the bagasakan centers. Marketing thru bagsakan centers (24%) in South Cotabato may be attributed to the relatively developed roads, fairly advanced market systems due to the presence of large corporations, and better production facilities.

Table 19. How Farmers Sell Their Products

	Sarangani		South Cotabato	
	freq	%	freq	%
Nearest market centers	96	67.1	29	38.6
Middle men	29	20.3	26	37.1
Thru bagsakan centers	13	9.1	17	24.3
Nearest processors distributors	4	3.5	0	0
Total	142	100	72	100

Constaints Encountered by Producer and Processor Groups. Some of the comments noted during FGDs include the following:

- Weak support in the provision of information of market prices; While the team

noted that there were visible bulletin boards in the barangay concerning market prices, the team were informed that these were no longer updated by concerned officials. Farmers still rely on their neighbors in learning what prevailing market prices are prior to coming to downtown areas.

- Inability to meet market demands. Even if producers groups were informed of prices, low production adversely affected their capability to meet market demands. The inability to project production and demands left many producers' successor groups unproductive.
- Even if demands are high, low quality of processed goods (abaca) result to losses during market deliveries.
- Lack of relevance of the training modules to farmers circumstances.

Infrastructure Support

The Agriculture Infrastructure Support component provides support mechanisms for sustained agricultural production through community involvement. At the early stage of program implementation this component focused their activities on road rehabilitation, and spring development. During the later part of program implementation this component concentrated its activities on infrastructure maintenance through community involvement, such as:

- Labor based routine road maintenance scheme by the barangays
- Water management through the UBAs and UCOs
- Building Management of the Bagsakan Centers

Table 19 summarizes the status of infrastructure support in terms of road rehabilitation and spring development in the barangays.

Table 19. Status of Infrastructure Support

Mun	Brgay /Sito	Infrastructure Support
Sarangani Province		
Glan	Sufatubo—Kampao	Water system. Road rehabilitation up to Datalbulol but not accessible during heavy rains.
	Laguimit -- Mabisa	Water system
Malapatan	Daan Suyan- K'maging	Water system Very bad roads. Researchers passed through rivers to get to area.
	Libi - Klambog & Rancho	Water system. UDP road maintained by barangay.
Malungon	Upper Lumabat - Inumpaang	Water system. Road rehabilitation.
	Kinabalan - Proper	Water system Footbridge
Maasim	Amsipit A – Tahakayo	Water system. UDP road no longer maintained.
	Nomoh – Maknit	Water system
Kiamba	Tablao - Banawag	Water system Footbridge
	Maligang - Malayo	Water system
Maitum	Zion - Kabuacay	Water system Box culvert. Footbridge (Incomplete).
	Upo - Sugpang	Water system. Inaccessible road to Sugpang.
South Cotabato		
Tupi	Kablon – Glandang	Water system. Bagsakan center with DTI agreement.
	Linan - Upper Linan	Water system.
Tampakan	Palo 19 – Bonglawaan	Water system UDP road . Bagsakan center.
	Albagan - Visminsue	Water system UDP road (but subject to conflict with Blaang groups, already 5 UDP members killed)
Tantangan	Dumadilig - Upper Matimos	Water system UDP road
	Maibo - Paghidaet & Paglaum	Water system. (11 tabs) UDP roads.

Spring Development as Major Contributions of UDP to Upland Communities. UDPs innovative approach used in spring development enabled the program to serve many beneficiaries. The beneficiaries were involved in the planning, construction, and maintenance of the water tubs with their labor as counterpart to the project.. All sitios covered in the assessment, with the exception in Glandang, Tupi, South Cotabato, had functional water systems. Informants consider spring development as a lifetime gift of UDP to their communities. In Maasim, a Blaan talked about the community excitement while the tubs were being constructed. All were involved in the clearing of areas and laying out of pipes. After being deprived of potable water for many years, the introduction of flowing water right in the center of the sitio was caused for celebration. In Upo, Maitum farmers using jointly procured the materials for their water system. The team found this practice replicated in many sitios.

Barangay/Sitio Roads and Footbridges. Undoubtedly, the program made headway in establishing roads and footbridges in remote barangays. According to the participants of the FGDs, these infrastructure provided their community the access to other roads towards the barangay centers. For instance, a box culvert in Zion, Maitum, had made access to poblacion quicker. Farmers used to consider bringing goods to Maitum a major task because of the creek separating them from the rest of the poblacion. In Banawag, Tablao, natives consider the footbridge linking them to the town proper heaven-sent. In the past, they had to cross a long winding creek, or traverse difficult trails, to get to the other side of their sitio which was just a few meters across the creek. In Bonglawaan, Palo 19, South Cotabato, a UDP road leads up to the sleepy mountains of Bonglawaan where peanut production was once high (before pests attacked them). Farmers no longer have to use horses to bring their goods. Now, a motorcycle (habal-habal) regularly visits their sitios to transport sacks of their produce.

.Among the salient observations on infrastructure program are the following:

- The establishment of water systems in all barangays have transformed the lives of many upland farmers who have been suffering from poor water supply for so long a time.
- There were indications that community were moving towards communal

road maintenance as evidenced by joint efforts by community leaders to organize teams that will oversee road construction and maintenance.

- Be that as it may, the construction and rehabilitation of roads must be supported by the BLGU as most UBAs do not have sufficient funds to sustain road maintenance activities.
- While roads and footbridges ease the transport of goods, they do not necessarily lower fuel and transport costs.

SUMMARY OF FINDINGS

SAD

- **Adoption and effects of DFS (including STOP and SWC) with respect to productivity, income generation and resource management and influence of extension activities.**

UDPs five years work is still too short for major physical impact of sustainable agriculture development. Expectations to the contrary are unrealistic. Be that as it may, indications of soil conservation practices are already evident whenever farmers are given technical support on their adoption of the new farming practices. Although the physical impact is still inadequate, learnings from the program are evident in the community.

RM

- **Effects of environmental awareness campaigns (knowledge, attitude, concrete action) and community level training activities.**

There is evidence of high level of awareness of the need for forest protection among the respondents and key informants of the study. However, concrete activities in forest protection have been minimal due to the absence of sufficient inputs (e.g. planting materials).

- **Implementation and effects of land use planning, CWP and BDP – extent to which plans have been actually implemented, institutionalized and policies**

have been enforced.

All barangays visited in both provinces showed good CWP and BDP with the assistance of UDP. The plans are prominently featured in barangays and learning centers, some of which were integrated in the Municipal Development Plans and supported by local legislation. However, implementation of those plans have not produced significant results.

RFS

- **Access and utilization of savings and credit.**

Access to loan services have been very minimal with most of the farmers availing only one loan cycle. Policies requiring farmers to pay on a weekly basis have discouraged many from availing of the loans. Such policies are not attuned on the predicament of farmers. There were lack of skills in financial management both among the officials and members leading to the weakening of many FSCs.

MED

- **Level of enterprise development and marketing in the community**

This activity needs to be assessed further considering the lack of evidence of positive impact in the upland communities. Many of the barangays visited were not able to develop producer or processor groups and farmers still sold their products individually to the nearest markets forfeiting high market prices thru collective efforts and market linkage. Factors affecting poor marketing practices are: lack of market linkage; low production; weak leadership in the formation of marketing groups in the community.

CIDES

- **Level and effectiveness of community organization to support upland development activities.**

The UBAs in both provinces showed the best promise to sustain the program. While the UBAs were supported by the Local Government Units, their activities were not integrated in the annual plans and budget of the municipality. The officers and members of the UBAs also lack skills and values for collective development.

RECOMMENDATIONS

The following recommendations are made:

What could have been done differently. This study covered many topics with broad population coverage (two provinces) but very limited budget. The team wanted to probe deeper on many issues affecting the program but was hindered because of time and funding constraints. There are many useful insights that could be gleaned from the implementation of UDP which may provide inputs to the current program and to other programs that may be formulated for the development of mankind. The team recommends the following:

- Concentrate on smaller contiguous areas with some cultural variations in a province to attain deeper insights from the program.
- Increase population size to significant levels so that inferences can be made on the general population;
- Focus on key variables already found critical in the present study, to wit: capacities of ATS/BEWs, appropriate extension delivery mechanism and local government support.
- Include social indicators using national standards (eg. Nielsen or SWS index). We note that income is a very poor indicator because farmers may not tell the

truth—or cannot recall-- about their true income. We suggest using other social indicators used by established research agencies.

- Refocus the present instrument to include a needs analysis of extension workers, so that gaps in skills and knowledge be addressed in future projects.

Other recommendations :

- Conduct a study on the capacity of LGUs to integrate UDP activities within the current LGU systems
- Develop a model for local government engagement on upland development.
- Conduct the same study in different project areas to see differences in program implementation and farmer responses in different settings.

**INTERVIEW GUIDE FOR AN EVALUATION STUDY ON
THE EFFECTIVENESS OF THE UDP PROGRAMME WITH RESPECT TO RESOURCE
MANAGEMENT AND INCOME GENERATION**

Introduction

Good day. I am Mr./Ms. _____ of the Social Health Environment and Development Foundation, Inc. based at Mindanao State University General Santos City. We want to know about the Upland Development Programme in your area. The answers you will give are very important inputs in improving the implementation of the program. Rest assured that your answers will be treated with utmost confidentiality, and that this questionnaire cannot be traced back to you. Are you willing to be interviewed? Thanks.

Time Started	Date of Interview
Time Ended	Interviewer

**I. HOUSEHOLD INFORMATION
(Household Head interviews to be conducted in local dialect)**

A. SOCIO-ECONOMIC INFORMATION

(TO BE FILLED OUT BY INTERVIEWER PRIOR TO START OF VISIT)

1. Household head
 - (01) - (12) beneficiaries
 - (21) - (25) non beneficiaries
2. Location of household head/farm
 - Province (1) Sarangani (2) South Cotabato
 - Municipality:
 - Barangay-Sitio:
3. Ethnicity of household head (Please check appropriate box)
 - (1) born in the sitio with migrant parents)
 - (2) migrant
 - (3) IP (Indigenous) tribe: _____
4. If migrant, state number of years in the barangay. _____
(Indicate actual numbers)
5. Civil status of household head
 - (1) single
 - (2) married
 - (3) widowed
 - (4) separated
6. No. of years in school: ____

7. Gender of household head

- (1) male
- (2) female

8. Household size supported _____

(Please indicate actual numbers)

9. Number of household members assisting in farm *works*? _____

(Please indicate actual number)

10. Major sources of income

- 1) on-farm
- (2) off-farm
- (3) both

11. What is the size of your farm (in hectares)? _____

12. State major crops/livestock

Panamom (Crops)	Area	Prodn Per cropping	No. of cropping	Quantity Sold	Income (in pesos)
Cash Crop					
Rice					
Corn					
Peanut					
Assorted Vegetables					
Mongo					
Camote					
Cassava					

Medium Crops					
Banana					
Others:					
Long Term Crops					
Mango					
Coconut					
Durian					
Rambutan					
Coffee					
Forest Trees					
Others, please specify					

Livestocks	No. of Heads	No, Sold (this year)	Income (in pesos)

13. Have you participated in UDP trainings?) ___ Yes ___ No

14. Enumerate UDP trainings participated (list them down to be categorized/coded later)

Topic	Place	Month, Year
Tree Project Reforestration		
Riverbank Stabilisation		
Agroforestry		
Hedgerow / Contour Establishment		
DFS		
Farm Plan		
Cultural Management of Fruit Trees		
Organizational Development		
Land Use		
Entre Farm		
Others, please specify:		

15. Have you participated in UDP field trips ? ___ Yes ___ No

16. Enumerate UDP field trips participated (list them down to be categorized/coded)

Topics	Place	Month, Year
DFS		
Others, please specify:		

B. INFORMATION ABOUT FARM RESOURCE MANAGEMENT

1. Is your farm included in the survey for Community-based forest management agreement?

(1) yes (2) no

2. Are you recipient of Certificate of Stewardship Contract? (*Nakadawat ka ba og "certificate of stewardship contract?"*) (1) yes (2) no

6. According to magnitude, list down the problems in the provision of services in support of DFS?

- 1
- 2
- 3

7. According to importance, list down the skills learned from the DFS?

- 1
- 2
- 3
- 4

8. Do you now grow combination of crops and livestock upon application of DFS? (1) yes (2) no

9. Do you now grow crops in rotation or in succession according to seasons upon application of DFS?
Yes 2. No

10. What crops/livestock did you produce before application of DFS?

Pananom (Crops)	Area	Prodn Per cropping	No. of Cropping	Quantity Sold	Income (in pesos)
Cash Crop					
Rice					
Corn					
Peanut					
Assorted Vegetables					
Mongo					
Camote					
Cassava					
Others, please specify					
Medium Crops					
Banana					
Others:					
Long Term Crops					
Mango					
Coconut					
Durian					
Rambutan					
Coffee					
Forest Trees					
Others, Please specify:					

11. Have you increased overall farm production (crop/livestock) upon application of DFS?

12. Have you increased surpluses after consumption for sale upon application of DFS? (1) yes (2) no

13. What soil conservation measures did/do you apply in your farm before and upon application of DFS? (Please check appropriate on rows)

Soil conservation measures	Before DFS	Under DFS
None (Wala)		
Contoured hedgerows (pagtanom of mga babag)		
Rockwall (Pagbabag og bato)		
NVS		

14. Has DFS given you a sense of family security with various sources of food and income? 1 yes 2 no

15. Has your DFS farm invited attention on other farmers? 1 yes 2 no

16. Do you have a written farm plan as suggested by UDP? Yes 2. No

17. Do you operate according to your farm plan? 1 yes 2 no

18. Was DFS considered in the formulation of the BDP? 1 yes 2 no

19. Do you have areas in your farm that are very steep? Yes 2 No

20. Do you include the very steep portions of your farm in the DFS? 1 yes 2 no

21. If yes, what did you plant there? _____

22. Do you believe that the barangay should maintain and protect remaining forest? yes 2 no

23. Do you perceive that other farmers adopt farm technology from your DFS than the extension efforts of the AT? 1 yes 2 no

24. According to frequency, list down the activities of the AT in your barangay

- 1
- 2
- 3
- 4

25. Rate the services of your AT 1. Poor 2 Good 3 Very good

26. According to frequency, list down the activities of the BEW in your barangay?

- 1
- 2
- 3
- 4

27. Rate the services of your BEW? 1. Poor 2 Good 3 very good

E INFORMATION ABOUT SAVINGS AND LOANS

1. Are you member of the SLG in your community? (1) yes (2) no
2. Are you a member of your local FSC () yes () no
3. Is your FSC registered in the SEC ? () yes () no
4. Number of times you availed loans from FSC.....
5. Average amount loaned from FSC? _____
6. To what expenditures did you use the FSC loan proceeds
(1) production (2) micro enterprise () household use () others specify.....
7. List down according to importance, the UDP activities in capacity building for SLGs and FSCs?

8. Rate the efficiency of carrying out the UDP activities in capacity building for SLGs and FSCs
Unsa man ang kalidad sa mga buluhaton sa UDP para sa SLGs ug FSCs?
(1) poor (mahina) (2) fair (igo-igo ra) (3) efficient (maayo)

F. INFORMATION ABOUT ENTERPRISE DEVELOPMENT, MARKETING AND INFRASTRUCTURE

1. Rank according to importance, the UDP services for enterprise development and marketing (trainings on entrefarm, product development, business skills, and services on linkage facilitations and negotiations)

Inputs	Rank
Training on Entrefarm	
Product Development	
Business Skills Development	
Facilitation on linkages and negotiations	

2. Do you have a producer's group? Duna na ba moy producer group? Yes ___ No ___
3. Did the UDP services made you active member of the producers' group in the community? (1) yes (2) no
4. Type of marketing arrangements entered into: (1) none (2) individually (3) groups
5. Are you regularly selling farm products? (1) yes (2) no

6. Do you regularly receive UDP-LGU support in terms of information on prices, product demands and other market trends yes no

7. Are you a member of the processors' group in your community? **1 yes 2 no.**

8. State the changes in marketing of farm products in your community as result of UDP intervention?

9. State your prevailing marketing practices.

(1) thru bagsakan centers (2) middle men (3) nearest market centers (4) nearest processors distributors to regional markets (6) other, specify.....

10. Existence of all-weather farm to market roads to the community yes no
Duna bay permanenteng dalan gikan sa inyoha paadto sa inyong baligyaan?

11. Existence of water system. Yes No

12. Frequency of public transport vehicles plying to and from your community

(1) daily (2) twice a week (3) weekly (4) bi-monthly (5) monthly

13. Do the roads constructed under the UDP lower your transport cost.

14. How much has your barangay road contributed to higher profit margin in marketing farm products?
Unsa man gayud ang natabang sa barangayroad sa pagpa-usbaw sa ginansiya sa productto?

(1) not much (2) much (3) very much

THANK YOU.

CHECKLIST ON THE COMMUNITY INFORMATION

(Interviews with key informants; focused group discussions; PRA and field observation)

1. Self Introduction

- who are we
- where do we come from
- only take approximately one hour
- one of us is taking notes
- inform they can stop interview if they do not want to discuss

2. Purpose of Visit

- assessment is done on UDP effectiveness
- find out how community is adapting the UDP inputs
- findings will help improve program delivery

3. Background of Participants

- size of family; size of people staying in if sharing
- duration of stay in the community
- religion
- ethnic grouping

4. Sustainable agriculture and development

Percent of farmers applying DFS

Percent farmers applying hedge row system and contour tillage

Percent farmers practising multiple cropping

Percent farmers with increased production and incomes

5. Resource management, protection and reforestation

What are the material inputs and services as support to stop further encroachment of farming onto the forest lands and river bank stabilization?

List down inputs and services

What community activities were undertaken to further stop encroachment of farming on to the forest lands and river bank stabilization?

List down activities

What are the results of the community activities

- 1 poor
- 2 good
- 3 very good

Were the community activities effective?

- 1 yes
- 2 no

Did majority of the community members participate in the formulation of the CWP/BDP?

- 1 yes
- 2 no

Were the protection measures supported by written policies/ordinances?

- 1 yes
- 2 no

Were the protection measures properly enforced?

- 1 yes
- 2 no

Has the encroachment of farming to the forest land stopped?

- 1 yes
- 2 no

6. CWP and land use planning

Was the CWP developed?

List down the inputs and support services to CWP and land use planning

Do the community members know the existence of CWP

Do community members understand the contents of CWP?

Were the community members involved in the formulation of CWP

Is the CWP integrated into the BDP?

To what extent has the CWP been implemented

Are the plans being monitored and feedback used for replanning?

Have the GIS maps been used as reference in planning?

7. Environmental awareness campaigns

How intensive did the UDP/LGU pursued environmental awareness campaigns

1 not intensive

2 intensive

Did majority of the community members participated in the campaign?

Has those who participated in the campaign show positive understanding on environmental protection?

Were those who participated practise soil conservation and stop farming on steep lands?

Were those who participated convinced other farmers to practise environmental protection?

8. Capacity building

List down types of trainings/workshops conducted in the community

Rate the participation of the community members as to:

Quantity (percent of community members who attended)

Quality (percent with continuous attendance)

Percent of community members who rated the training as to:

Relevant %

Useful %

Effectively conducted %

Level of understanding attained by the trainees

High

Low

Reasons for cases of low understanding

Did majority of the community members apply the knowledge and skills attained in the training?

What are community actions made as result of the trainings?

Policy regulations/ordinances
Forest protection
Routine road maintenance
Contour tillage

9. Savings and Credit

- *Number of SLGs in your community
- *Month and year SLG organized
- *Amount of savings in your SLGs
- *Month and year your FSC organized
- *Is your FSC registered in the SEC () yes () no
- *Amount of capital stock of your FSC
- *Numbers/percent of farmers as members of the FSC
- *PFI in which your FSC is attached to () bank () cooperative () others specify
- *Numbers/percent members availing loans from FSC
- *Utilization of FSC loans () production () micro enterprise () household use
() others specify
- *Has the FSC function as a village bank () yes () no
- *If no, state reasons why
- *Rate efficiency of UDP activities in capacity building for SLGs and FSCs
() poor () fair () efficient

9. Enterprise development, marketing and infra structure

- * Rank according to importance, the UDP services for enterprise development & marketing (entrefarm, product development, business skills, negotiations, linkage facilitations)
- * Number of producers group established in the community
- * Number of marketing arrangements established in the community
- * Number of processors of farm products in the community
- * State notable changes in marketing of farm products as result of UDP intervention
- * State existing marketing practices of farmers () thru bagsakan centers () middle men () nearest market centers () nearest processors () distributors to regional markets
- Existence of all-weather farm to market roads to the community () yes () no
- Frequency of public transport vehicles plying to and from your community
- Do the roads constructed under the UDP lower your transport cost and time?