

End-line Evaluation Report

On the Project

Prevention of Natural Resource Degradation and Community Livelihoods Improvement in Walinbulla Locality of Central Rift Valley

**SUBMITTED TO:
VISION OF COMMUNITY DEVELOPMENT ASSOCIATION/
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CONTENTS

Acronyms.....	1-iii
Executive Summary.....	1
1 Background Information.....	3
2 Overview of the Project.....	4
2.1 Brief Overview of the Project	4
2.2 Brief Overview of the Project Area	5
2.3 Overview of Key Partner Organizations.....	6
3 Objective and Methodology of the Evaluation	6
3.1 Objectives of the Evaluation	6
3.2 Scope of the Evaluation	7
3.3 Methodology of the Evaluation	7
4 Findings of the Evaluation	8
4.1 Target Respondents.....	8
4.2 Livelihood Base and Rainfall Pattern	9
4.3 Availability of Market and Distance.....	10
4.4 Source of Market Information	12
4.5 Trend of Market Price.....	12
4.6 Practice of Selling Cereals and Livestock	13
4.7 Source of Food and Consumption	15
5 Engagement in Project Focused Interventions.....	15
5.1 Climate Smart Agriculture & NRM.....	15
5.2 Engagement in Non-Timber Products	17
5.3 Engagement in SLM	18
5.4 Gender focused CSA/NRM.....	19
5.5 Women focused IGA (Village Saving & Lending Group)	19
6 Conclusion and Recommendation.....	21
6.1 Conclusion.....	21
6.2 Recommendation	22
Reference	23

Acronyms

ATJK	Adami Tulu Jido Kombolcha
CBO	Community Based Organization
CC	Climate Change
CERV	Central Ethiopian Rift Valley
CSA	Climate Smart Agriculture
CSL	Climate Smart Lending
CSO	Civic Society Organization
ETB	Ethiopian Birr
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GO	Government Organization
GTP	Growth and Transformation Plan
IGS	Income Generating Scheme
KII	Key Informant Interview
MDG	Millennium development Goal
M&E	Monitoring & Evaluation
MoA	Ministry of Agriculture
MoFED	Ministry of Finance and Economic Development
NGO	Non-Governmental Organization
NRM	Natural Resource Management
NTFP	Non-Timber Forest Products
ORS	Oromia Regional State
SMART	Specific, Measurable, Achievable, Realistic, and Time-bound
SNNPR	Southern Nation Nationalities and Peoples' Region
SP	Strategic Plan
SPSS	Statistical Program for Social Science
SWOT	Strength Weakness Opportunity and Threat
VTE	Village Tree Enterprise
VoCDA	Vision of Community Development Association

Executive Summary

1. The project under evaluation is entitled “Prevention of Natural Resource degradation and community livelihoods improvement in Walinbulla locality that constitutes four rural kebeles, namely Walinbulla, Abine-garmama, Nagalign and Gabiba-rasa. Geographically, the target area of the project is situated in the upper stream of Lake Dembel (Ziway) in the central rift valley of Ethiopia, Oromia regional state, East showa zone, AdamiTulu Jido kombolcha district.
2. The objective of the project is to decrease dependency and pressure on the natural resources and enhance sustainable livelihoods for local communities through targeting 870 direct beneficiaries, out of which 540 was supported under IDH & Tree Aid funding and the remaining 330 under UNDP/GEF/SGP funding. Out of the total 400 HHs were supplied with 400 firewood’s saving stoves, 300HHs organized on honey productions and were supplied with 200 modern hives and apiary equipment, 20HHs farmers organized in agricultural lending and fodder grass development and some of them were supplied with seed capital, 141HHs organized on fruits trees and supplied with 1410 red-lady papaya seedlings, 10HHs organized in moringa-soaps production and supported with seed capital enabling engagement into soaps production from moringa and allo-vera leaves.
3. The project supported the plantation of around 149,000 seedlings in the enclosure area through mobilizing area enclosure and volunteer community members and students. 400 women that are organized into 21 groups of IGAs are supported through gaining access to business development skill training and ETB 215,000 in the form of seed capital to enhance women engagement in petty trading. The seed capital is used in the form of revolving fund among group members and as expressed by some of sampled beneficiaries, the seed money has strong contribution in boosting their active engagement in feasible IGAs. On the top of this, the 21 women groups enabled to save ETB 224,484 and this enhanced their capital and disbursement potential on monthly basis.
4. The promotion of modern beekeeping schemes as part of the agro-forestry IGA initiative was partially successful due to the negative pressure erratic rainfall and harsh weather condition. As the identification, orientation and trainings on the importance of area enclosure is provided, the initiative is considered as having germination potential with promising harvest in normal seasons. Successive training on clearing apiary site is crucial for beekeepers to ensure foraging capacity of bees in the colony. Totally, the initiative enabled the group members to harvest **661kgs** of honey during the project period and gained ETB **264,400 birr** through selling portion of the harvest.
5. Distribution and plantation of fast-growing fruits trees was planned in the project for HH farmers as model to instigate the agro-plantation activities as well as diversify income and food source of the beneficiaries. Accordingly, more than 1410 red-lady papaya improved variety of fruits was distributed to 141 farmers and this has been serving as a learning ground in initiating cross learning among neighbours. The target beneficiaries enabled to consume some portion and sell excess production.
6. The women enterprise in organic soap production from moringa/Alloe-Vera plant enabled to produce about 1,634 soaps and gained ETB 81,700 from sell as additional income through performing more over the initial plan. Customers’ satisfaction is increasing, as the members of local community and bypass passengers are starting purchasing such soaps through plan for the purpose of its utility as cosmetics serving as sunscreen.
7. Energy saving efficient stoves was distributed to 400 women in four kebeles (100/kebele) as part of the project plan and this has been facilitating the utilization of energy efficiency in cooking and saving women’s workload while contributing to the improving trend of household sanitation family health.

8. The provision of theoretical and practical training on climate smart agriculture was provided in the form of TOT, which is cascaded to community level orientation through focusing on the advantage of CSA over the conventional agriculture. The approach CSA as improved means of productivity and income is started adaptation by the target farmers as a means to overcome challenges related to compost preparation from locally available materials and application of compost on farming lands and side effect of using inorganic fertilizer on farm lands. The initiative was taken as pilot through motivating model farmers with ETB 50,000 in the form of seed capital support to produce in organic approach.
- 9 In the area of natural resource management, sand water conservation practices, capacity building training was provided for area enclosure groups' members with the objective to enhance knowledge and awareness regarding forest management and wise use of forest for its sustainability. The initiative incorporated community mobilization towards engaging in physical conservation work, such as soil bund and plantation pit excavation and check dams, which enabled excavate up to 149,000 plantation pits during the project period.
- 10 In terms of overall achievement, almost activities are undertaken with success and complete accomplishment, except the production of honey, which remained to around 17%, and fodder grass development, due to harsh climate condition that hampered the production of honey and fodder grass development during the current period of rainy season. The other limitation is in the area of climate smart loan provision, with attainment of 50% due to the effect of rain stress similar to honey and fodder grass production.
- 11 The funds utilized during the two years project periods (July 1, 2021 to December 31, 2022) is reported to be **ETB 4,542,721.45**, detail financial analysis to be handled on the basis of audit report expected to be handled in view of funding agreement.

1 Background Information

Vision of Community Development Association (VoCDA) is a local NGO established in 2003 with the vision to see improved, livelihoods, mitigation and rehabilitation of natural resources, and educational status of the target area community, among some. VoCDA as secular development organization has been promoting community-based development initiatives in line with actualizing the major objectives that deal with the grassroots community empowerment, food security maintained and development of infrastructural facilities developed. As emerging indigenous NGO, VoCDA is currently operating in Dugda, Dododta and Adamitulujidokombolcha in east and Arsi zones of Oromia region.

With an intention to enhance its contribution to the improvement of natural resource preservation and life situation of the target community, VoCDA is envisaging to undertake Prevention of Natural Resource degradation and community livelihoods improvement in Walinbulla Locality of central rift valley, project since 2021 in 4 rural kebeles of Adami Tullu Jido Kombolcha woreda of East Shewa zone, Oromia region. The target area of the project is literary known as the wolinbulla locality and situated in vicinity of Lake Dambal/Batu town, at the distance of about 160kms from Addis Ababa. Administratively, the area is situated under Adamitulujidokombolcha Woreda of east shewa zone of the Oromia Regional State.

A 2-years long Prevention of Natural Resource degradation and community livelihoods improvement in Walinbulla Locality of central rift valley is designed and undertaken in the area since April 2021. The major development objective of the project is to contribute to the reduction of poverty among 870 rural households in the Wolinbula locality through sustainable natural resource management, rehabilitation of degraded land and creation of VTEs.

This endline evaluation report is prepared on the project entitled ‘Prevention of Natural Resource degradation and community livelihoods improvement in Walinbula locality of ATJK district. The project was implemented with the joint funding support from UNDP, IDH and Treeaid. VoCDA served as the core implementing partner in collaboration with ARJK woreda Agriculture Development office and other key government sector offices.

The goal of the project was to contribute to reduction of vulnerability of natural resources through reinforcing efforts focusing on conservation and rehabilitation of the environment with ultimate objective of attaining improved food security situation and livelihoods status of the target communities.

The target area of the project is situated in vicinity of Batu town, the capital of Adami Tulu Jido Kombolcha (ATJK) woreda of East Shewa Zone, Oromia Regional State with a distance of 160 kms from Addis Ababa. The project undertaken in four rural kebeles: Negalign, Walinbula, Abine-garmam, and Gabiba-rasa.

The objective of the endline evaluation is to undertake analysis of project impact and achievements/results of the project on target area and target beneficiaries that would help to understand ongoing impacts and challenges.

2 Overview of the Project

2.1 Brief Overview of the Project

The project under evaluation is co-funded by tree aid, IDH/ISLA, and UNDP/GEF/SGP with the intention to address problems related to land degradation and livelihoods enhancement of the targeted communities. In terms of donor-based category, 540 beneficiaries were supported under IDH & Tree Aid funding while the remaining 330 beneficiaries were UNDP/GEF/SGP, totally the projected reached 870 beneficiaries through various interventions.

The project focused on activities related to seedling nursery, fruit tree seedlings distribution, seedling germination, fodder grass development and distribution, farmers forest day celebration events, different capacity building workshops, capacity buildings on energy stove production and moringa soap production. The implementing partner followed environmental-friendly income generation modality to enhance household income. Income generating activities approach was to decrease the pressure community put on the natural resources through introducing alternative livelihoods schemes.

	Planned Activities	Planned to Reach	Actual Reached Beneficiaries	Remark
1	Firewood's saving stoves	400	400	
2	Honey production	2,250	661	
3	Modern beehives and apiary equipment	200	200	Apiaries; smokers, protective clothes, gloves, wax, queen excluders and bees-vials,
4	Farmers organized on agricultural lending and fodder grass development	20	20	
5	fruits trees	141	141	1410 red-lady papaya fruits
6	Moringa & allo-vera soaps production and selling	10	10	Households

The project was focused on supporting the restoration of 158 hectares of degraded lands and increasing vegetation coverage through establishing five area enclosure groups. The establishment of moringa/allovera soaps producers' group and climate smart agro-lending groups are social enterprises under the support of the project with the aim to supplement the income of 870 households.

To this end, all the seven enterprises will access income generating schemes as planned in this proposal which will contribute to the livelihood enhancement schemes planned for alternative income sources including individual HH levels. The plan is encouraged the seven enterprises (comprising 330 individual households and 540 HHs at individual level) to involve in production and commercialisation of fruits, honey, moringa soap producers, fuel efficient stoves utilization and fruits tree plantation beneficiary groups.

To promote the conservation practices of individual households as local environmental campaign initiative, the recognition of model farmers with exemplary performance in the area of environmental preservation, there is a plan to reward eight model farmers and two schools in consideration of their excel effort. In this case every year there would be one person from

each kebeles in total eight persons, and one school from four kebeles to recommended for reward.

2.2 Brief Overview of the Project Area

The target project area is located in the upper basin of Lake Dembel/Ziway to the north western plateau sub-catchment. The area is characterised by steep slanted highlands, with the lower basin being flat with broad valleys. The runoff of lake Dembal/Ziway discharges from the plateau west of Ziway from the upper basin of the Gurage/Masken high land. The altitude of the basin ranges from approximately 1,600 MASL in the rift floor to over 3,500 MASL in the large volcanic peaks of the western Gurage Mountains, which form the second major recharge area of the basin, followed by Kater-river which flows to the rift valley Dambel lake, where the project sites is located on the floor of the rift valley adjacent to the lake.

The Central Ethiopian Rift Valley (CERV) catchment is situated 160km south of Addis Ababa in the administrative regions of Oromiya and Southern Nation Nationalities and Peoples' Region (SNNPR) and covers an area of 14,000 km² (Figure 1). CERV is characterised by a chain of lakes and wetlands with unique hydrological and ecological characteristics.

The various lakes in the CERV watershed are interlinked and situated in a closed basin (i.e., without an outlet to major rivers or to the sea) (Figure 2). Within this closed catchment area, 7 sub-catchments have been distinguished. The wide diversity of landscapes and ecosystems comprise extensive biodiversity-rich forests and wetlands. The CERV is an environmentally vulnerable area in Ethiopia. As a closed river basin, relatively small changes in land and water use can have far-reaching consequences for ecosystem services, and potentially undermine the sustainable use of the area.

The project targets 4 Kebeles in Adami tulu Jido kombolcha in the East shewa zone of the Oromia regional State, in Ethiopia. The wetland ecosystem in the CERV is the major fresh water ecosystem in Ethiopia, with substantial economic, ecological and social significance. Management of land and water resources in the CERV is complex due to the increased competition for irrigation water, land and biomass. Moreover, issues such as deforestation and poor farming schemes which results to climate change may affect the distribution of rainfall.

Recent private investments in irrigated horticulture and floriculture for local and international markets, respectively, stimulate economic growth and development, but claim their share of the limited resource base, especially water. There is much competition between commercial and small holder producers for water usage, which, then compounded with deforestation and poor land use practices upstream, creates complex threats to the vulnerable ecosystem.

Lake Ziway is one of the lakes within the central rift valley system which serves for a wide range of socio-economic activity. Different water use sectors are recently increasing their pressure on the water balance of Lake Ziway which is recharged by precipitation, small streams and two rivers, namely the Katar and Meki Rivers.

Additionally, due to reduced vegetation cover from unsustainable forest management and overgrazing, there is a high risk of flooding in the rainy season, as well as the risk of water bodies running dry in downstream areas in the dry season. Effectively, as the soil loses cover

and root structures, there is increased soil erosion, less percolation and increased runoff that leads to more flooding and land degradation to downstream areas.

Farm land in our targeted Kebeles, between Wolin bula and Ziway town, has recently been destroyed due to flooding that result to destroying/removal of fertile soil and reduce fertility of farming land. Moreover, the loss of forest cover, leads to high erosion and low infiltration, resulting in little groundwater recharge of both surface runoff and subsurface flow. The eroded soil flows down the upper stream towards Lake Ziway, causing the lake to silt up. The level of water in Lake Ziway, has been declining, springs and rivers are drying up, erosion is rampant, silt is filling up lakes and wetlands and fish stocks in the Central Rift Valley lakes have decreased considerably.

The small streams in the four intervention kebeles directly recharge to Lake Ziway. The intended protection and rehabilitation of natural resources is expected to increase in vegetation cover through the establishment of enclosure areas, improved land management practices and reduction of human pressures on the natural resources., will help reduce soil degradation and soil erosion in the area, reducing the salinization of the Lake Ziway. It will also contribute to reducing the risk of flooding during rainy season in our targeted kebeles, as well as further downstream. Furthermore, the project will contribute to increasing the water quality of lake and to increase the water level during the dry season.

2.3 Overview of Key Partner Organizations

Vision of Community Development Association (VoCDA) is an indigenous secular NGO operating in Arsi-Nagelle, Adamitullu Jiddo Kombolcha, Dodota and Dugda districts in Oromia Regional State. The organization was established in 2003 and registered as Ethiopian resident charity with registration number 0129 in line with the CSO and NGO agency re-registration policy. VoCDA has been guided by strategic plans in the promotion of community-based development interventions to contribute to improving life and strengthening livelihood basis of the poor and vulnerable communities.

The organization promotes the application of well-thought systematic intervention to address the pressing issues that deserves remarkable emphasis on building the capacities of poor people, vulnerable groups and their institutions to deal with structural issues of poverty. VoCDA has been promoting development interventions that focus on strengthening community-based livelihood capacities through enhancing integrated investment in the areas of capacity building related to local capital formation and institutional transformation. The coordinated effort in partnership key stakeholders has been bringing remarkable changes in the life and livelihood basis of the target community.

3 Objective and Methodology of the Evaluation

3.1 Objectives of the Evaluation

The general objective of the intended end line evaluation is to undertake analysis of project *impact and achievements/results* of the project on target area and beneficiary that would help to know project impacts and failure.

3.2 Scope of the Evaluation

- Familiarizing oneself with the project idea (refer to the project proposal document) and reports done during the past two years,
- Assessing the socioeconomic situation of the target community; based on current and baseline situations,
- Analysing, impacts of project;
- Assessing the current situation of natural resources after project implementation,
- Assessing changes envisaged after the project interventions, against the prevailing situation of gender norms and practices,
- Assessing increment and/or decrement of livelihoods of target community/beneficiary after project interventions, in comparison to the before project interventions,
- Assessing the community reflections on project intervention through dialogues taking into account focal group discussions among project beneficiaries and non-project beneficiaries,

3.3 Methodology of the Evaluation

The endline evaluation is undertaken through employing both quantitative and qualitative methodologies. In the quantitative method, HH questionnaires was used through applying stratified random sampling while the qualitative method utilized participatory assessment approaches that include Key Informant Interview (KII), Focus Group Discussion, physical observation and case studies. The findings from various sources are triangulated with key indication from review of relevant document and literatures.

The data collection exercise was undertaken through deploying four data collectors and one supervisor. The enumerators and supervisor were undergone orientation on the data collection process with close on spot checking by field research during the data collection process. Context specific questionnaires was prepared and applied with the intention to serve the purpose and facilitate ease of analysis through the application of SPSS.

To gain inclusive understanding, the quantitative data is collected from the four target woreda in terms of sampling proportional to size. This enabled to collect 120 HH questionnaires, which is 30 per target kebele. On the other hand, the qualitative assessment utilized open ended interview checklist to serve probing the participants of KII and FGD in a systematic and participants friendly procedure.

The data collection process was also supported by orientation and prior discussion with key stakeholders, particularly line government offices and community leaders. In the data collection process, due attention was provided to maintain ethical consideration and local language application. The collected data is coded and analysed through employing SPSS (Statistical Program for Social Science) software while the findings of qualitative assessment is used to triangulate with the result of quantitative results and key summaries from document review.

In terms of scope,

- The evaluation focused on the direct beneficiaries of the project that are situated in the four target kebeles of Walinbulla locality.

- Geographically, the four-target rural kebeles (Walinbula, Abine-garmama, Nagalign and Gabiba-rasa) are located in the upper stream of lake Dembel (Ziway) in the central rift valley of Ethiopia, Oromia regional state, East showa zone, AdamiTulu Jido kombolcha district.
- As the total beneficiaries are 870, the sample utilized 120 respondents in a systematic identification to ensure the incorporation of target beneficiaries from existing core intervention in a proportional approach.

4 Findings of the Evaluation

4.1 Target Respondents

The endline evaluation data was collected from the four target kebeles in ATJK woreda through targeting 120 respondents, out of which 66 (55%) was women and this indicates the application of proportional representation of both gender in the evaluation process on the one hand and proportionality in addressing beneficiaries from both men and women.

Statistically, there is a recommendation to take a sample size between 10 and 20 percent to ensure reliability of the findings and as this sample indicates representation about 14%, the analysis has positive value to consider interpretation for the entire population. The proposed sample size coverage is taken into consideration the prevailing minimum cost, time constraints and convenience for movement during the prevailing security tense situation due some armed men insurgency in the vicinities.

As the target population (beneficiaries of the project) is homogenous in character, the data collected from 120 respondents ensures validity and reliability of the results to be analyzed from the view point of the entire beneficiaries and beyond. The methodology was based on applying triangulation approach of data collection and analysis, which includes quantitative HH survey, qualitative assessment and document review.

The sample respondents were equally divided into target kebeles, which are 30 per kebele with the intention to facilitate the application of cluster-based sampling that would ensure the evaluation analysis from proportional number of respondents. The coverage of target respondents in terms of gender varies among the four target kebeles and this is in line with focal intervention planned and undertaken per kebele, for instance the engagement of women in green production, such as soap making influenced the number of females to be higher (76.7%) in this target kebele while the engagement of more males in fruit production makes the number of female to be lower in Gabiba-rasa kebele, which is about 30% in comparison with the other target kebeles (see Table 1 below).

Table 1: Respondents of the Evaluation by Sex & Kebele

Target kebele of respondent * Sex of respondent					
Crosstabulation					
Target kebele		Sex of respondent		Total	% of Female
		Male	Female		
1	Nagalign	7	23	30	76.7
2	Walinbula	15	15	30	50
3	Abine-garmama	11	19	30	63.3
4	Gabiba-rasa	21	9	30	30
Total		54	66	120	55
%age		45	55		

The marital status indicates the existence of married, separated and widows at the rate of 95.8%, 2.5% and 1.7% respectively out of the total respondents (see Table 2 below).

Table 2: Marital status of respondent by sex

Marital status * Sex of respondent Crosstabulation				
Marital status	Sex of respondent		Total	% age
	Male	Female		
Married	53	62	115	95.8
Divorced	1	1	2	1.7
Separated	0	3	3	2.5
Total	54	66	120	

The educational status of respondents' cross-tabulated by sex reflects the existence of more non-literate female in comparison with that of males, which reflects the existence of 48.5% female in the non-literate category while this figure is about 25.9% for male. The finding indicates the existence of more males in the elementary education level from grade 1-8, which is 69.2% in cumulative sense. (see Table 3 below).

Table 3: Educational status by Sex of respondents

Educational status * Sex of respondent Crosstabulation						
Educational status	Sex of respondent		Total	%age	%age of Female	%age of Male
	Male	Female				
Non-Literate	14	32	46	38.3	48.5	25.9
read & write	6	6	12	10	9.1	11.1
Grade 1-4	18	12	30	25	18.2	33.3
Grade 5-8	14	10	24	20	15.2	25.9
Grade 9-12	2	6	8	6.7	9.1	3.7
Total	54	66	120			

4.2 Livelihood Base and Rainfall Pattern

The main livelihood base in the target area depends on mixed farming whereby about 93 (77.5%) of target respondents indicated as depending on mixed farming in the target areas (See Chart 1, below). This further reflects the prevalence of minimum, almost non-existence of non-farming opportunities. Subsequent to mixed farming, the second most covered engagement is cropping farming with the rate of response reaching 18.3% while engagements in livestock rearing alone and petty trade is almost non-prevailing. This finding further indicates the non-existence of variation among the target kebeles in terms of having access to multiple income sources (see Table 4, below)

Table 4: Main livelihood sources by target kebele

Main livelihood sources * Target kebele of respondent Crosstabulation						
Main livelihood Source	Target kebele of respondent				Total	%age
	Nagalign	Walimbula	Abine-garmama	Gabibara-rasa		
Mixed Farming	23	27	21	22	93	77.5
Crop Farming	6	2	7	7	22	18.3
Livestock Rearing				1	1	0.8
Petty Trade	1	1	1		3	2.5
Salary/wage			1		1	0.8
Total	30	30	30	30	120	100

The pattern of rain fall in the past rainy season is considered as dry and partially dry in the four target kebeles, irrespective of altitudinal variation which was considered as contributing to either drought or improved rainfall. In this regard, the finding of the baseline survey reflected the prevalence of regular rainfall pattern in Gabiba-rasa kebele in comparison with Nagalign kebele with limited rainfall due to its relative location nearer to very lowland climate of the central rift valley. The finding of the endline evaluation indicates the increasing trend vulnerability of all target kebeles to the negative effect of climate change. The effect as explained by Guye Garmame from Abine Garmama kebele the member of Limat beekeeping group (one of the beneficiaries of modern behaves), did reflect their experience related to continuous reduction in bees' population in the initial instance and early evacuation prior to production of honey.

As a result, the target group was not in a position to harvest the fruits of their effort in this season, even though the other group led by Engliz Ragassa reflected ability of harvesting 12 kgs from a single behaves through availing additional feeds and water in the form of emergency reinforcement needs, which was gained from the training provided in the initial startup period by the implementing partner and woreda level agricultural experts.

In comparison to the baseline situation in relation to rainfall, which indicated the prevalence of 57% regular rainfall and 43% drought pattern in the entire kebele, the endline situation reflected the trend of worsening scenario, as there was 55% drought and 45% semi-dry pattern with scant regular rainfall. In terms of kebele based variation, for instance there was good rain in Abine-garmama and Gabiba-rasa kebeles, as the ration of gaining access to regular rain was 68% and 72% respectively during the season prior to the period of baseline. The trend in these kebeles after one year, which is the season prior to endline evaluation, indicated the prevalence of drought and semi-dry pattern in both kebeles without enjoying regular rainfall (see Table 5, below)

Table 5: Rainfall pattern by Kebele

Target kebele by Rainfall pattern in past recent season					
Target kebele	Frequency			Percentage	
	Rainfall pattern in past season		Total	Rainfall pattern in the past season	
	Drought pattern	Semi-dry pattern		Drought pattern	Semi-dry pattern
Nagalign	17	13	30	57%	43%
Walinbula	16	14	30	53%	47%
Abine-garmama	17	13	30	57%	43%
Gabiba-rasa	16	14	30	53%	47%
Total	66	54	120	55%	45%

4.3 Availability of Market and Distance

As identified through the findings of endline evaluation, the majority of target population in all of the four target kebeles, about 46% travel below 30 minute to reach potential markets, while those travels up to 1 hour reaches 20% of the population. In this case, about 60% of the entire target population have access to market within one hour distance, which indicates the prevalence of access to market related opportunities in terms of engagement in petty trade,

ease of access to agri-inputs supply and marketing their agricultural products including fresh vegetable and fruits (see Table 6, below).

As those that travel more than 2 hours distance to gain access to market reaches 15% of the entire population, the issue of market distance is could not be considered as core factor in preventing target beneficiaries from exploiting market related opportunities, except the negative influence of undesired actors in the agricultural value chains, including depressive pricing policy from the government side on this year's wheat harvest. The KII participant from Gabiba-rasa kebele, for instance indicated the regulatory pressure of the government on reducing the selling price of one quintal of wheat from ETB 4,300 to 3,200 is enforcing the farmers to loss ETB 1,100 per quintal in this harvesting season.

(see Chart 4 below).

Table 6: Market availability & Distance by Target kebele

Market availability * Distance of the nearest market * Target kebele of respondent Crosstabulation							
Target kebele	Type of Access Market	Distance of from the market					Total
		below 30 min	30 min to 1 hour	1 hour to 1:30	1:30 to 2 hour	>than 2 hour	
Nagalign	Village market	4	1				5
	Nearby market	18	6				24
	Far big market				1		1
	Total	22	7		1		30
Walinbula	Village market	3	2				5
	Nearby market	16	6	3			25
	Total	19	8	3			30
Abine-garmama	Village market	4					4
	Nearby market	10	9				19
	Far big market			7			7
	Total	14	9	7			30
Gabiba-rasa	Village market			1			1
	Nearby market				2	10	12
	Far big market			1	8	8	17
	Total			2	10	18	30
All Kebele Summary	Village market	11	3	1			15
	Nearby market	44	21	3	2	10	80
	Far big market	0	0	8	9	8	25
	Total	55	24	12	11	18	120
	Percentage	46%	20%	10%	9%	15%	100%

4.4 Source of Market Information

The source of market information as indicated by the respondents of the baseline survey is mainly from friends and relatives (about 50% of the total) followed by market place open information (about 35% of the total). As reflected in next Chart, opportunity of access to market-info is dominated by traditional mechanisms, such as friends, traders and open market interaction. This reflects the non-existence of having access to informed decision that would help to maximum market level pricing advantages. The main influencer is middle actors, called Delala in most cases.

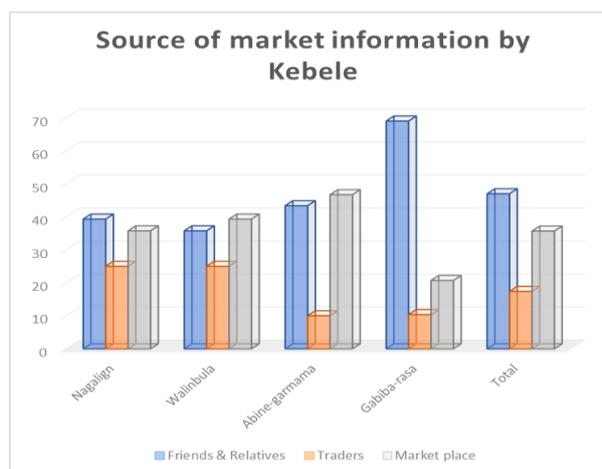


Chart 1: Source of market information

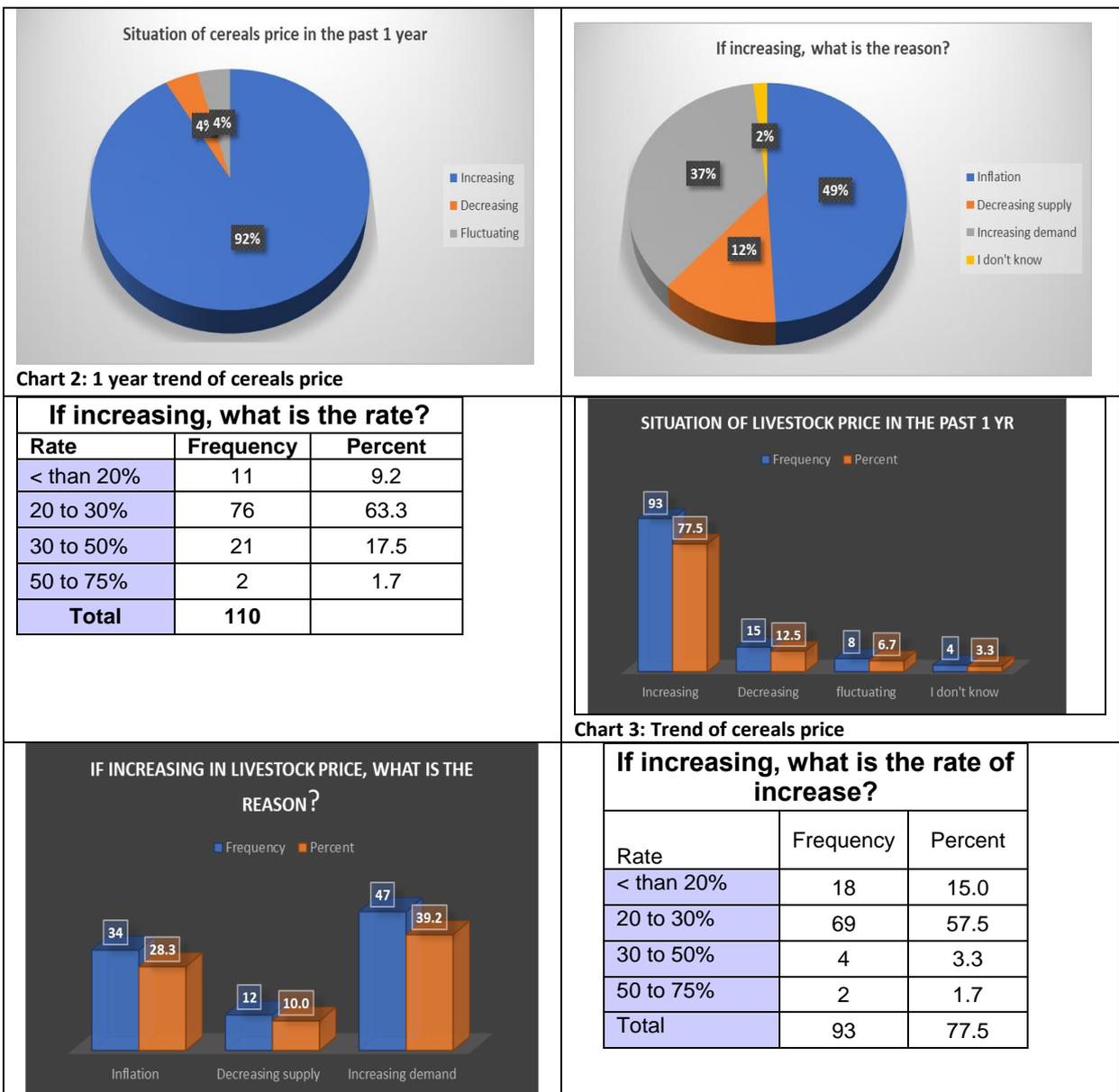
As the government market regulatory actors started defining the farmers' gate price for cereals, the target farmers are facing another challenging scenario, which is more turbulent in disturbing the decision-making rights of producers. As reflected in the baseline finding, the influence of 'Delalas' was very threatening to taking informed decision by producing farmers, while recently the negative influence of regulatory framework is further pushing target farmers to fall under the influence of both government and Delalas at the same time, as the latter are trying to utilize illegal hidden routes that might pay a little bit marginal price more than what is set by the government, but operating under the threat of losing the entire benefit, if caught red-handed by government laws enforcement organs.

4.5 Trend of Market Price

The endline evaluation focused on understanding the trend of cereals and livestock prices in the past one year of project implementation period. Accordingly, the trend indicates the prevalence of huge increase in cereals price, as revealed by 92% of the respondents. The reason behind such increase is attached to inflation as reflected by 49% and decreasing supply by 37%.

The trend of decrease in cereals supply in the local market is associated with the prevailing drought situation in the current harvesting seasons. In total, the rate of inflation is estimated to be between 20 and 30%, as indicated by about 63.3% followed by 17.5% of respondents with the view reflecting the existence of 30 to 50 % rate of inflation in comparison with similar period price of last year in the same local market.

In terms of livestock, there is increasing price trend, as reflected by 77.5% (93 out of 120) respondents. They reflected on the reason, as due to trend of increasing demand, which is indicated by 39.2% followed by those that mentioned inflation 28.3%. The rate of increase is mentioned to fall between 20 and 30%, as indicated by 75.5% of respective respondents (see Charts below).



4.6 Practice of Selling Cereals and Livestock

In terms of cereals and livestock sale, there very few households still engaging in cereals and livestock selling, there are respondents, such as about 52% and 20% of target respondents with the practice of selling in the past three months respectively. The major cereals being sold is wheat, as 86% of those reflected the practice of selling cereals witnessed while the practice of selling livestock is being witnessed by 10 out of 26 with higher rate I comparison with other livestock, such as goat and sheep.



Chart 4: Practice of Selling Cereal

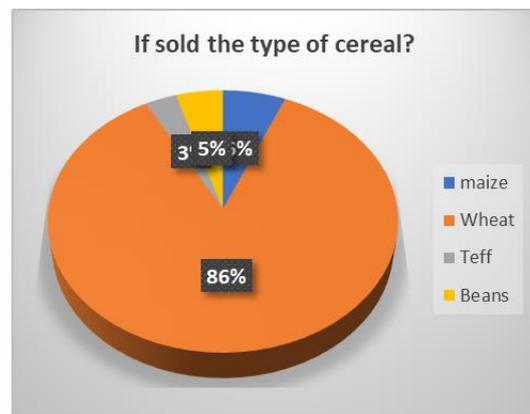


Chart 5: Type of cereals sold



Chart 6: Practice of selling livestock

Type of livestock sold in the past three months

Type of Livestock	Frequency	Percent
Ox	10	38.5
Cow	2	7.7
Goat	7	26.9
Sheep	5	19.2
Donkey	2	7.7
Total	26	100

As far as the reason of selling is considered, the majority indicated the need to purchase food item is pushed the HH to sell livestock followed by the need to purchase non-food items. In comparison with the baseline findings, there is no sign of change as about 40% of respondents reflected the need to purchase food grain is taken as the core reason in both baseline and endline periods.

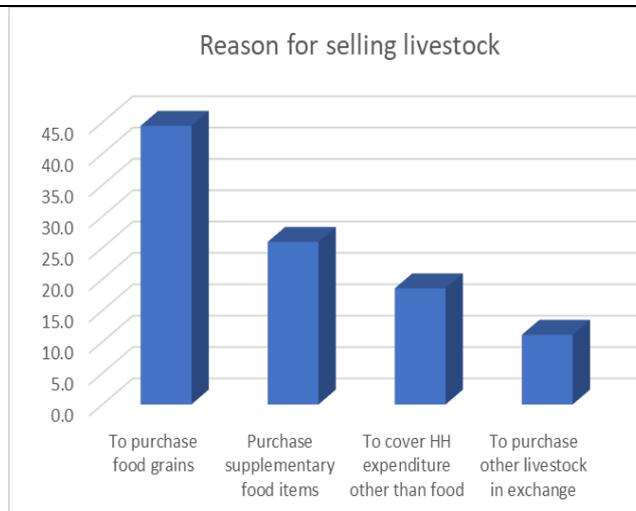


Chart 7: Reason for selling livestock

The trend of selling to save money and purchase another in sense of fattening and selling in the form of alternative income generation is practiced among minimum households, which indicates the trend of limited practice of investment other than mixed farming.

On the other hand, the sale of milk and milk by-products becomes nil in the endline evaluation which was mentioned by about 26% of survey respondents in the baseline period. As revealed during the FGD session, the escalating drought situation has dramatically reducing the production of milk even for HH food intake.

4.7 Source of Food and Consumption

In terms of the food source, about 79% of respondents indicated as depending on their own production. This was 54% in the baseline period followed by 29% that indicated as depending on food aid or gifts from relatives. In the endline period, there is no food supply from aid or gifts from relatives, as the trend of drought has been pushing the status of households to reduce gifts for relatives. Dependency on of household on food to be purchased from the market was 17% during the baseline and this is increased to about 31%, which indicates the escalating trend of food self-insufficiency, even it is in minor proportion (see Table 7 left).

Table 7: HH Source of Food

Target kebele * Source of Food for HH Consumption				
Target kebele	Source of Food for HH Consumption			
	Own production	Purchase from market	Total	Percent
Nagalign	26	4	30	86.7
Walimbula	27	3	30	90.0
Abine-garmama	19	11	30	63.3
Gabiba-rasa	23	7	30	76.7
Total	95	25	120	79.2
%age	79.2%	30.8%		

The findings of qualitative assessment help to reflect the prevalence of reduction in own production and dependency on own food consumption, due to climatic change and associated reduction in rain sufficiency and coverage. The reality is further reflected as kebeles with relatively dependable harvest, such as Gabiba-rasa is being considered as having lower rate of self-sufficiency, 37.5% (see Table 8, left), while this kebele was considered in the top list of depending on non-own production in significant proportion.

Table 8: Food consumption self-sufficiency from own production

Target kebele * Food consumption self-sufficiency				
Target kebele	Food consumption self-sufficiency from own production?			
	Yes	No	Total	Percent
Nagalign	11	15	26	42.3
Walimbula	4	22	26	15.4
Abine-garmama	6	13	19	31.6
Gabiba-rasa	9	15	24	37.5
Total	30	65	95	31.6

5 Engagement in Project Focused Interventions

5.1 Climate Smart Agriculture & NRM

In terms target community experience related to engagement in Climate Smart Agricultural practices and/or improved system of Natural Resource Management, the baseline survey reflects the existence of only 6% of target respondents. The one-year project intervention enabled to improve the status and accordingly out of the endline evaluation respondents, about 66% as having engagement in CSA/NRM initiative within the past one year (see Chart left)

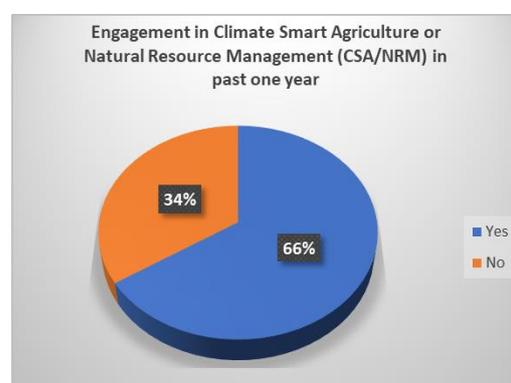
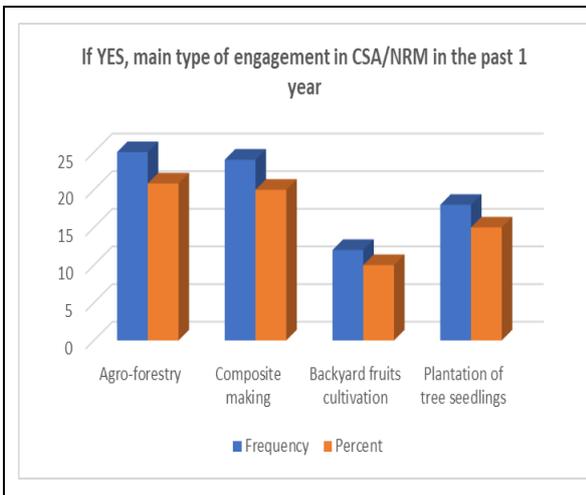


Chart 8:HH engagement in CSA & NRM



The evaluation further identifies the level of engagement indicating that about 20% of target respondents as having engaging in agro-forestry and composite making while 15% and 10% as actively engaging in Plantation of tree seedlings and backyard fruits cultivation respectively (see chart left).

This reflects the trend of positive contribution of the project within limited time of intervention in the target kebeles.

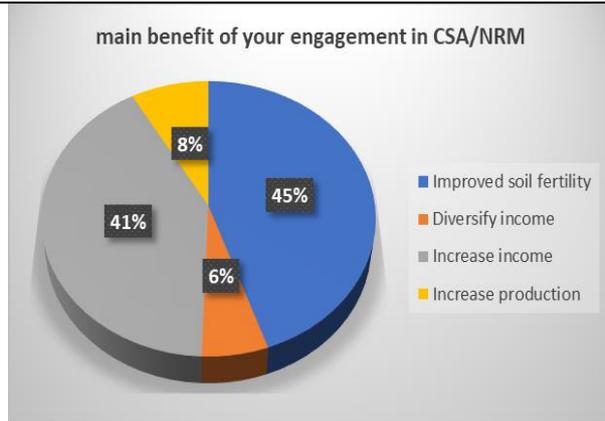


Chart 9: Main benefits of engagement in CSA/NRM

In terms of actual and potential benefits being derived from the engagement in CSA/NRM, the evaluation result helped to reflect its contribution towards improving soil fertility (45% of respondents), and increase production as witnessed by 41% of target respondents. As the project helped to increase the level of engagement in CSA/NRM initiative of individual and group-based exercise, the benefits have strong sense of motivation element to mobilize more engagement at community based reinforced initiative.

The existence of attitudinal change trend on NRM is witnessed by about 77% of endline evaluation and this was witnessed by 17% during the baseline survey. Even though, we try to exclude the baseline data, the contribution of this project in bringing positive attitudinal change on almost 50% of target respondents. This is considered as the contribution of the project through the implemented various NRM focused interventions as witnessed by 48% of respondents with the view supporting the existence of positive change in the past year.

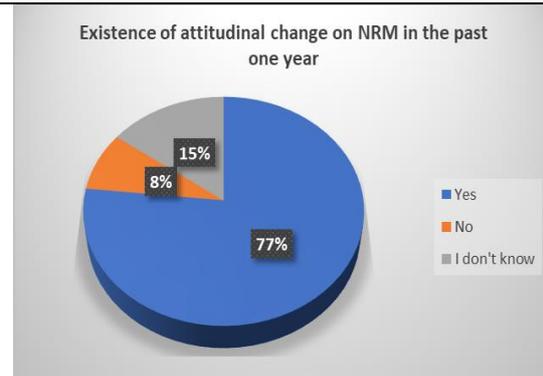


Chart 10: Existence of attitudinal change

5.2 Engagement in Non-Timber Products

The endline evaluation tried to understand target household's engagement in the production of non-timber products in comparison with the baseline benchmark. Accordingly, the baseline benchmark indicates the existence of households that had engaged in non-timber focused production was limited to 7% of target respondents while the endline reflects status of improved engagement reaching up to 53% of target households. This is an insignificant increase in attaining non-timber engagement in the target localities through the project initiative.

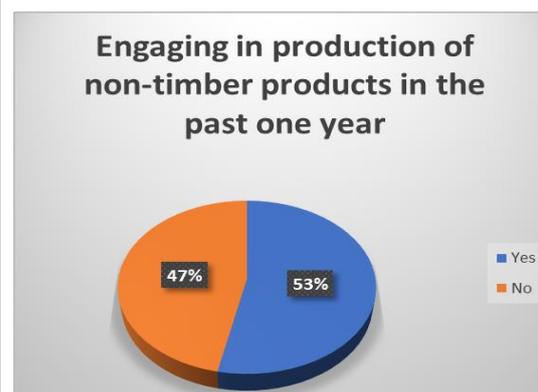


Chart 11 : HH engagement in non-timber production

Table 9: Type of HH engagement in non-timber products

Non-timber products		Frequency	Percent
1	Fodder production	15	23.4
2	Honey production	32	50
3	Soap making	6	9.4
4	Fruit trees cultivation	8	12.5
5	Combined engagement	3	4.7
Total		64	100

The relevance of the project in promoting modern beekeeping, fodder grass production and the likes is being ensured as the intended interventions are ensuring possibility of engagement in environmentally friendly income and livelihood sources. Availing access to opportunities with organized engagement in non-timber focused production alternatives is producing the expected result in this regard.

As indicated in the above table that is driven from the result of the endline evaluation, about 50%, 23% and 12.5% of target respondents have been engaging in honey production, fodder production and fruit tree cultivation respectively. The challenging factors as reflected through KII and FGD sessions, is revolved around limitation of rain and corresponding drop in moisture that had been hindering gaining access to the expected results from their engagement in CSA.

Case study-1

As part of the CSA interventions, VoCDA distributed 3 modern Langstroth beehives per group of four beneficiaries organized as a neighbourhood in their residential locality. Each beekeeper group received the beehives free of charge. Beekeeping utility equipment such as smokers, protective clothes, queen-excluder and honey extractors were provided to serve in a group-based utilization approach.

The chosen localities were observed to have traditional beehives in many places and are ideal for beekeeping as there are sufficient flowering perennial (permanent) and seasonal flowering plants to forage by colony of bees. As promising case, Obbo Amado Bele, a 35 years old farmer with level of education of grade 7 completion was one of the group members who attended training on improved beehives management and received 3 modern Langstroth beehives through the project initiative. The initiative enabled obbo Amado to harvest 15 Kg of organic honey twice per year and to gain ETB 3000.00 through selling 10 kgs at the rate of 300.00 per kg.

During the endline assessment, member of the evaluation team with appropriate professional background tried to inspect the situation of beehives management whereby came across that out of the three beehives, only one is occupied by bee colony. The other two hives are abandoned because of lack of flowering plants as a result of extended dry season without sufficient rainfall.

The other limitation indicated during inspection of the apiary site by the evaluating team is poor sanitation in and around the beehives. Besides, the beehives were fixed with trees which are

potentially exposing the bees to ants. Thus, the farmer deserves regular based professional support from pertinent agricultural agents and experts.

5.3 Engagement in SLM

The promotion Sustainable Land Management (SLM) is very minimal prior to this project intervention, as only 7% of respondents did confirm their engagement during the baseline survey. The contribution of the project in raising awareness and supporting with inputs has enabled to increase the level of engagement to 67% as revealed through the findings of the endline evaluation (see chart 13, left)

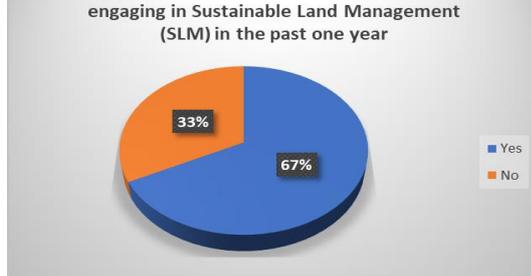


Chart 12: Engagement in SLM

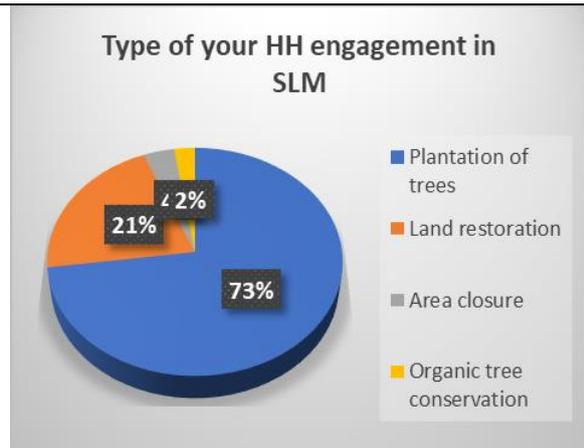


Chart 13: Type of engagement in SLM

The type of engagement in Sustainable Land Management (SLM) is revealed to be involvement in tree plantation (73%) followed by land restoration through soil and water conservation (21%) of target respondents of the endline evaluation (see chart 14, right).

The contribution of the project is remarkable as the participants of the qualitative assessment from line government offices reflected during the evaluation process. The agricultural development office experts reflected the prevalence of high contribution of the project in mobilizing target communities during the green legacy initiative.

The contribution of the project in promoting training exercises on SLM initiative and contextualized NRM interventions enabled the target community members to enhance their attitude on the importance of citizen's engagement in the promotion of CSA. In this case, the finding of endline evaluation reveals the opportunity of gaining access to such type of training by almost half of the target beneficiaries, as 55% of respondents indicated their participation in SLM focused training sessions (see chart 15, left).



Chart 14: Participation in NRM focused training

Case Study-2

Obbo Engliz Regasa and his three other team members took training on modern beehives management and have received three modern Langstroth beehives per group of four organized beekeeper farmers. Obbo Engliz Regasa said that even though a colony of bees has entered the beehives and there have been larvae in all the beehives, there has been no harvest so far. He associated the lack of harvest with the extended dry season with below average rainfall in the area for the last couple of years that has resulted in poor vegetation growth with little flowers. The evaluation team inspected the beehives and the hives are having weak bee colonies most probably as a result of poor sanitation indicated by spider webs – Wax moth, at the hives entrances. Therefore, disease and parasitic infestations as result of poor sanitation could have resulted in limited the bees from producing honey. Thus, comprehensive package of training is required with regular monitoring and mentor service to ensure sustainability of the initiative beyond the project span.

5.4 Gender focused CSA/NRM

To reinforce gender focused CSA/SLM initiative in sustainable approach, the project promoted the engagement of interested women in organic soap production from moringa leaves and *Olivera avera*. One of the initiatives is the women group in Negalign kebele. The group name is Megeristu to mean ‘green engagement’ in local language Afan-Oromo. The group member’s main engagement is soap making from environmentally sound inputs.

Iftu Bensa, 28, married and a mother of 7, out of which 4 are in school, is the cashier and sales women of the soap making group. As she mentioned, in the initial instance, the group faced difficulty in attaining the level of quality expectation due to limited skills and experience. Through time, the project facilitated participation in skill-based training and our day-to-day exposure to market interaction and corresponding demand started capacitating our technical and marketing skills.

Currently, the group has adequate skills in producing quality organic soap that are being purchased on demand at our production store. She further mentioned the prevalence of price variation from the ordinary soap, as the green soap is being sold almost double of the ordinary bathroom soap. The reason is the ingredient of our organic soap that is natural with sun screening benefits for women in general, and those engaged in petty trade with daily exposure to direct sun rays of open village market.

Efitu further mentioned the contribution of the project in availing group based working capital with equitable access to all members on the basis of individual and/or mini-group based business plan. As the project availed ETB 27,000 in the form of group capital, the group leaders devised the strategy of gaining access to ETB 1,700 to ETB 2,500 per member on the basis of individual capacity and feasibility of proposed business plan.

On the one hand, the opportunity of having access to some sort of seed capital is boosting the confidence of each group member while on the other enabling to trap opportunistic mini-business through bringing their individual capital. As successive plan, the soap making group has the intention to expand their manufacture through starting liquid soap in the near future.

5.5 Women focused IGA (Village Saving & Lending Group)

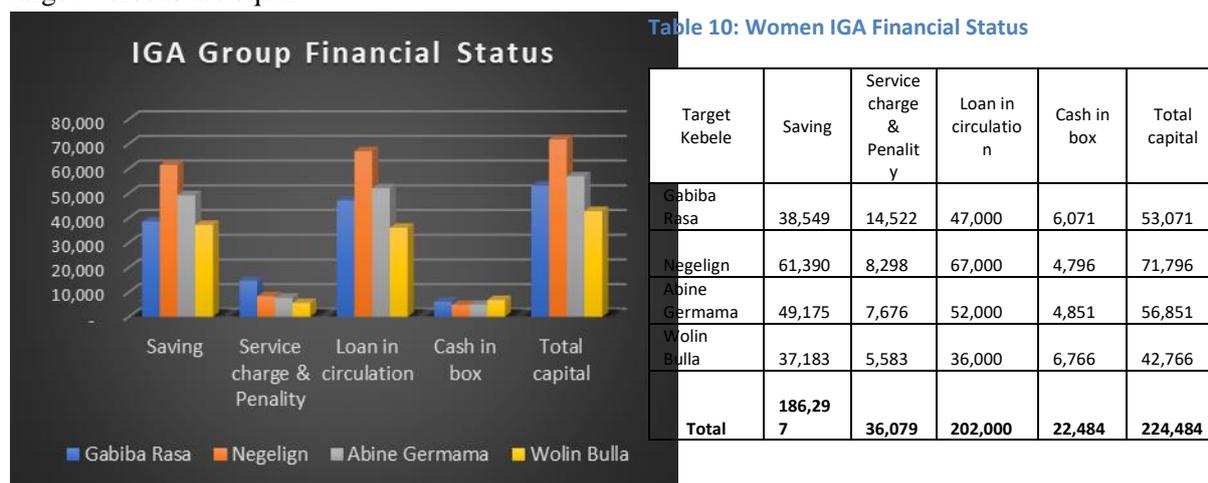
Out of the total beneficiaries in four kebeles, 443 (51%) were females and out of these 400 are organized in women led IGA in the form of village saving and lending group with the aim to engage in off-farm income generation activities, such as petty trade and the likes. The project facilitated the provision of training for group members in the areas of business plan, income and expense handling (book keeping), profit analysis through identify opportunity and threat.

In this regard, the participants of qualitative assessment (KIIs & FGDs) during the endline assessment reflected on the valuable contribution of such training towards enabling target women in gaining adequate understanding about business interaction and market share, how to operate profitably in the existing vegetable value chains. To reinforce their potential on ongoing process, refreshment training was conducted in the second year of operation through participating all members of the IGA groups. Gender and leadership focused training was also provided for the committee members through participating about 75 women leaders with focus on roles and responsibilities of each committee members.

To reinforce the women groups with access to flexible working capital, the project availed ETB 215,000 in the form of seed capital and this helped them to start business through gaining access at individual member level in the form of revolving fund. As the group leaders manage the fund,

individual members have ease of access to working capital on the basis of individual business plan. In this case, one of the group members indicated the advantage of such fund in utilizing during peak business period and returning to the group leader during slack period. She mentioned that the credit fund management style as enhancing the confidence of women, as helping to minimize associated risks of holding working capital during slack period. On the top of this, participation in gender focused training exercises enabled the group members to enhance knowledge and skills on gender issues through enabling to share information, experiences and negotiation skills in promoting reflection and debate.

In terms of financial status of the organized IGAs in the four target woredas, data organized from the final report of the project helped us to understand the existence of ETB 224,484 in the form of total group capital with highest in Negalign and lowest in Wolin bula kebele. The variation is associated with the level of group members saving while the initial seed fund and number of members in all target woredas are equal.



From the above alternative business sources we infer that the women group household level income is surely improved from the pre-project periods as additional incomes secured now.

6 Conclusion and Recommendation

6.1 Conclusion

- As witnessed from the quantitative and qualitative assessment results, the intervention of this project has been indicating the prevalence of huge unexploited potential that demands multi-sectoral investment with the aim to attain positive change on the live and livelihood basis of the target community.
- Key stakeholders believe that VoCDA and its activities in the Woreda have been undertaken through maintain the principles of transparency and accountability to the poor. There is close collaboration and joint monitoring exercises throughout the project process. Staff commitment in serving vulnerable community deserves further appreciation.
- With the intention to meet recommended gender balance, the project has involved women almost as half of the target beneficiaries, with due effort in including them in traditionally considered as men's activity, such as beekeeping.
- It is ascertained that the project started with the aim to promote multiple activities with limited budget. The project activities are agro-forestry including distribution of seedlings of various fruit trees, beekeeping, IGA's through reinforcing women saving & credit group with availing access to seed capital, engaging women in green production through reinforcing with skill-based training. As each of the interventions deserve huge funding, the engagement of multiple activities with limited funding access has limited the attainment of expected change in wider community level scale.
- Woreda level government key partners praised the project for the effort in creating solid awareness among the majority about the importance of conservation of natural resources while addressing the need for income generating activities among members of the community. On the top of this, the project has been bringing positive impact on community level attitude on the importance of considering alternative agricultural practices, such as CSA and SLM.
- The trend of much dependency on timber products has been in the trend of reduction in comparison with post intervention period. The effort in community-based awareness creation, training and capacity support has been positive contributions of the project in this regard.
- The target community depends on substance farming practices with limited level of harvest and scarcity of alternative income sources to compensate household food shortage and other HH consumption requirements. Vulnerability to climate change is getting worsen during the project period, which in turn tends to reduce the expected change that could be attached to the contribution of this project.
- There is good access to potential markets, but the drought prone nature of the localities and government triggered undesired influence on cereal price has negatively impacting active engagement of the target community in value chain interactions.

6.2 Recommendation

- Community-based interventions in CRS/NRM deserve multispectral engagement with remarkable enabling funding arrangements. As the number addressed households are few in number, attaining wider level change and associated impact still demands paramount effort and long-term investment.
- The promotion beekeeping, conservation agriculture, backyard fruit production, tree seedlings plantation and green IGAs deserving involvement of target beneficiaries in successive training and ease exposure to regular mentoring and coaching. This deserves the attention of respective line government offices in an organized approach.
- There is a need to promote improved access to knowledge and skill management practices on CSA/NRM initiative at individual HH and the entire community level as well. The need to promote tree plantation, organic tree conservation and area closure initiative are recommended as feasible interventions.
- The relevance of promoting NRM/CSA from gender sensitive perspective is gaining momentum in indicating the value of attaching nature to more of women. Such intervention demands well defined strategic interventions in the areas of institutional capacity building at woreda level and community level working groups and traditional setups.
- The trend of promoting CSL through organizing NRM focused self-help groups deserves practical attention as functional groups with vital contribution towards improving CSA/NRM endeavours.
- In the areas of social norms and gender, successive projects are expected to focus on the promotion of community-based knowledge management practices. There is a need to encourage and aware target community members without limiting to target group members alone.
- As part of the recommendation, beneficiary farmers and extension agents are expected to work together in a regular joint exercise. This will facilitate ease of access to professional support from beekeeping experts while facilitating the provision of regular on the job training, coaching and mentoring exercises reinforced by experience sharing with other successful beekeepers somewhere in a similar agro-ecological setting.

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