



**Adventist Development and Relief Agency (ADRA  
Ethiopia)**

**Resilience in the Horn of Africa (RiHA)**

**Final Evaluation of RiHA Project in Gode and Adadle  
Woredas of Somali Region**

**Evaluation Report  
(2019-2021)  
Draft version (version 1)**

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## Table of Contents

List of Tables .....	2
List of Appendices .....	3
Abbreviations and Acronyms .....	4
Acknowledgement.....	5
Executive Summary.....	6
1. Introduction .....	14
2. Background.....	14
3. Objective and Purpose of the Evaluation .....	15
4. Methodology of the Assessment.....	16
4.1. The Method.....	16
4.2. Assessment Instruments.....	18
4.3. Data Management and Analysis.....	18
4. Findings .....	20
4.1. Relevance.....	20
4.2. Effectiveness.....	24
4.3. Efficiency.....	33
4.4. Impact .....	37
4.5. Sustainability .....	51
5. Lessons learned .....	52
6. Conclusion and Recommendation.....	54
6.1. Conclusion.....	54
6.2. Recommendations.....	56
Appendices .....	58

## List of Tables

Table 1: household sample distribution by kebele.....	17
Table 2: Key evaluation criteria, domains and targets .....	19
Table 3: Growth in Livelihood capital (scores) .....	28
Table 4 Number, Type, Cost And Community Contribution Of CAP Projects .....	29
Table 5. Proportion of RiHA project beneficiaries with improved food security .....	39
Table 6 Proportion of samples who perceived their asset possession improved due to the project.....	41
Table 7. Proportion of samples who stated that their livelihood diversified due to the project.....	42
Table 8. Contribution of the project to improve access to access to finance .....	43
Table 9. Contribution of VSLA, CAP and Revolving Goat Scheme to Improve Social Capital.....	44
Table 10. Contribution of RiHA project to risk absorption capacity .....	46
Table 11: contribution of RiHA to income .....	47
Table 12: Contribution of Riha project to increased productivity .....	48
Table 13: Proportion of households with resilient livelihoods and the contribution of Riha project ...	50
Table 14: correlation between resilience and factors contributing to it .....	51

## List of Appendices

Appendix 1: Household survey Questionnaire .....	58
Appendix 2: Semi Structured Questionnaire .....	58
Appendix 3: Number of VSLAs, memberships, saving, loan and contributions .....	58
Appendix 4: Number of CAP Projects, Project Cost and Community Contribution .....	59
Appendix 5 Number of FMS organized and their members (2019-2021 .....	59
Appendix 6 Number of FFS established and their membership .....	60
Appendix 7 Number of PFS established and their membership .....	61

## Abbreviations and Acronyms

ADRA	Adventist Development and Relief Agency
CAHWs	Community Animal Health Workers
CAP	Community Action Plan
DA	Development Agent
DAC	Development Assistance Committee
DRM	Disaster Risk Management
ETB	Ethiopian Birr
FFS	Farmers Field School
FGD	Focus Group Discussion
FMS	Farmers Market school
GTP	Growth and Transformation Plan
HHP	Human Health Post
MoA	Ministry of Agriculture
OECD	Organization for Economic Cooperation and Development
PCDP	Pastoral Community Development Project
PTSC	Project Technical Steering Committee
PFS	Pastoral Field School
PSACCOs	Pastoral Saving and Credit Associations
RiHA	Resilient in the Horn of Africa
TVET	Technical and Vocational Education and Training
VAs	Village Agents
VSF	Veterinaires Sans Frontiers
VSLA	Village Saving and Credit Association

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## Executive Summary

### 1. Introduction

ADRA Ethiopia implemented a project "Resilience in the Horn of Africa" in partnership with VSF-Suisse with the financial support of ADRA Denmark in Gode and Adadle woredas of the Somali Region between 2019 and 2021. The project has four components, all with the major purpose of addressing critical socio-economic and livelihood challenges of pastoral and agro-pastoral communities particularly in strengthening the resilience of livelihoods of the shock affected communities. The components include a community action plan, access to finance, climate adaption techniques and production methods, and coordination and cooperation.

### 2. Objectives and Purpose

The purpose of any final project evaluation is to determine whether the project/program achieved its goal and desired outcomes during its operational life. Specifically, the evaluation has the aim of assessing the project against its own stated goals, objectives and outputs in a view of enhancing project impact, effectiveness, efficiency, relevance and sustainability, developing recommendations for providing guidance and drawing key lessons learned that contributed to organisational learning. The evaluation covers a period extending from January 2019 to December 2021.

In a nutshell, the major objective of this final evaluation is to assess the RiHA programming and interventions in Gode and Adadle woredas of the Somali region; draw lessons learned, best practices to scale up and recommendations for informed project policy making and decisions.

### 3. Approaches and Methods

For the evaluation, we used a mixed approach (both quantitative and qualitative). The quantitative approach depends on the sample household survey data and has the purpose of capturing goal and outcome level indicators. The primary data are obtained through interviewing 11 sample households selected from eight kebeles, a focus group discussion with groups of beneficiaries (VSLA, revolving goat scheme and active participants of CAP activities, FMS, FFS and PFS chairpersons, village facilitators) and key informant interviews with NGOs active in the area and have similar experiences such as VSF-Suisse, Mercy Corps and ACF and also with ADRA field office staff. Secondary information collected from the ADRA field and head offices supplement the FGD and sample survey data. We used structured and semi-structured questionnaires, secondary collection sheets and other templates to collect relevant information. For data analysis, the consultant used mean, percentages, frequency and correlations. The before and after project approach is also used to assess whether there are differences between the beneficiaries and comparison groups.

### 4. Key Findings

The final evaluation used the design and relevance, the effectiveness, efficiency, impact and sustainability criteria developed by OECD/DAC.

#### 4.1. Relevance

The VSLAs, revolving goat schemes and CAP, FMS, FFS/PFS are highly relevant and a priority of the target pastoral and agro-pastoral communities. The project specifically solves the critical constraints to access affordable financial services, depletion of assets and poor participation in development activities. It is also appropriate to local and national government pastoral area development priorities. Activities implemented in the period are also highly appropriate and relevant in terms of complementarity and synergy with key institutions operating in the targeted areas; and analysis of assumptions and risks which were relevant to date. The project interventions are timely, appropriate and relevant to enhance

resilience to climate change and to increase income and assets for pastoralists and agro-pastoral communities. However, some approaches adopted by the project may not be relevant. For example, VSLAs, PFS and FFS are not in line with the government strategy, which aspires for RUSACCOs/PSACCOs instead of VSLAs and producers, marketing and multipurpose cooperatives instead of FMS, PFS and the FFS. Yet the government recognises them as an alternative approach that can ensure higher benefits to the community, strengthening the sense of ownership and community participation. Therefore, the project needs to mainstream the project approaches so that the government will take over them and sustain them to ensure their sustainability.

#### 4.2. Effectiveness

At the outcome level, the objective of the project is 'Livelihoods improved for pastoralists and Agro-pastoralists based on sustainable strategies developed by themselves'. The measure of operationalisation of the objective on the other hand is improvements of the five livelihood capitals (natural, physical, financial, social and human capital). The target of the project is to increase/improve three of the five livelihood capitals in the period.

There is an improvement in access to natural capital compared to the baseline period from 2.08 to 2.28 points. This growth is higher for the VSLA, revolving goat beneficiaries and active CAP participants, the FMS and the FFS/PFS groups than the non-beneficiaries reflecting the positive impact of the project. The physical capital also increased from 1.76 to 2.20 points, and the growth is in favour of the beneficiaries of the revolving goat scheme, active CAP participants, FMS and FFS/PFS members. For VSLAs, however, the growth of physical assets is greater for non-VSLA members. Financial capital also increased by 2.5 times from 0.80 to 2.77 points, the largest growth still for the beneficiaries than non-beneficiaries and for pastoral than agro-pastoral communities. The average score of VSLA members is 2.34 folds of that of the non-VSLA members and that of the goat beneficiaries 1.29 times that of the non-beneficiaries. The score of the active CAP participants is 63.4% above that of the inactive participants. The FMS, FFS and PFS also have the potential to promote saving and investment and have a substantial effect on financial capital. The score of the financial capital of the FMS members is nearly similar to the non-members and that of the FFS and PFS increased by less than a percent. This is because FFS and PFS produce and sell without sharing earnings with the individual members. The social capital growth is 82.4% from 1.35 to 2.47 points. This growth is significant for VSLA members (51% above the score of the non-members), 0.8% above the non-beneficiaries of the revolving goat scheme. For active participants of the CAP, the FMS, FFS and the PFS growth of the social capital is more for the non-beneficiaries. The lack of regular participation in the meetings and discussion forums may have contributed to lower growth and the effect of drought contributed to the low growth of social capital. The result of the assessment of human capital is also the same. In summary, there is growth in the five livelihood capitals, which is above the target of three livelihood capitals expected to improve in the project period. The higher growth for the direct beneficiaries of the project (VSLAs, goat, FMS, CAP, FFS and FMS) showed that the project activities are problem solving and can improve livelihood capitals, and thus the project achieved its goal of increasing three livelihood capital in the three years.

The other intermediate objective of the project is to implement 20 community projects through community action planning. The project achieved this objective and constructed 20 community projects in 14 kebeles. The completed projects include water supply points (birkas), human health posts and vet posts, schools and adult learning centres, all selected and prioritised by the community. The actual cost of the 20 CAP projects was ETB 14.9 Million. Although the communities have to contribute 50% at the start and gradually increase to 70% by the end of the project period, the actual achievement was 35.2%. The project is successful in accomplishing this intermediate objective but failed to reach the target of community contribution of 50%. The severe and prolonged drought, flood and desert locust invasion, rising inflation and prices of construction materials, weak participation and contribution of the community (due to effect of the shocks), migration of the community during implementation (in search



of food, animal forage, daily labour) are some of the critical challenges witnessed in community project planning and implementation.

The second intermediate outcome is the improved management and transformation of financial resources into other livelihood capital to build resilience. This focuses on the establishment of the VSLAs and increasing their share capital, improving income through better marketing and increasing the number of goats per year by 25% through the revolving goat schemes.

The plan for the establishment of the VSLAs is successful. Although the target is to establish 25 VSLAs, the actual number of VSLAs in the period is 39 (56% above the target.) The VSLA currently have a cumulative saving of 1.939 million (an average of ETB 49,738.46 per VSLA and 2552.37 per member) and cumulative loan of 1.9 million. Most of them already completed their third cycle. The average saving per member declined however over the period due to drought and exposure to various shock. In the period, the average saving per member declined from ETB 56.92 to 37.05 per week. The share out capital also declined from ETB 814,800 in the first cycle to 476,900 in the final cycle. The number of borrowers also declined from 430 to 229 in the period. The loan service, therefore, covered only 30.1% of the VSLA members. The share capital also reached over a million. The number of members also declined from 791 at the start to 760 (85.3% women). Over the three years, the number of members declined by 4%, the highest for male members. About six VSLAs witnessed a decline. In Alamin and Barwaqo VSLAs, over 45% and 28% of the members left the associations. *The project met its objective establishing 25 VSLAs, but this achievement is not qualitative as most of the organized VSLAs faced many challenges.* Although the achievement is tremendous and encouraging, VSLAs faced critical challenges such as low savings related to poverty and vulnerability and consequently small and shortage of loan funds, weak management committees, low participation in small and profitable business, inadequate knowledge and experience on non-pastoral and non-farm activities, drought and other shocks.

The target for the revolving goat is to increase the number of goats by 25% each year. Although the project achieved all activity level indicators above the target, the goal of increasing the number of goats is falling behind. Over 61.5% of the goats were distributed in 2020 and 38.5% in 2021. Thus, it is difficult to achieve a growth of 25% each year. Moreover, the death rate due to shortage of forage, poor management and diseases is over 9% while miscarriage was over 6% and in some over 50%. Death rates also reach up to 47% in some kebeles. The birth rate, on the other hand, was only 33.5%. The overall achievement is the growth of 21.2% over the two years. Only in seven groups established in 2020, the percentage growth of goats is 50 and above, while in the rest, less than the cut-off point of 50%. In two groups, the current number of goats is less than the number at the beginning and hence negative growth due to high death rates.

The increasing income through improved marketing and value chains was achieved although the project organized 56% of the FMS after the second quarter of the 2021. The proportion of FMS group members who responded to increased income was 73.4% while that of the non-beneficiaries 50%. According to the key informants, the project linked each FMS with the client of their preferences. The groups supply vegetables and fruits directly to these clients while animal fodder through bidding on farm. The project also accomplished successfully the training of 10 village agents. Therefore, project is effective in achieving this target although there are still challenges that affect the sustainability of the FMSs.

The project organized all targeted FFS and the PFS group and achievement was 100%. Most of the FFS groups are using irrigation and producing vegetables, maize, sorghum, watermelon and animal fodder for market and consumption. The average land holding of these groups ranges from four hectare to 15 hectares and the average membership size was 24.4. Using irrigation the groups produced twice per year, relative to three on private farms in the same area. Access to water improved although frequent

breakdown of pumps, rising costs of maintenance, fuel and spare parts are challenging. Productivity obviously increased over time with training, technical support and provision of inputs by the VSF-Suisse. The proportion who responded to increased production of crops account for 20% of the sample of beneficiaries while this was none for the non-beneficiaries. Hence, the project achieved this goal.

#### 4.3. Efficiency

The performance of the project in accomplishing the planned targets timely, with the required quality and quantity is satisfactory. Community mobilisation, community project identification, planning, implementation and formation of the project management committee for maintenance of community project were fully completed. The project completed 20 community projects with few delays due to rising prices of construction material, low participation and contribution of the communities (only 35.2% of the project cost), drought and migration of the communities in times of project implementation. Although CAP is very successful in accomplishing its targeted activities, community contribution is low and far behind the expected minimum of 50%.

The performance of the revolving goat scheme is also satisfactory. The project distributed 260 goats to 130 households. Revolving the doe after the first kid, however, did not happen given that the distribution is too early (only 2020 and 2021).

The performance of awareness creation, organising the VSLAs, training the management committees and village agents and staff, provision of materials for VSLAs is above the target. The training on MIS for village agents and the staff, on the other hand, was below the target due to a lack of skilled trainers and lack of license for the MIS. The performance of the farmers' market school is as per the target, although the project organised only 44% of the required FMS groups in 2019. Those organized in 2021 account for 56% of the total FMS organized by the project, which are not functional to full scale. The project trained village agents above the target to facilitate the FMS and the FFS/PFS. Until December 2021, the project trained 33 facilitators.

#### 4.4. Impact

The goal of the project is to strengthen the resilience of the most vulnerable people in conflict-affected areas in the Somali Region. The design document however did not show the means to measure this goal. Therefore, we need proxy indicators and variables that can relate to the realisation of resilience and finally combine their results into a single index.

Food security: the VSLA and the revolving goat improve access to finance and asset diversifications and income. The growth in income, diversification and asset accumulation contribute to improved food security. The result of the assessment shows that VSLAs, CAP and revolving goat scheme has a positive contribution to food security. The beneficiaries of these components are more food secure than the non-beneficiaries do. The average score for the VSLA members for food security is 30.4% over the non-members and the goat beneficiaries over 50% of the non-beneficiaries. Similarly, the proportion of active and knowledgeable CAP participants who stated food security improved is greater by 2.1% compared to the inactive participants. Furthermore, women are more food secure than men and pastoralists than agro-pastoral households do. The positive difference in favour of the project beneficiaries shows the impact of the project on food security.

The revolving goat scheme beneficiaries are also more food secure than the non-beneficiaries (35.6% vs 7.7%). The improved marketing, access to irrigation, training and technical support also improved food security of the FMS (73.4% vs 50%) and the FFS/PFS group members (73.8% vs 0%). In general, all project interventions have significant contribution to improve food security.

**Asset accumulation:** the three components have a significant impact on asset accumulation and retention. VSLA members observed more asset accumulation than members (17.1% lower) and the goat beneficiaries 31.6% greater than that of the non-beneficiaries. The CAP has also a similar impact. Asset accumulation is also relatively high for the pastoral and women households than the agro-pastoral and men households. The revolving goat scheme beneficiaries also agree that their asset possession improved over the period (25% vs 0%). The increased food security, production and income through project support also improved the asset of the FMS groups (50.3% vs 25%) and the FFS/PFS groups (52.7% vs 0%). Thus, all interventions have positive contribution to asset building.

**Behavioural change** is another impact domain related to the project. Behavioural change in financial management and utilization, developing a culture of saving and borrowing for profitable investment and financial literacy is the highest among the VSLA members, goat beneficiaries and active CAP participants. Women are also more literate in finance and observed behavioural change than men. The continuous training, mobilization and sensitization, training and technical support also improved the work ethics and attitudes, coping and saving, investment and engagement in various alternative activities for goat schemes beneficiaries, FMS and FFS/PFS group members. Hence, the behavioural change and building assets are one of the successful achievements of the project.

**Access to finance:** According to the sample VSLA households, 57.1% perceived that they have significant access to financial services (saving and loan services) after their engagement in VSLAs. About 58.7% of the women and 42.9% of the men stated they agree VSLAs improved their access to finance. Similarly, over 46.2% of the agro-pastoralists and 88.9% of the pastoral community samples showed that their access to finance is highly improved due to VSLAs. The revolving goat scheme has also an indirect effect on access to finance. Beneficiaries can easily exchange goats with cash in times of emergencies by eroding their assets. The survey shows that there was improvement in access to finance for 65.8% of goat beneficiaries and 45.7% of non-beneficiaries. The proportion of active CAP participants who have knowledge and experience and improved access to finance is 69.4% compared to 7.7% for inactive households.

Improved income, regular saving, productivity growth, market linkages and membership in VSLAs improved household access to finance for the FMS and the FFS/PFS groups. A number of members of these platforms/associations are also a member of the VSLA, have access to saving and loan services. As a result, 73% of the FMS groups and 71.9% of the FFS/PFS group members stated that their access to finance improved significantly relative to 50% and 0% for non-group members, respectively.

**Improved social relations:** VSLAs not only provide affordable financial services but also a source of self-reliance, social cohesion, peaceful co-existence, trust and group actions and decision-making. The role of building social capital is substantial. About 44.3% of sample households stated VSLAs has a considerable effect on building social capital (trust and group actions) while 55.7% disagree. Social cohesion, trust, social support and peaceful co-existence are better among the beneficiaries of VSLAs, goat scheme and CAP, women than men and pastoralists. Therefore, the impact of the VSLAs, CAP and revolving goat schemes is considerable for building social capital. Similarly, the exposure to various technologies, group meeting, exchange of ideas, joint decision-making, contributions and self-support systems in the community improved social relations, trust, conflict reduction among the FMS, FFS/PFS groups. About 64.1% of the FMS and 64.6% of the FFS/PFS groups agreed that their social relation improved relative to 50% for the non-group members.

**Risk absorption capacity:** increased income, saving and borrowing, access to finance resulted in less vulnerable and resilient livelihoods. Such households are less vulnerable and have a higher capacity to re-bounce from shock easily. The VSLAs contribute to those objectives through providing saving and loan services and household can diversify their livelihoods; the assessment shows that VSLA members have the highest risk absorption capacity than the non-members (above 19.1%) and the beneficiaries of

goat more than the beneficiaries reflecting the positive and differential impact of the project on risk absorption capacity. Women are more shock absorbers than men are and pastoralists than the agro-pastoral communities. The risk absorption capacity of the FMS and the FFS/PFS is also improving over time relative to the non-group members attributed to improved income, assets, production and productivity and exposure to technologies and improved livelihood practices.

**Diversification of livelihood:** it has a risk spreading effect. Households dependent on more income sources and livelihood options are more resilient than those dependent on one or two economic activities. Different economic activities have different risks and potentials. The more households diversify their livelihood the more resilient they are. VSLAs, CAP and revolving goat schemes provide opportunities for such diversification. Thus, the direct beneficiaries of the three components are more resilient than the non-members and non-beneficiaries. While 48.6% of the VSLA members responded that the project has a higher effect on diversification, the proportion of the non-beneficiaries who responded to improvement to diversification was 50%. Similarly, 50% of the goat scheme beneficiaries stated that the project impacts diversification of their livelihood compared to 47% for the non-beneficiaries. The proportion of the FMS and the FFS/PFS groups responded to improved diversification of livelihood, on the other hand, was 48.6% and 61.5% against 50% and 0% for the non-group members.

**Behavioural change and financial literacy:** besides growth in income and gender empowerment, VSLAs are vital instruments for behavioural change. The qualitative information from sample participants showed that attitudes and behaviours towards gender roles and equality, engagement of women in IGAs and generating income, participation in meetings and respect for group bylaws, and members, and conflict avoidance are improving among the VSLA members. There is also behavioural change regarding saving and financial management and towards income-generating activities. This behavioural change is considerable among the VSLA and revolving goat beneficiaries, women and pastoral communities.

Other positive impacts include improved self-reliance and reduced dependency, income and productivity growth, which are highly positive for the VSLA members, beneficiaries of revolving goat scheme, active CAP members, women and pastoral communities. Overall, there is adequate evidence that all interventions (VSLA, CAP, goat, FMS, FFS/PFS) have indeed significant effects and have the potential to change livelihoods.

#### 4.5. Sustainability

The project is environmentally sustainable, as all project activities (VSLAs, revolving goat scheme and CAP) are small scale or have no adverse impact on both the social and natural environment. It is also socially sustainable and promoted a common platform for conflict resolution, joint decision-making, planning and social relations, social support and building trust between members. Financially, the VSLAs are self-sustaining. However, they need to increase their savings and capital to meet the increasing demand. VSLAs should also transform to higher-level financial institutions and be licensed to obtain support from the government upon the project termination. Another option is to increase the loan fund through revolving seed money so that they can sustain themselves over many years and grow to viable financial institutions. The training on bookkeeping and accounting, documentation and reporting, follow-up of financial flows and reporting are crucial areas in need of attention.

The revolving goat scheme is the most sustainable intervention given that the project provided goats to the individuals to own and manage by themselves. In all aspects, the goat scheme is the most sustainable enterprise. Yet revolving the goats to the next person is very difficult even currently let alone after the closure of the project. It is also technically sustainable and within the knowledge and experience of the

households. All goats distributed so far are local breeds that sustain under traditional management system, feed shortage and are adaptable to the local environment. The CAP may also not be sustainable unless the government mainstream the processes and procedures, the principles and objective of CAP and apply to its regular programme planning and implementation. The CAP projects however are sustainable as far as they are community owned and supported by the government. The FMS and the FFS/PFS have a controversial sustainability issue. Although the FMS has significant effect on marketing there is no clear institutional and management distinctions from the FFS/FMS platform. FMS did not share profits with members and not legally organized and accepted in cooperative legal framework. The FFS/PFS have also the same sustainability issue. FFS are a sort of producers' cooperatives working together and sharing the benefits. This was not also operational at current state except producing in group and supplying to the market. PFS are engaging, largely in buying and selling of animals and making profits with little engagement in production aspect. Both FFS and the PFS focus on group production and marketing and have no relations with marketing of individual products. Both are also engaged in narrow economic activities and need to diversify their activities into supply of essential farm inputs, tools and commodities most needed by the members. In conclusion, except for the gaps stated above, the five interventions are sustainable but needs close monitoring, supervision, regular technical support and coaching, linking and mainstreaming with government offices, and modifying intervention strategies and institutionalization.

## **5. Lessons learned**

Targeting the rural poor, particularly women to improve the vulnerable rural livelihood, are the best option to improve the overall wellbeing. The saving and loan promoted through the VSLA approach is also an interesting innovation to improve access of pastoral women to adequate finance to expand rural off-farm and non-farm activities. The distribution of goats proved to contribute to asset accumulation, risk absorption capacities and economic empowerment of women. The FFS/PFS contributed to improved food security, income, diversification, asset accumulation and improved technical knowhow. Integrated approach has better contribution than a single intervention to witness significant change. Drought and other shocks are determining the fate of livelihood of the commodities and effectiveness of the project interventions.

## **6. Conclusion and Recommendations**

The project in general and the VSLAs, revolving goat scheme and CAP, FMS and FFS/PFS in particular, have an encouraging impact on the livelihoods and potential to build resilience. The food security, asset accumulation and retention, access to affordable finance, risk absorption capacities and behavioural change, income and productivity have been increased, almost all improvements in favour of the beneficiary and target groups. The finding also shows that all the five livelihood capitals of the community and households improved in the period with above the target performance. The number of VSLAs, membership size, growth in share capital, loan provision and saving are, however, declining considerably. The performance of the goat scheme is also encouraging except for failure to attain a target of increasing the number of the goat by 25% each year. Through the CAP activities, the project constructed 20 projects prioritised by the communities. At the activity level, the performance is above 100% for most of the activities except for training and installing MIS. The potential for scale-up of the RiHA project is profound through an integrated approach and intensive capacity building to sustain and consolidate current achievements.

The recommendations: improve the loan capital through mobilising savings and revolving funds, linking VSLAs with the IGAs, improving the management capacity of the VSLA management committees, transforming VSLAs to higher level financial institutions so that they can get recognition and licence, technical support and financial access from the government. It is also important to reduce the monthly/weekly saving per member to attract more poor women. For the goat scheme, eliminate the

revolving approach as it creates conflict and fatigue. It is also important to increase the number of goats provided, given two is not enough for households who lost almost all their valuable assets and suffer from chronic food insecurity and poverty. The local government should mainstream CAP in planning, community mobilisation, project identification, implementation and resources mobilisation. The contribution of the community, earmarked at 50% with growth by 10% for successive projects is not achievable and must consider the context of the pastoral areas, capacity households, vulnerability to various shocks. The attitude by the local government is positive and appreciative but it could not adopt it as an important development tool.

The FMSs should transform into marketing cooperatives than blurred objectives. The sustainability and legal personality these institutions will be ensured if they are consistent with the government cooperative strategies and legal framework. As community organization, it can survive for some times, but with little hope for advancement and growth. The FMSs should also include members' outputs, supply essential inputs and most needed commodities to the members and the community to ensure their organizational, institutional and financial sustainability. The FFS and the PFS need more capacity building, institutional reform and more capacity building. As production unit, they are producers' cooperative and must gradually transform into economically viable institutions. They need also legal personality and access government support and capacity building and coaching upon termination of the project. Apart from the current interventions, the project needs to expand its scope of intervention, in addition to strengthening the current outcomes. Most importantly, institutions such as pump repair and maintenance and spare part supply youth associations, incense producers capacity building and technical support, input and commodity supply associations, bee keeping enterprises (along the Wabe shaballe river), value addition to the production of the PFS, and others are important to strengthen resilience, reduce exposure to risks and improve livelihood options for the community.

In conclusion, current achievements determine the fate of the RiHA project. Our evaluation indicates that all interventions have positive contributions to resilience building and improving livelihoods. This does not mean, however, that all are sustainable and without no challenges with the termination of the project. A number of project activities accomplished in 2021 and most of them have a functional life of less than a year. The project organized 43.6% of the VSLA, 38.5% of the goat schemes, 28.6% of CAP projects, 50% of FMS, 56% of the FFS and PFS groups in 2021. Without the close supervision, technical support, financial and capacity building support these interventions are unlikely to sustain. It is also difficult for the government to takeover these outputs given the absence of the legal framework for most of them and the weak capacities of the woreda institutions. This reflects the need for the extension and scaling up of the project to ensure sustainability of outcomes and to facilitate the smooth takeover by the government.

## 1. Introduction

Drought and frequent climatic variability and changes in the range ecosystem created a haven for poverty and poverty-related social and economic problems. A large proportion of livestock died due to extended drought and inadequate access to early warning, proper mitigation measures and restocking programs. Frequent shocks and range degradation also contributed to the decline of livestock productivity and income. The shocks also contributed to the large-scale transformation of pastoralists into agro-pastoral livelihoods that depend on crop and livestock production. Overall, livestock assets of the communities are declining, worsening vulnerability and resilience of livelihoods. The Somali region is one of the largest pastoral regions experiencing severe and frequent droughts caused by climate change. Agro pastoral and pastoral communities have no access to affordable financial services to diversify their livelihoods and income sources so that they strengthen their resilience. Although participatory action planning has been started since 2003, as a community-driven development' by PCDP, this was not sustainably adapted to the daily life of the communities. The infrastructure gap is therefore significant and a large part of the pastoral areas are inaccessible in the rainy season, suffer from a critical shortage of water, education and health and vet infrastructure. Drought, crop pests, lack of knowledge and experience in modern production techniques, weak market linkages, inadequate irrigation infrastructure are deterrents to crop production. Productivity, as a result, is extremely low.

Cognizant to the deteriorating human and natural conditions in the pastoral areas, ADRA Ethiopia in collaboration with VSF-Suisse designed the 'Resilience in Horn of Africa' project in 2019. The project adopted sustainable livelihoods approaches based on a strong focus on community involvement and ownership in Gode and Adadle woredas of the Somali region.

To date, the project completed its implementation and in preparation to scale up its operation based on the results of an assessment of the current project activities.

This final, therefore, aimed at investigating the whether the project met its objectives, examining its efficiency, relevance, effectiveness and sustainability and drawing lessons and recommendations. For this purpose, ADRA Ethiopia hired Reach Consult to conduct the impact assessment of RiHA. This report is prepared based on a thorough field assessment with different communities and woredas to draw important lessons and issues for future intervention.

The report, including this introduction is presented in six chapters. Chapter two is an objective and purpose of the current evaluation study and chapter three is a brief background of the project with a focus on its objectives, targets, design outcomes, finance and stakeholders. Chapter four is a detailed methodological approach used in the study. Chapter five elaborates the findings of the assessment of the VSLAs, revolving goat scheme and CAP considering the relevance, effectiveness, efficiency, impact and sustainability. Chapter six presents lessons learned in implementation and chapter seven concludes the overall findings with detailed recommendations for future action and scale-up.

## 2. Background

Resilience in the Horn of Africa (RiHA), a three years programme, builds the resilience of the pastoral and agro-pastoral communities in Gode and Adadle woredas of the shabelle zone of the Somali Region. The operational objective of the program is to strengthen the resilience of 48,000 most vulnerable people in the two drought-affected woredas.

The RiHA programme has four components that contribute towards the accomplishment of the outcome 'Livelihoods improved for pastoralists and agro-pastoralists based on sustainable strategies developed by themselves'. These components are the following.

**a). Community action planning (CAP):** its operational objective has been participatory problem identification, planning and implementing community projects prioritised by the community and financed by the project and community contribution of at least 50%. Specifically, the component aims at ensuring the knowledge and experience of the communities in managing their development needs and challenges through active participation and contribution and finally to develop a sense of ownership and to ensure the sustainability of projects. It is also an instrument for self-reliance. The component facilitates the CAP process in targeted communities, plan and implement and form structures to manage and maintain CAP projects.

**b). Access to finance:** the purpose of the component is to establish VSLAs which are managed and owned by members and provide saving and loan services for the beneficiaries. Self-reliance is an objective through the provision of affordable loans that can be used for social, investments such as farming, inputs, purchase of assets (such as goats), start-up capital for small businesses and other several livelihood essentials. The component mainly builds and strengthens the financial capital of the communities that ensure diversification and livelihood resilience. The component has also two sub-components: VSLA and revolving goat scheme. The main activities are training of staff and Village Agents of existing VSLA, Supervision of VSLA activities and maintaining MIS, forming and training goat groups from interested women, and training groups of pastoralists/agro-pastoralist in market research of selected value chains.

**c). Climate adaptation techniques and improved production methods:** it focuses on building resilience through better production techniques, introducing techniques and knowledge of climate adaptation particularly in areas of natural resources management, investment in new production techniques, and capacity building of community institutions. Floods harvesting for irrigation, river diversion, pump irrigation, sustainable rehabilitation of degraded rangeland and other techniques are some of the sustainable and productive methods aspired by the component. Specific activities also include training of agriculture and livestock staff including Development Agents as FFS and PFS facilitators, mobilising and training pastoralists and agro-pastoralists in Pastoral field schools/Farmer Field Schools, and planning and implementing major water conservation and rangeland development projects using the CAP approach. The component helps to build the natural, physical, financial and human capital of the households and the communities.

**d). Coordination and cooperation:** the key to the project success responsible for the overall planning, coordination, implementation, follow up, supervision and monitoring of project activities and financial flows. Its mandate is to create a platform for stakeholders' collaboration and coordination, including all relevant and active local government institutions and non-governmental organisations. It also includes documentation and dissemination of lessons learned, monitoring and evaluation.

The estimated direct beneficiaries of the project are 48,000 people (27360 women and 20640 men). The source of funding is the people and government of Denmark/DANIDA in collaboration and partnership with ADRA Denmark with ETB 32,988,665. Of this, ETB 23,157,672 (71%) is programme cost and 9,830,993 (29%) for administrative purposes.

### 3. Objective and Purpose of the Evaluation

The Impact Assessment of RiHA focuses on three project components: community Action planning, village Saving and Credit Associations and revolving goat schemes all as related to resilience, empowerment of women and the vulnerable. The overall purpose of the evaluation is, therefore, to assess the RiHA programming and interventions in Gode and Adadle woredas of the Somali region;



draw lessons learned, best practices to scale up and recommendations for informed project policy making and decisions.

The specific objectives of the assessment rest on the three components, their objectives, goals and effectiveness concurrent with the following basic issues listed below.

- Regarding VSLAs, the extent to which the VSLAs' financial capabilities (income and Assets) improved resilience to shocks; behavioural and attitudinal change towards the loan, saving and income-generating scheme (diversification of livelihoods) and their link to resilience; benefits of financial inclusion in strengthening beneficiary resilience; the extent to which VSLA structural organisation empowers women (formal communications, decision making, engagement in decision making); the viability of the approach and the need for adjustment or not, the potential for scale-up, impact (anticipated and an unanticipated), lessons learned, best practices to be drawn and recommendations,
- Analyse the extent to which the CAP benefited, empowered, created a sense of ownership, a collaboration between the stakeholders and the community, improve resilience, and sustainability with a critical investigation of sustainability, adjustment needed in CAP approach and an unanticipated challenge and best practices observed,
- The extent to which the project reached the target population, difficulties in meeting the obligations, extent of participation of the beneficiaries in goat identification. It also examines the extent to which the approach used and training provided increased benefits from the revolving goat schemes. It also assesses the extent the desired benefits met and the possibility for scale-up; the need to redefine and adjust the objectives, goals and objectives for goat scheme; impacts and contribution to livelihood resilience, unanticipated results occurred (positive and negative), best practices to scale-up and lessons learned and recommendations for the revolving goat scheme.

## 4. Methodology of the Assessment

The assessment adopted a mixed research approach. The quantitative evaluation relied on the primary household survey data for the assessment of basic outcome and goal level indicators. The qualitative approach, on the other hand, assesses the details of the processes and procedures of planning, implementations, coordination, monitoring and evaluation, and exploring the causes and effects of changes by the intervention in the community's livelihood. Therefore, the mixed evaluation approach is reliable in achieving the intended objective.

### 4.1. The Method

The evaluation used the results framework, assessed achievements against planned targets and analysed the findings using the OECD-DAC evaluation criteria. Data and information were collected using document review, secondary data, household survey, key informant interviews and field observations.

**A Document review** includes the design document of the project, annual progress reports and plans (2019-2021), the Result framework of the project (original and revised), GTP II (2015-2020), ADRA's country strategy, and five years strategic plan, previous evaluation reports of ADRA in Ethiopia and elsewhere in Africa, manuals and guidelines of VSLA, CAP and goat revolving schemes.

**Household sample survey:** ADRA, although conducted a baseline survey before implementing the project, the dataset of the baseline survey was not documented for comparison with the state of the final

evaluation figures. The household sample survey covered 111 households (92.5% of the proposed target) from six kebeles in Gode and Adadle woredas of the Somali region. The sample covered those households that benefited from at least two of the major components of the project. The samples comprised 43.2% of the households benefited from the goat scheme, 77.5% from the CAP and 82% were members of the VSLAs. Given that, the project adopted an integrated approach to intervention, 86.8% members of the FMS and 89.5% members of the FFS/PFS. Of the total actual samples, 10.8% of were benefited from only one, 16.2% from two and 73% from over two specific components (VSLA, CAP, Goat, FMS and FFS/PFS). See table 1. As per the proposal, the consultant selected eight kebeles in collaboration with the project manager of the field office of ADRA and VSF-Suisse based on accessibility and availability of households in the kebele, the number of beneficiaries, and the distribution of the three components. The survey thus covered five agro-pastoral communities and three pastoral kebeles. The agro-pastoral kebeles include Dabafeyd, Wardid, Kayane, Bohol of Adadle woreda and Dolo bad and pastoral kebele include Ano kulul of Gode woreda and Harsog and Birlays of Adadle woreda. See table 1.

**TABLE 1: HOUSEHOLD SAMPLE DISTRIBUTION BY KEBELE**

Sample kebeles	proposed sample	actual size	Coverage	Sample composition					
				Female	Agro-pastoralism	VSLA	Goat scheme	FMS	FFS/PFS
Dabafayd	15	16	106.7	62.5%	100.0%	87.5%	75.0%	100.0%	100.0%
Wardid	15	15	100.0	100.0%	100.0%	100.0%	53.3%	100.0%	100.0%
Kayane	15	12	80.0	75.0%	91.7%	100.0%	41.7%	100.0%	100.0%
Bohol Hagarre	15	13	86.7	76.9%	7.7%	76.9%	15.4%	0.0%	0.0%
Ano Kulul	15	19	126.7	57.9%	0.0%	57.9%	47.4%	0.0%	0.0%
Dolo Bad	15	11	73.3	100.0%	100.0%	100.0%	63.6%	100.0%	100.0%
Harsog	15	13	86.7	61.5%	0.0%	61.5%	15.4%	46.2%	38.5%
Birlays	15	12	80.0	25.0%	0.0%	83.3%	25.0%	75.0%	100.0%
Total	120	111	92.5	69.4%	48.6%	82.0%	43.2%	86.8%	89.5%

Source: Derived from own Household Survey, December 2021 and January 2022.

**Key informant interviews (KIIs):** the consultant conducted a discussion with ADRA's field office and VSF-Suisse staff on the state of performance of the VSLAs, CAP and the revolving goat schemes, and FMS and FFS/PFS, the critical challenges and the likely effect of the five major activities of RiHA on the livelihood of the beneficiaries.

**Field Observations:** the consultant observed community projects constructed through community action planning including school, health post and water supply point (birka) and forage production in some of the sample kebeles.

**Focus Group discussion checklist:** The consultant conducted focus group discussion in six kebeles (four from Adadle and two from Gode woredas) on the challenges and performances, benefits and impact, capacity and other related issues on VSLAs, goat revolving schemes and community action planning. The evaluation also covered issues related to FMS and FFS/PFS with the village facilitators and agents, chairpersons and management committee members of the associations.

## 4.2. Assessment Instruments

To collect relevant information and data from households, communities and institutions the consultant developed four major data collection instruments.

**Structured questionnaire:** The questionnaire covered five thematic areas, each question tallied with the basic indicators (output, and outcome) of the result framework of the project. It includes location, household profile, community action planning, engagement in VSLAs, and revolving goat scheme, participation in FMS, FSS/PFS (see annex ii)

**A semi-structured questionnaire** was prepared to capture vital areas of the five generic evaluation criteria (Efficiency, effectiveness, relevance, impact and sustainability) focusing on major project outcomes, processes and procedures, key challenges, impacts and recommendations.

**OBSERVATION CHECKLIST:** includes major observation domains, strengths and weaknesses, potential challenges and brief on-site recommendations. See annex iii.

## 4.3. Data Management and Analysis

The data was collected manually using paper questionnaires. Two enumerators were trained for half a day to upgrade their ability to collect reliable data and their understanding of each question. Each question was linked with the assessment indicators particularly to impact and outcome levels. The consultant also checked each day the completed questionnaires for missing values, consistency, reliability, completeness and comparability. The consultant entered the completed data into the SPSS for coding and recoding, data cleaning and editing, merging and analysis.

Experienced consultant collected the qualitative data. The collected information was entered a spreadsheet by woreda and informant categories to assess similarities and differences summarised for all in a single worksheet. This data set was triangulated with the findings of the household survey and observation checklists.

We used a variety of data aggregation levels for analysis of the changes and performances of the project. These include a group of project interventions (VSLA, Revolving goat scheme, CAP, FMS, and FFS/PFS), gender, woreda, beneficiaries and non-beneficiaries, and literacy status.

Moreover, various statistical packages were used to assess the benefits of the project and differences across beneficiaries. These include independent sample tests, simple statistics such as averages, percentages and correlations. Finally, the results were presented in tables and brief texts.

We used six rating scales for data analysis as follows Highly satisfactory, (5 points) for all activities implemented above the target satisfactory (5 points) for achievements of over 90% and less than 100%, moderately satisfactory (4) for performances achieved between 70 and 90%, moderately unsatisfactory (3 points) for performances between 60% and 70%, unsatisfactory (2 points) for achievements of 40% to 60% of the target and highly unsatisfactory (1 point) for all achievements below 40% of the target. While for impact assessment we used the five steps Likert scale of high satisfactory/strongly agree, satisfactory/agree, neither agree nor disagree, unsatisfactory/disagree and highly unsatisfactory/strongly disagree. Finally, we aggregated and averaged each point to analyse the outcome and to compare it with the three years target.

The impact level indicators are usually those which focus on the goal and objective of the project. The project, in general, has four output level indicators one each for the VSLA, revolving goat scheme and

CAP and FMS/FFS/PFS. The five activities have a change effect on various livelihood options/strategies. The most notable impacts could be on assets, food security, income, housing, health and education, social relations and co-existence, resilience and exposure to shocks and others. These are the intermediate outcomes of the VSLA, the revolving goat scheme, CAP, FMS and the FFS/PFS. The eventual goal is improved resilience. The resilience of households from shocks has linkage with the improvement of the intermediate outcomes. Although there is no indicator for this in the project design document, we used qualitative information as described by groups and individual household surveys, that whether resilience is improved and satisfied by the intervention. Thus, we averaged all results from the impact assessment of food security, asset building, shock absorption, behavioral change and others (10 in total) to develop a resilience index with a maximum of 50 and a minimum of 10. Based on the developed index, we classified households into four groups: highly resilient, moderately resilient, vulnerable and highly vulnerable. The following table shows the impact assessment indicators modified from the project design document.

**TABLE 2: KEY EVALUATION CRITERIA, DOMAINS AND TARGETS**

criteria	Indicator	Indicator Target
Relevance	Assessment of the overall priority, intervention logic, targeting, institutionalisation,	None to measure (qualitative)
Impact	Strengthened resilience of the most vulnerable people in conflict-affected areas of the Somali Region	Resilience, shock absorption, income, asset accumulation, productivity, self-reliance, food security, etc.
Effectiveness	Livelihoods improved for pastoralists and Agro-pastoralists based on sustainable strategies developed by themselves	Increase in 3 of 5 household/community assets: physical, natural, financial, social and human
Sustainability	All major components indicators in terms of technical, financial, environmental, institutional sustainability	None to measure (qualitative)
efficiency	Communities take the lead in the CAP approach to identify and implement prioritised community projects (output 1)	Total target 2019-21: 20 CAPs implemented
		Percentage community contribution to CAP projects increased annually
		Increased income from selling through new value chains
	Financial resources are well managed and transformed into other livelihood capitals for resilience building (output 2)	% of VSLAs increasing the "share" price from previous to next cycle The number of live goats increased 25% per year

Source: Result framework of the Project

### Limitation of the Assessment

PSNP is a dominant programme in both woredas and provides cash and food for nearly 30,000 households. The provision of food and cash influences household livelihoods. Therefore, it is difficult to net out the impact of the ADRA's project from PSNP and relief activities in the area. The assessment adopted the before and after project theory of change considering other externalities (external programmes and projects) are equally affecting the whole population. Moreover, to assess change and to determine whether the project has an impact, we use also the beneficiary/non-beneficiary, target and non-target approaches.

Availability of this data can help compare any change observed in two distinct periods (beginning of 2019 and end of 2021) and to use more robust evaluation methodologies.

The severe drought in the area forced many households to migrate with their animals and to search for daily labour. Therefore, it has been difficult to cover the most affected kebeles.

## 4. Findings

The impact assessment of the RiHA covers all components except the climate adaption techniques and productivity and coordination and collaboration components of the project. Moreover, the final evaluation relied on the five generic evaluation/assessment criteria developed by DAC. The assessment, therefore, covers not only the impact alone but also the whole chain of activity to goal level. Although there is no indicator and benchmark for the goal of the project, the consultant selected the most closely related resilience factors. The VSLAs improve access to affordable loan services and hence enhance income flow, diversification of livelihood, food security, asset building, behaviour change and financial literacy, and so forth. The distribution of goats is for asset building and hence ensures asset accumulation, resilience, shock absorption capacities, food security, nutrition and income. Community action planning is a planning strategy for construction, rehabilitation, maintenance of priority projects of the community. It enhances participation, self-reliance, commitment, knowledge and experience, empowering the vulnerable groups and sustainability. In general, CAP is an ingredient for all activities of the project. The FMS improves market linkages and access to inputs and services, product marketing at a reasonable price and prevents farmers from seasonal market failure and price decline. Hence, it is an incentive for farmers and pastoralists to produce for markets, increase income, productivity and food security. The resilience of these households is better than those who are not benefiting from the FMS approach. The FFS/PFS, on the other hand, has an objective of producing and marketing in a group and improving productivity and income from both crop and livestock. Therefore, the resilience of households benefiting from a package of these interventions is faster and more stable than those who benefited from a single intervention or none.

### 4.1. Relevance

Relevance assesses the continuing appropriateness and relevance of the design of the project. It specifically refers to the following areas: -to what extent does the project respond to priority issues, the extent of validity of the objectives; appropriateness of strategies; risks and assumptions, ownership of the project by the stakeholders. In this report the following key indicators are considered:- alignment with the government policies and strategies, alignment to donor country strategy, complementarities to needs and priorities of vulnerable primary targets, completeness of programme design, Consistency of internal logics, complementarities and synergy of the project with key institutions, and analysis of risks and assumptions.

**Alignment of the project to government and donor policies and strategies:** the VSLA is an instrument for solving financial constraints in marginal pastoral areas. The VSLAs are the basic associations from which relatively advanced rural financial institutions are emerging. In pastoral areas, VSLAs are more vibrant, sustainable and socially accepted institutions, given that they comply with traditional institutions, social fabrics and relationships. The government policies, strategies in pastoral areas and consequent regional and federal development plans support access to finance to diversify livelihoods, participation in other livelihood options and increase risk absorption capacities and consequently resilience of livelihoods of the pastoral population. The VSLAs are also important instruments where pastoralists started sedentary life due to consequent erosion of assets and livelihoods. For women, VSLAs promote income-generating activities and improve income. The results of FGDs also showed that VSLAs are the only financial institutions that are affordable with easy access to cover all costs of necessities and emergencies. Thus, VSLA complements the government policies and strategies in pastoral and agro-pastoral areas.

Drought is a critical socio-economic constraint in the pastoral areas. The frequency of drought and its impact is increasing from time to time with a devastating impact on livelihoods and livestock population. As a result, several households started sedentary life, and transformed into agro-pastoralists, daily labourers and migrants. The government policies and international organisations provide large-scale relief support to save lives yet with little option to save the large-scale demise of the precious assets of pastoralists-livestock. The restocking programme is also one menu besides relief food distributions to support livelihood rehabilitation and asset building. The revolving goat scheme is part of this endeavour and adopted by many NGOs with varying outcomes. The RiHA intervention contributed to asset building and the revival of shock affected livelihoods for poor households who lost their assets. Women are the most vulnerable group. In terms of relevance and alignment to the government policies, the revolving goat scheme is another way of treating restocking programmes that is highly focused on the most vulnerable and poor households. Therefore, the revolving goat scheme is highly relevant and supplements the DRM policies and strategies.

Although, the approach is different FMS and FFS/PFS are part of the extension services of the government. Innovation, skill and knowledge building, self-reliance and experimenting with new ideas and technologies are part of the FFS/PFS intervention strategies, which also complement government extension services. FMS is about the marketing of products and inputs at an affordable price. The strategy is a complement to the cooperative marketing strategies, where cooperatives collect agricultural products (crop and livestock) from their members and sell to the market at good prices. Similarly, cooperatives supply commodities and services, demanded by the community, particularly agricultural input (pumps, fuel, spare parts, seeds, hand tools, chemical and fertiliser) at affordable price and sell to their members. The FMS approach is a complement to the cooperative marketing strategy.

**Complementarities to Needs and Priorities of Vulnerable Primary Targets:** population growth, environmental degradation, declining rangeland productivity and vulnerability to climate change resulted in an incidence of chronic food insecurity and malnutrition, large-scale livestock deaths and poverty. The declining rangeland productivity exacerbated by frequent drought, devastating floods eroded the risk absorption capacity, resilience and social support of traditional institutions. Inadequate access to financial services and effective marketing services influenced income flows and asset accumulation, and above all, diversification of livelihoods. As a result, most of the communities subsist on the highly vulnerable traditional pastoralism and crop production under moisture stress. The VSLAs solve this challenge, which has a significant effect on income growth, asset accumulation, behavioural and attitudinal change, self-reliance, and enhanced diversification and resilience to climate change. VSLAs are, therefore, one of the critical paths to resilience in pastoral and agro-pastoral areas. They are also in line with the interests and priorities of the communities and identified as critical development needs through community action planning. VSLAs are also most relevant for the poor households who have no adequate income sources (except livestock or daily labour), women and ex-pastoralists and new entries to crop farming for purchase of farm inputs.

The revolving goat scheme also has an objective of asset accumulation and retention, food and nutrition, self-reliance and dignity. The scheme targeted the very poor households who lost their animals to drought and pests particularly women, poor ex-pastoralists. It is also one of the identified projects through community action planning. The discussion with the communities showed the goat scheme is the most preferred project component in almost all areas, particularly among the vulnerable groups. Preference however varies. The sample survey of households shows that, for example, about 3% of the respondents stated they prefer cattle (cow and donkeys) these households include 5% of women, 3% of males, 10% engaged in pastoral livelihoods, 6% that subsist on agro-pastoralism, 8% of VSLA beneficiaries. Thus, pastoral communities' preference is more for cattle than goats mainly due to their large holding of goats before they lost many of their assets to drought. On the other hand, agro-pastoral who depends on irrigated crop farming (leading sedentary life) has the highest preference for goats than

cattle. In general, the scheme reflects the priority needs of the communities and is thus highly relevant in improving the livelihoods of the vulnerable poor.

The FFS/PFS boosts the knowledge and experience of the community in the production of crops and livestock. Various innovations including irrigated maize and sorghum production, fodder production (Sudan and elephant grasses) and other feeding practices introduced through this platform. The seasonal fall of prices by a significant proportion, particularly for pastoral communities following drought, is a devastating livelihood threat. Animal forage declines and many animals die due to a shortage of feed. Price reached its record low. The FFS/PFS intervention, therefore, solves these problems and currently, many households can withstand drought and provide irrigated forage for weak animals and as a result, reduced the level of animal death. The linkage between FMS and FFS/PFS also improved income through marketing to the most preferred market actors and clients (whole sellers) by eliminating the costs for intermediaries. A large proportion of members of these platforms stated the platform is a top priority and generated significant income for the groups. However, the FFS and PFS associations are currently a simple group organised to run communal irrigated cropland supplying to the market without sharing the profit to the members. It is a sort of producers' cooperative, with little connection in boosting individual farm productivity and marketing of products. The PFSs also engaged in the marketing of animals, purchasing and selling of goats and cattle, in groups and mechanisms of affecting individual member productivity, not in place. Despite these shortcomings, the FFS/PFS has the potential and priority of the community but needs much more capacity building and strategies to affect individual member products and productivity.

**Completeness of Project Design and internal logic:** The project building on the VSF-Suisse and RiHA experience in Sub Sharan Africa identified and promoted the project components, particularly VSLA, CAP and the revolving goat scheme. Above all, the design and logic of the theory of change link variable agents and interventions that are highly related to contributing to higher-level impacts and intermediate outcomes. Thus, the three components have strong internal logic and connectedness. However, the design of the internal logic and result framework is not well detailed and linked to standard logical framework and hierarchies. The activities that contribute to the desired output are detailed and relatively comprehensive. Moreover, although there are apparent cases that need changes in project implementation, there is no design or strategic changes throughout the project life. On the other hand, there is an adequate and highly relevant, detailed, tangible and deeper risk assessment of the project for a better understanding of interconnections between pastoralism and agro-pastoral livelihoods and a deeper appreciation of the risks and opportunities for scaling up of successful "multiple-benefit" approaches for sustainable livelihoods that can improve climate resilience and achieve other policy goals.

**Complementarities and Synergy of the Project with Key Institutions:** The key stakeholders are the office of agriculture, livestock development offices at the woreda and regional level and VSF-Denmark. The project complements the regular programmes of these offices, which have critical limitations of capacity (development and operational budget, logistics and transportation services).

The extension services of the government institutions suffer from a lack of capacities. The project, on the other hand, concentrated on a few areas selected target groups and provision of regular follow up, technical support, and monitoring at field level. The RiHA project provides training to these government institutions who train target beneficiaries through the technical and budget support of the project. This, on the other hand, created synergies and collaboration between the stakeholders and the project, although this was not uniform for all stakeholders. Although the contribution of the cooperative development office is limited to licensing, organising and capacitating the already organised groups and associations, there is no actual involvement in VSLAs. Yet the cooperative office is a designated institution for all financial institutions particularly for those, which attain the status of pastoral saving and credit associations and unions. VSLAs can transform into PSACCOs gradually once they fulfilled

the criteria of the office (such as membership size and capital). One argument of the office is that the Cooperative office should be involved in all life cycles of the VSLAs if the project has to hand over or transform them into a higher level, for it is difficult for the office to accept institutions beyond its recognitions. It seems relevant, therefore to engage the cooperative office in the future scale-up of the project.

Many of the government and NGOs in the Somali region are active in providing relief services due to frequent and severe drought with little resources for sustainable livelihood development and resilience. The restocking programme although in place, addressed only a fraction of the affected population. Although the revolving goat scheme is not part of the government regular programme, due to limited capacities, it appreciates every development activity destined to address the problem of pastoral and agro-pastoral communities affected by the havoc of severe drought. For NGOs, which already intervene through revolving goat scheme, the component is a bridge for cooperation, collaboration and lesson learning. Therefore, the revolving fund scheme has strong synergies with the local government regular programmes and other NGOs active in the area.

**Analysis of Risks and Assumptions:** the identified risks and conditions for project success during the design were highly realistic and considered the national and local contexts. Drought and seasonal floods are the most serious risks with devastating effects on the livelihoods of many pastoralists and agro-pastoralist. Two of the three years project periods have experienced severe drought and seasonal flood in low-lying areas of the Wabe Shabelle River. This has a severe impact on livelihood capital. Therefore, many of the assumptions made during the design period are still relevant and realistic but with limited options and capacities to curb its negative effects. Yet, the severe effects of shocks did not encourage the project to adjust its targets and resources based on the severity of the shocks, particularly drought and flood. The severity of the shocks did not also translate into changes in interventions and/or preventive support to save livelihood of the victims. For example, the project distributed only two goats through a revolving fund per beneficiary who lost so many animals and has an average of 7.94 family members (min 1 and max 16). Moreover, the efficacy of CAP, particularly the contribution of the community to projects, in cash does not consider the effect of shocks on income flow, food security and the poverty level of the communities. Most of the households contribute none at all or fulfil the earmarked 50% of the project cost, which will also reach 70% for every additional project.

Furthermore, CAP was introduced in all pastoral target woredas by PCDP in 2003 following the same theory of change and implementation strategies to ensure priorities of the communities and adopt bottom-up planning for construction, and rehabilitation of human and animal health posts, access roads, water supply points, schools and adult education centres, rangeland rehabilitation, irrigation schemes, and saving and credit associations. The endeavour however did not translate into a sustainable instrument for various reasons. The contribution of the communities was both in kind and in cash, which is not over 30% of the project cost. Even with this low level, many of the communities could not afford to pay. Hence, the RiHA did not consider revising the contribution level of the community from experiences and lessons particularly in pastoral livelihoods frequently affected by many shocks.

The organisational structure of the FMS, FFS/PFS could also be a risk particularly up on the termination of the project. They differ from the government organisational structure and hence will be difficult to support with the existing legal framework. Thus, there is a risk of sustainability unless the project made further effort to consolidate with the government and/or more capacity building and modification of intervention in the scale-up period.

In several cases, the stakeholders lack the basic capacity and commitment to sustain project outputs. According to the stakeholders, they have an inadequate budget for supervision; technical support and follow up of already handed over project activities/outputs. The project should cover all supervision costs even during its implementation period to provide technical support and supervision activities.



Without the financial support of the project, therefore, the stakeholders could not provide adequate supervisory and technical support services.

Although the region is the most peaceful and stable of any part of Ethiopia, country-level risks such as war and conflict, soaring inflation, declining investment, are directly or indirectly affect the woredas and the project interventions. The design document and successive progress reports fully covered these assumptions and still they are highly relevant and realistic.

The design document did not anticipate the risk of COVID-19, yet the risk detailed in various progress reports.

In general, this assessment found out that the project is relevant and ensured priorities and development needs and aspirations of the local community, aligned with the government policies and strategies and has strong synergies with local government regular development programmes and that of active NGOs in the area.

## 4.2. Effectiveness

Effectiveness, in this report, is the extent to which the project realised its objective. The realisation of objectives includes the actual achievement of the objective stated in the project's logical framework and the effectiveness of VSLAs in delivering financial services, revolving goat scheme building household assets and CAP promoting a participatory approach to project planning and implementation. Effectiveness addresses the key issues related to whether the outcomes have been achieved, targeted communities reached and satisfied, factors influencing the achievements of the project expected outcomes.

The project has only one outcome indicator 'Livelihoods improved for pastoralists and agro-pastoralists based on sustainable strategies developed by themselves'. The design document also stated that the measure of the achievement of this objective is the positive changes in the five livelihood capitals (natural, physical, human, social and financial capital). The objective is to increase the score of at least three of the five livelihood capitals.

### **Outcome: Livelihoods improved for pastoralists and agro-pastoralists based on sustainable strategies developed by themselves**

This outcome results from effective implementation of the outputs. The outputs are community action planning and community projects, VSLAs and revolving goat scheme, and climate adaptation techniques and production methods. The combination of the five activities and their efficient and quality implementation will cause livelihood asset/capital growth.

**Natural Capital:** includes land, water, soils, forests, trees and others. The natural capital of the pastoral and agro-pastoral areas largely incorporates rangeland, irrigated and rainfed farmlands, forests for fuel wood harvesting, construction and the extraction of incenses, and water resources. Except for irrigated and rainfed farmlands, other resources are communal resources managed by the community and there is no private property. Hence, in this report, the analysis of natural capital in the pastoral areas focuses on improved access than private ownership unlike in the highlands.

In this assessment, we measure changes in natural, physical, financial, social and human capitals. We calculated current status from the household survey conducted in eight kebeles on December 2021 and January 2022. Although the project has to collect and establish progress in livelihood capital, the data for 2021 was not available at both the head and field level offices. Thus, we used the average of the 16 kebeles during the baseline (2019) and the current survey results in eight kebeles.

In 2019, the average score for natural capital in the project areas was 2.08 points (calibrated at the maximum of five and minimum of 0). The same source also shows that the average natural capital score for male and female households was 2.17 and 1.94 points, respectively. There is no other aggregation level (such as beneficiaries and non-beneficiaries of VSLAs and goat beneficiaries) as the project start implementing these activities after the baseline survey. A consequent survey in 2020 covered the same kebeles but with fewer household samples. Therefore, comparisons between the average of 16 kebeles and the six sample kebeles may not reflect the true change in values of natural capital and other livelihood capital.

The current sample survey result shows that the score for the natural capital for the whole sample was 2.28 points. The largest score was for VSLA beneficiaries (2.32 Vs 2.05 points). The score for women is still higher, although both enjoy the same sources and face similar challenges. Compared to 2019, there is significant growth in access to natural capital. However, in the last three years, seasonal floods, frequent and severe droughts and desert locusts devastated large areas of farm and rangeland. The drought and desert locust eroded rangeland productivity and livestock forage supply. The same shocks also severely affected rainfed and irrigated farmlands plummeting crops. Irrigated farmlands are declining per capita with a growing population and a rising number of agro-pastoral households moving out of pastoralism. Rising prices of fuel and other agricultural inputs also affect the natural capital. Forests and trees are also declining in both density and type following drought, floods and locust invasion. Yet, the household survey and the focus group discussion showed that access to natural capital is better than three years ago.

**Physical capital:** this asset includes improved housing, infrastructure, tools and equipment, agricultural inputs, transport (vehicles, bicycle, motor cycle, animal-drawn carts) and improved energy. The change in this capital depends on the changes in other capital such as financial capital, natural capital, human capital. Saving and income can boost physical capital. More empowerment and training, knowledge and experience also influence physical capital. Factors such as food security, income, access to finance, reduced vulnerability to drought and resilience also increase physical capital given that these are the immediate productive assets of the better-off households.

The average score for physical capital in 2019 was 1.76 points (1.56 points for women, 1.90 points for men). There was also a slight decline in 2020 (6.3% below the 2019 level). In 2021, the average for the physical capital of the eight sample kebeles and 111 households was 2.20 points, which was 25.1% over the baseline figure. Furthermore, considering the baseline average serves also different social and economic groups, this growth is more significant among the non-VSLA members 25.1% above the average of 2019) than the VSLA members (6% over the average of VSLA members). Given that VSLA members have observed improvement in income, productivity, access to finance, food security and nutrition, we expect a positive change in physical capital. However, the low score relative to the non-beneficiaries is because members save and invest in profitable enterprises than buying household gadgets and other improvements. The other reason is the low economic status of the VSLA members the hinder investments in physical capital. Similarly, the physical capital change for women is better relative to men and agro-pastoralists.

Regarding the revolving goat scheme, the beneficiaries observed better changes with an average point of 2.38 relative to 2.07 points for the non-beneficiaries. The reasons are better income, food security, asset holding and changes in risk absorption capacity. Furthermore, the average point is 35% above the baseline, 41.7% above the average of 2020 for beneficiaries. Thus, physical capital growth is one success area of the project.

The FMS, the FFS and PFS beneficiaries witnessed a significant change in physical capital. The average for the FMS groups in 2021 (survey of eight kebeles) was 2.22 points for the FMS and 1.30 points for the FFS and PFS group members. The average point for the FMS is 26.1% above the baseline and

70.7% above the non-group members. Similarly, the average score for FFS/PFS members was 2.20 and 1.25 for the non-group members. The average for the beneficiaries was also 25% higher than the baseline and 75.8% over the scores of the non-group members. Given that FMS and FFS/PFS have the highest income growth, productivity, asset holding, and better risk absorption capacity and resilience, the physical capital will show an upward trend. Many of the FFS invested in pumps, agricultural hand tools, carts and others to support irrigated crop farming. Several FMS and the PFS groups also invested in small enterprises or village businesses such as teashops, merchandise trade, incense trading and others.

**Financial capital:** there is a significant improvement in this capital due to the establishment of the VSLAs and an increasing number of beneficiaries. Several households save up to 300 birr per month in some VSLAs and a minimum of ETB 100 per month (according to the focus group discussion). A considerable number of households also borrow money from the VSLAs for farm inputs, agricultural tools, renovation of shelters, purchase of pumps and fuel, health and education. The average loan per head in this cycle (according to the sample survey) was about 4283 birr, increasing considerably from cycle to cycle. About 69% of the VSLA members were beneficiaries of loan services. The largest portion also agrees increasing income due to engagement in income-generating activities (those in sub urban areas). The productivity growth of the VSLAs and the revolving goat scheme beneficiaries, participation in PSNP activities (for cash and food) also increased their income. Moreover, according to the focus group discussion, loan repayment is almost over 90%. On the other hand, although many households earn seasonal income following the rainy season, the flow of income is now more regular than before, as households are participating in small business such as petty trades and catering activities.

Therefore, the average in 2019 was 0.80 points, rising to 2.77 points for the entire sample in 2021, with the highest growth for VSLA members and goat beneficiaries. The average score of VSLA members in 2021 was about 3.08 points, (almost three folds above the average of 2019) and 1.32 points (65% over 2019) for the non-members. Furthermore, about 43.3% of the households scored over four points while 31.1% were less than or equal to 2 points for VSLAs members and 5.3 and 84.3% for the non-members, respectively. The growth of financial capital is also significant for goat beneficiaries. About 41.6% of beneficiaries scored four and above points and 25%, less than two points. There is also a significant number of active CAP beneficiaries who scored over four points (38.5%).

Access to the financial capital of the FMS, FFS/PFS members also improved. The score for the financial capital of FMS members was 3% higher, with an average score of 2.78 and 2.70 points, respectively. Over 36.8% of the FMS members scored four and above points. The FFS average score increased to 2.79 points relative to 2.63 points for non-members. About 22% of the members of the FFS/PFS groups scored four and above points compared to none for non-members of the groups.

In general, the five core areas of the project interventions have a significant positive effect on financial capital in favour of the direct beneficiaries. The VSLAs, however, have the highest contribution relative to other interventions. Hence, the project is successful in reaching the objective of increasing the financial capital of the households and the performance is moderately satisfactory.

**Social Capital:** In this assessment, human capital includes networks and connections, mutual self-help systems, social trust, formal and informal groups, participation in community planning and decision-making. The social capital is more detrimental in the pastoral area than in the highlands. High vulnerability, volatile livelihoods and income and asset flow, devastating drought, animal epidemics and flood are driving communities to engage in extended family and clan networks, social support systems, formal and informal groups. The resilience of severely affected populations was possible most of the time through such a support system based on the trust and connection of an affected person. The recent introduction of CAPs, VSLAs, revolving goat groups also contribute to improved new skills and experiences through training, regular technical support and follow up. The meetings, group-based

problem identification and solving, empower the community and improve participation and decision-making. New knowledge influences individual livelihoods. VSLAs are social and economic institutions to support poor households through affordable saving and loan services, based on mutual trust, cooperation and participation. Changes in social capital are therefore a necessary condition for most of the interventions in these areas.

The 2019 baseline survey showed that the average point for social capital was 1.35 points (1.31 points for females and 1.38 for males). The 2021 sample household survey, on the other hand, showed that the average score for social capital is 2.47 points, 83% above the baseline. The highest score, as usual, is for females (10% above males and 63% above the baseline), the VSLA members (51% above the non-members) and CAP active members (20.5% below the non-active) and 2.48 points for the goat beneficiaries (0.8% above the non-beneficiaries). However, there is no difference between males and females in social capital. In addition, 25.5% of the VSLA members scored four and above, while non-beneficiaries none. The proportion below 2 points was 52.2% and 68.4% respectively. About 22.9% of the goat beneficiaries scored four and above while 58.4% two and less.

The effect of being a member of the FMS and the FFS/PFS was however, not significant. For both groups, the average score of members was less than that of the non-members. For example, average of the FMS member was 60.2% of the non-FMS and the FFS/PFS member 68.3% of the non-members. Given that, the FMS and the FFS/PFS focused on the marketing and production of agricultural products of the group farm, the result is expected. Both platform associations are not collecting individual products like marketing cooperatives and have no contribution to individual farm products.

The overall finding is that the social capital in the project areas is improving relative to the 2019 situation. The growth is also significant among the VSLA members, Goat beneficiaries, pastoralists and literate households. The participation in CAP activities, being a member of the FMS, FFS and PFS group on the other hand has no significant impact on the social capital as stated in Table below.

**Human capital:** better access to health services, nutrition, education, knowledge and skills, capacity to work, capacity to adapt and diversify livelihood forms human capital. The skill and experience, education level, physical wellbeing of a person are critical elements to create resilient livelihoods. Educated and trained members who are healthy can innovate, work and prosper. Human resources development in pastoral areas is at a relatively lower stage compared to in the highlands. The proportion of the literate population and those who completed primary and secondary school education is fewer than in the highlands, although there are improvements in the last three decades. Skill training institutions and people trained in various skills are also not significant. Therefore, the human capital in the pastoral areas particularly in rural is extremely low.

In early 2019, the human capital index of the project woredas was only 1.34 points (1.23 for males and 1.50 for females). In 2021, the human capital score increased to about 2.66 points, 98.5% over the baseline period. The non-VSLA groups, goat beneficiaries and the FMS group members witnessed much growth in human capital. The same primary source shows that the human capital score for VSLA members was 2.57 points while for the non-members 3.00 points. Similarly, the score for the goat beneficiaries was 2.69 points. Active CAP participants have also the lowest human capital scores (2.58 points) than the inactive groups (2.67 points). Over 16.7% of the VSLA members have a score of four and above and the non-beneficiaries 31.6%. The proportion with less than or equal to two points accounts for 45.6% for the VSLA members and 31.6% for the non-members. Furthermore, the proportion of goat beneficiaries with four and above scores was 20.8% compared to 18% for the non-beneficiaries. On the other hand, a third of active CAP participants have a human capital score of four and above, while this was 13.2% for inactive CAP participants.

Moreover, it seems that being a member of the FFS/PFS group member is not a guarantee for human capital growth. For example, the average human capital score for the FFS/PFS members was 2.58 points

compared to 3.0 points for the non-members although the score is higher than the average for the baseline period. Human capital, above all, needs huge investment and need extensive external intervention and a long time strategy to achieve. Being a member of the FMS group seems to have a greater benefit, to increase the human capital score. The table below shows that the human capital score for members of the FMS group is 5.6% over that of the non-members. The training provided and frequent technical support and supervision have the potential to improve experience and skills in solving critical livelihood problems. In general, there is a clear sign of positive change in human capital in the project area relative to the baseline period, although the growth was not significant for some of the direct beneficiaries of the project components. See table 3 below.

**TABLE 3: GROWTH IN LIVELIHOOD CAPITAL (SCORES)**

Indicators		Natural capital		Physical capital		Financial capital		Social capital		Human capital	
		2019	2021	2019	2021	2019	2021	2019	2021	2019	2021
woreda	Gode	2.04	3.03	1.71	2.57	0.76	2.77	1.29	1.63	1.29	2.73
	Adadle	2.11	1.99	1.83	2.06	0.86	2.77	1.40	2.78	1.43	2.63
Gender	Male	2.17	2.22	1.87	2.09	0.83	1.75	1.4	2.47	1.52	2.97
	Female	1.94	2.3	1.61	2.25	0.73	3.19	1.27	2.47	1.39	2.53
Livelihood	Pastoralism	2.08	2.04	1.76	2	0.8	2.63	1.35	2.48	1.47	2.83
	Agro-pastoralism	2.08	2.6	1.76	2.5	0.8	2.96	1.35	2.37	1.47	2.52
literacy status	Literate	2.08	2.53	1.76	2.03	0.8	2.57	1.35	2.53	1.47	2.73
	Illiterate	2.08	2.18	1.76	2.27	0.8	2.85	1.35	2.44	1.47	2.63
VSLA member	Yes	2.08	2.32	1.76	2.18	0.8	3.08	1.35	2.62	1.47	2.57
	No	2.08	2.05	1.76	2.32	0.8	1.32	1.35	1.74	1.47	3.11
Goat beneficiaries	Yes	2.08	2.4	1.76	2.38	0.8	3.17	1.35	2.48	1.47	2.69
	No	2.08	2.18	1.76	2.07	0.8	2.46	1.35	2.46	1.47	2.64
Active CAP	Yes	2.08	2.19	1.76	2.22	0.8	2.72	1.35	2.39	1.47	2.58
	No	2.08	1.67	1.76	2	0.8	1.67	1.35	3	1.47	2.67
FMS grow	Yes	2.08	2.42	1.76	2.22	0.8	2.78	1.35	2.47	1.47	2.64
	No	2.08	0.7	1.76	1.3	0.8	2.7	1.35	4.1	1.47	2.5
FFS/PFS group	Yes	2.08	2.38	1.76	2.2	0.8	2.79	1.35	2.56	1.47	2.58
	No	2.08	0.63	1.76	1.25	0.8	2.63	1.35	3.75	1.47	3
Total		2.08	2.28	1.76	2.2	0.8	2.77	1.35	2.47	1.47	2.66

Source: own survey December 2021, Jan 2022 and ADRA Ethiopia timeline analysis and livelihood change story, 2019

In summary, the project met the target of improving at least three of the livelihood capital over the project period. As stated above, there are significant improvements in social capital, financial capital, physical and human capital achieving 100% of the target unlike 60% stated in the design document. All growth is also the highest for the VSLA, goat beneficiaries and CAP active members, FMS and FFS/PFS group members, reflecting the performance and better targeting of the project. Had it not been for severe drought, flood, locust infestation in late 2020 and 2021, livelihood capital growth would have been more than the stated findings. Other critical challenges are the low saving, low loan size, short repayment period of loans, inadequate skill and experience in non-pastoral activities, and weak management capacities that affect financial capital generated through the VSLAs. The inadequate number of goats provided, the short period for transfer of goats to mirror households, poor management, susceptibility of goats to drought (same breed to the local ones), shortage of feed, and diseases are critical challenges for goat beneficiaries, which also affect livelihood capital. Inadequate awareness and participation, unaffordable contributions/levies for the CAP community projects (given the severe drought), low participation in identification, implementation and decision-making are critical for the CAP beneficiaries to attain a reasonable level of growth of human capital. Moreover, non-intervention of FMS in marketing of individual farm products, lack of profit or benefit-sharing are challenges to improve income of members. The lack of repair and maintenance services for umps, rising prices of spare parts, fuel and agricultural inputs, severe drought eroding household assets inadequate technical

and extension services, lack of adequate knowledge and experience in modern irrigation practices are critical challenges to the contribution of the FMS, FFS/PFS to livelihood asset building. The PFSs equally suffer from severe drought, like in individual members. Several groups cannot sell animals due to a severe fall in animal prices following the drought and cannot feed animals kept for sale. The extended drought might contribute to the collapse of some of the PFSs, which invest most of their funds in animals. On the other hand, the training provided for VSLA members, and management committees, training on goat breeding and management, training on CAP for the general community and the project committees, regular technical support, supervision, and follow up and all round support for the FMS, FFS/PFS contribute to improving livelihood capital on which the project is successful. Despite significant livelihood challenges, beneficiary households from all components of the project are more resilient, have a better capacity to cope with shocks and sustain their livelihood assets than the non-beneficiaries

### **Intermediate Objective 1: Communities take the lead in the CAP approach to identify and implement prioritised community projects**

The target for the CAP was 20, while the actual achievement was 100% by December 2021, except for two ongoing projects. Of the total community investment projects constructed and rehabilitated, 55% were schools, 35% were human and animal health posts and 10% were water supply points (birka). Of the total community infrastructure, the project constructed 12 in Adadle and 8 in Gode woreda.

The actual cost of the 20 CAP projects was ETB 14.9 million. Although the communities have to contribute 50% at the start and gradually increase to 70% by the end of the project period, the actual achievement was 35.2%. This also varies from place to place. The maximum community contribution was 44.6% (Hersog school construction) and the lowest was 26.8% (Higlo School). The community contribution in Gode was 33% and at Adadle 35.2% of the total cost. In general, the community contribution is below 30% in 16% of the projects. Although in all kebeles the contribution of the community is below expectations, it is significant in face of the severe drought and high animal death rates, human suffering and critical shortage of water and animal feed and the rising cost of living and construction materials. The major challenges in CAP and community investment project construction are lack of construction materials and rising prices (cement), severe drought and shortage of water for construction, migration of the communities during construction, dependency syndrome (free of contribution as some NGOs did the same), lack of access road to reach some construction sites during the rainy season. Inflation has also been a major challenge, rising from 13.8% in 2018 (the design of the project) to 25.2% in 2021 (over 30% since September 2021) contributing to rising construction costs of many projects than expected in the project document. Although the government has to equip schools, health and vet posts up on completion, the lack of a pre-planned budget for vet and health clinics has been a challenge for the community infrastructure to serve the community. The water supply points (Birkas) and all schools however started functioning upon completion.

**TABLE 4 NUMBER, TYPE, COST AND COMMUNITY CONTRIBUTION OF CAP PROJECTS**

Indicators		Number of Projects	RiHA contribution	community contribution	Total project cost	Community contribution (%)	Unit cost (Birr)
woreda	Adadle	12	4,806,932	2,570,750	7,377,682	34.8	614,806.83
	Gode	8	4,989,690	2,550,100	7,539,790	33.8	942,473.75
project	school	10	6,122,512	3,087,200	9,209,712	33.5	920,971.20
	Health post	6	2,642,070	1,511,100	4,153,170	36.4	692,195.00
	Birka rehabilitation.	2	604,500	336,700	941,200	35.8	470,600.00
	Vet post	1	309,220	129,650	438,870	29.5	438,870.00

	HHP fence	1	118,320	56,200	174,520	32.2	174,520.00
year implemented	2019	4	1,723,020	1,051,850	2,774,870	37.9	693,717.50
	2020	10	4,229,672	2,418,250	6,647,922	36.4	664,792.20
	2021	6	3,843,930	1,650,750	5,494,680	30.0	915,780.00
	Total	20	9,796,622	5,120,850	14,917,472	34.3	1,491,747.20

Source: ADRA Gode Office, Jan 2022

Although CAP empowers communities and develops self-reliance, the participation of the community is limited. The sample survey showed that only 5.8% of the community members participated in project identification, 10.5% on planning and 14% on implementation. The largest proportion (68.6%) participates in the contribution of construction materials, cash and labour. Moreover, only 55.3% of the samples know what the CAP is and its procedures and 59.3% participated in the CAP only once. Yet 98.9% of the samples responded they were satisfied with CAP procedures and processes, and the same proportion was satisfied with the priority setting and the efficacy of the community projects in addressing the priority needs and the same proportion stated that CAP is empowering and satisfying the community and also a good platform for educational and experience sharing that can be adapted to an individual level. Yet, to sustain the community action planning, it requires continuous community mobilisation, sensitisation, training and mainstreaming.

The woreda government offices, particularly agriculture and livestock, provide training for the community, although they face critical capacity limitations. The government adopts the top-down planning procedure or the quota system for the construction of projects. CAP is now an inspiring platform to mobilise the community is increasing by the government institutions, for problem identification, priority setting and community project construction and mobilisation of the community, although the pace at which it progresses and the actual outcome is slow.

In general, at the design stage, the project planned to address the problems of 43,000 households. The recent reports of the project showed that 1,435 students (788 boys and 647 girls) from 2,317 households in eight kebeles are learning in schools constructed through CAP. Human and animal health posts and Birkas are benefiting 3,337 households. The village saving and loan association also served 760 and revolving goat scheme 130 households, all above the planned target for the three years.

### **Intermediate objective 2: Financial resources are well managed and transformed into other livelihood capitals for resilience building**

There are three key indicators to measure the effectiveness of this output: percentage change in share value of VSLA from one cycle to the other, increased income from selling through new value chains and the number of live goats increased by 25% each year.

**Percentage change in share values of VSLAs from one cycle to the other:** The project has clear targeting criteria especially for poor, vulnerable community groups. As VSLAs are both economic and social institutions, they provide saving and loan services for all their clients or members. The selection criteria of the VSLAs are usually women with low economic status and those who have no alternative livelihoods. The project used community self and administrative selection.

The focus groups and key informant interviews also show that the selection was very effective, and almost all are poor women with low income, assets and other material well-being. The project organised 39 VSLAs, 17.9% of them in 2019, 38.4% in 2020 and 43.6% in 2021. Of all VSLAs, 38.4% (15) are in Gode and 61.6% (24) in Adadle woredas. Compared to the planned target of 25 VSLAs, the current achievement is 52% above the target and the achievement is highly satisfactory.

In terms of members, the project organised 760 women and men by 31 December 2021. About 85.1% of members were women. The number of organised women into VSLAs in 2021 was 173.5% of the 438 targeted membership sizes. Moreover, the average number of members per VSLA is 19.5 compared

to the targeted average of 17.5. Moreover, seven VSLAs (18% of the total) have above 25 members and five VSLAs 25 and the rest are below 25. Of all VSLAs, two were organised only from males, 22 from women only and 15 from both males and females. Although the membership size is above the target, a significant number of households also left the VSLA due to failure to contribute to regular saving (high for the poor), migration, violation of the bylaw, drought and other shocks, and change of settlement area. Over the three years, the number of members declined by 4%, the highest for male members. About six VSLAs witnessed a decline and none increased their members. In Alamin and Barwaqo VSLAs, over 45% and 28% of the members left the associations.

Credible and detailed data on VSLAs (cumulative saving, unit share values, cumulative loans, loans past due, saving and loan per cycle, loan outstanding properties and cash, etc.) were not available for 2019 and 2021. Rudimentary data (December 2021) showed, however, that the cumulative saving was ETB 1,939,800 (an average of ETB 49,738.46 per VSLA and 2552.37 per member). The same source showed that 100% of the members are active savers. On the other hand, the cumulative loan, as of December 2021 reached ETB 1,861,400. The number of borrowers however declined from 430 (349 women and 81 men) in the first cycle to 229 members (a decline by 42.8%) in the current cycle. The proportion of current borrowers was therefore 30.1%. The MIS and data handling at the head and field office level regarding VSLAs are extremely poor, although the project trained several village agents whose responsibilities, among others, are to collect and organise data besides facilitating training and providing technical support for the VSLAs. Therefore, it is difficult to track the progress, identify the challenges, and hence difficult to make informed decisions.

According to the secondary data from the ADRA field office, saving per member per week (equivalent to share capital) has been declined from ETB 56.92 at the beginning to 37.05 currently (a decline by 34.9%). The number of the VSLA with a declining saving per member was 19 (48.7% of the total VSLAs). Although a decline in saving is almost a third of the first cycle for the whole VSLAs, variations were significant. For example, regular savings of one VSLA declined by 75%, three VSLA by 66.7%, 13 VSLA by 50% and four VSLAs by 33.3%. On the other hand, 17 VSLAs kept their original saving over the project period, while only one VSLA increased weekly savings per member by 25%.

Unlike the secondary data, a limited focus group discussion result showed that the monthly contribution/share value increased by an average of 50% from the first to the current cycle varying from one VSLA to the other. For example, the monthly contribution of members in Anfak (kayane kebele) increased from ETB 200 to 300 (150%), Tawfiq (Bohol Hagarre) from ETB 100 to 200 (200%), Idman (Ilan) from ETB 100 to 150 (150%). Reports and FGDs also show that in several VSLAs monthly regular saving is declining due to severe drought and chronic food insecurity. For example, the monthly contribution of Barwaqo VSLA (ano kulul) declined from ETB 500 to 300 per member for the same reasons.

The primary survey data, on the other hand shows an increasing share out capital with an average of ETB 839.35 per individual in the first cycle to ETB 2211.69 in the second and ETB 3228.61 in the third cycle, which is consistent with the project target. However, the primary data might not be accurate to show the whole picture of the 39 VSLA. The declining regular saving per member (for the whole VSLAs) resulted in the declining amount of equities distributed to the clients from year to year. The reasons for declining regular savings are lack of adequate income, food insecurity and poverty following the occurrence of drought and other shocks.

Recent secondary data (ADRA field office, Jan 2022) also showed the same result. The share out capital in the first cycle was ETB 814,800 and the third final cycle only 476900 declining by 41.5% over the period.

***Therefore, the project did not meet the target of change in share value of capital, resulting mainly from external factors to the project.***



The focus group discussion also shows that the maximum and minimum loan size ranges from ETB 1000 to 5000 per loan and loan repayment period in only three months. For most households, both the loan size and repayment period is not convenient. Due to rising inflation, the loan size is inadequate, particularly for those who want to engage in various businesses. The repayment period is also too short to run a profitable business. As a result, 30% of the borrowers spend the loan on farming activities (vegetable production), 9.5% on animal feed, 7.9% for social cases and 3.2% on consumption (food and other necessities), 15.9% for medication and education, and 7.9% on fuel. The proportion investing in farming, pumps, goats and small businesses account for 55.6% of the total borrowers and the rest for consumption and social cases. The household survey also showed that 69.2% of the members borrow from the VSLAs with an average size of ETB 463.49 in 2019, 1951.75 in 2020 and 3685.97 in 2021. The cumulative loan per borrower over the three years was, therefore, ETB 6042.80.

Other key challenges currently facing the VSLAs are low and declining savings, dropout of members, lack of skills and experience in business activities, weak management of VSLAs, inadequate technical support, and others. None of the VSLAs has a bank account. A significant number of the management committees cannot read and write and supported by men who are literate and by village agents. Eight VSLAs saves money in form of goats and cows for sale, yet are under severe drought stress and unable to convert them into cash. Given the dominance of Muslim members, VSLAs provide interest-free loans to members but with no charge for operating and administrative costs. Therefore, all VSLAs have no capital as a group and potential for growth. All VSLAs has no differentiated saving for social and investment purposes. The project did not also link VSLAs to businesses and business skills.

The sustainability of the VSLAs is challenging, as they are not fulfilling the association criteria of the cooperative proclamation. As a result, the woreda cooperative promotion offices will not overtake and provide all materials and technical support after the project's termination. There is no strategy for growth and transition stages to an independent and self-reliant cluster associations or RUSACCOs. Therefore, more capacity building and training are required to enable them to stand by themselves and facilitate conditions to transform them into higher level associations.

**Increased number of goats by 25% per year:** the selection criteria for revolving goat scheme are vulnerable women households who lost their livestock due to drought and diseases. This self and administrative targeting was acceptable by the communities.

The target for the project period was to establish 15 shoat groups. The project provided each group member with two female goats. Half of these groups are mirror groups, which will receive the first kids from the first group. So far, the project established 18 groups provided with 260 goats, at a rate of two shoats per member. Overall, the achievement was 120% of the target for the period.

The target of the revolving goat scheme is to increase the number of goats by 25% each year (75% by the end of the third year). Since the project distributed the goats in 2020 and 2021, we have to adjust this target to 50% and 25% respectively. The distribution of goats started in 2020 (61.5% of the total). Since then, 110 were born, 38 were dead and 24 were lost due to various reasons. Death rates in some kebeles are very high. For example, of the total goats in Dabafayd, 46.7% were dead, Ubalay 26.7%, Guba dad and Harsog 20%, and Bursardo and Dud Ade 18.8 and 17.6% were dead. Severe drought, shortage of feed, diseases and poor management are the major causes of death. Shortage of feed and diseases as contributed to large-scale miscarriage (6.9% of total), over 33% in Birlays, 23.1%, Tarfodly, 11.1% in Karinka and Adadle 02 (Bohol Hagarre).

Based on the administrative data, the current number of goats available is 291 or (79.7% of the target). The same source also shows that only five kebeles achieved the desired target of 100% and above, four groups 90-100%, three groups 80-90% and the rest below 80%. The project, therefore, failed to achieve its target. Thus, *the project did not achieve the goal of an increased number of goats by 25% per year.*

The design document stated also that beneficiaries have to transfer the doe once it gives birth to the kid by retaining the kid. Data on the number of transferred and the number of households that benefited from the transfer were not available. However, the sample survey data show that none of the beneficiaries stated they transferred the doe to the next person according to the project provisions. The beneficiary should transfer the doe to the next person within three months after the doe give birth to the kid. For many of the households and from a scientific point of view, three months is inadequate for the goat kid to be self-reliant and has to remain to suckle up to six months for good growth and survival to diseases. Given the severe drought and shortage of forage for doe, the milk produced for the kid is not adequate even within the first months. The separation of the kid and the doe within three months is the cause for large-scale death rates. Other anomalies are that several households did not want to transfer the doe and contributed to poor management of the doe and the kid. Other challenges are the shortage of feed. Almost all households use open grazing and traditional management. For 95.7% of the households, animal feed is inadequate throughout the year. In the drought period, the feed shortage is severe and a cause of many deaths. Introducing Sudan and elephant grasses recently however solved some problems related to the shortage of animal feed particularly for agro-pastoralists with access to irrigation infrastructure.

The VSF-Suisse trained community animal health workers to combat communicable animal diseases. The activities of the CAHWs are encouraging and extolled by the community. The VSF also supported the establishment of agro-vet clinics that provide drugs. Thus, over 97.4% of the samples stated having access to drugs, treatment and vaccination services and over 90% benefited from private and government institutions. According to the key informants, VSF established two agro-vet clinics (one each) in the two woredas.

Despite critical challenges within the revolving goat schemes, 64.6% stated that goats were their priority preferences and for the rest not. Some stated that they need more goats in face of their experience in rearing too many animals and severe drought and others need cattle, donkeys and investment funds than goats.

### **4.3. Efficiency**

Efficiency assesses whether the financial resources and other inputs efficiently used to achieve the intended results. It assesses project efficiency in terms of time, resource use and achievement of the planned activities. For this assessment, we use the implementation of planned activities and financial performances.

#### **CAP Activities performance**

The CAP sub-component includes three activities. These include facilitation of CAP activities, planning and implementation of CAP projects and formation of structure for management and maintenance of CAP projects. Annual progress reports show that the project implemented all activities as per the guideline of CAP and annual plans. The project, in collaboration with government institutions and the beneficiary community conducted the general assembly with the community for the identification of key challenges and their priorities. This activity was accomplished 100% each year. The Planning and implementation of the CAP projects follow the identification and prioritisation of the project through community participation and workforce established at the community level. In the last three years, ADRA Ethiopia planned and implemented 20 CAP projects through community contribution. Thus, the project completed all planned projects (human health posts and vet posts, water supply points, schools and other projects) on time. It also completed the formation of structure for management and maintenance of the CAP projects in line with the planned target and time frame. About 98 CAP

management structure committees from 14 kebeles/locations were trained and operational. Moreover, ADRA trained nine hollow block producers in Kayane, Tarfodley and Harsog-and produced and provided hollow blocks for the construction of community projects in their kebeles. ADRA, VSF Suisse and the government staff provided awareness creation and training for the committees. Implementation of this activity was with 100% success. The severe drought in the area, migration of the community in times of implementation, inadequate awareness, poverty, inadequate contribution and low participation, and above all the rising prices of construction materials and shortage of some construction inputs were critical causes for the delay of construction of some projects.

### **VSLA Activities performance**

This sub-component has four major activities, including training of staff and village agents, supervision of VSLAs and maintaining MIS, forming and training of shoat groups, groups training in market research.

**Activity 2.1 Training of staff and Village agents:** The plan was to train 2 staff and 15 village agents. The project provided on-job refresher training for two staff on the various issues of VSLAs and 38 village agents responsible for the formation of VSLA, documenting MIS of the associations and training of the VSLA members. The project provided this training for five days in seven sessions and four stages.

**Activity 2.2 Supervision of VSLA and maintaining MIS:** This activity was unsuccessful. The training of the staff and the village agents in MIS in excel format was not accomplished as per the plan due to a lack of skilled trainers. Therefore, the VSLAs suffer from critical data gaps and record handling. The aim was to provide training for the VSLA Officer in MIS/data tracking, and regular updating of MIS and producing reports. VSLA Officers focus on monitoring and supportive supervision of VSLAs and VAs. The lack of training for the village agents is a critical challenge for the project to organise and manage relevant VSLA financial and non-financial information and to track the performance of vital indicators. Since there is no MIS, the planned updating of the MIS is not in place and hence not accomplished.

**Activity area 2.3 Forming and training of shoat groups:** community mobilisation to identify and select vulnerable households who will receive breeding shoat and then be organised in groups by the community elders, religious leaders and the government and project staff completed successfully and on time. The plan was to establish 15 shoat groups that will benefit from the revolving goat scheme and to date, the number of the established group was 18 (20% above the target). The project accomplished provision of training for the selected beneficiaries on animal feeding, production, reproduction, disease prevention and livestock marketing above the target. The project completed procurement and distribution of goats as per the schedule, quality standards and preferences of the beneficiaries and accomplishment was above the target. The project organized most of the shoat groups in 2020 and 2021. The plan for training of community animal health workers from shoat groups (one per group) was 15. The achievement of the activity was above the target (220%) and the project trained 33 CAHWs by VSF-S in collaboration with vet experts of sector office.

**Activity 2.4 Training groups in market research (FMS):** FMS is a learning platform that empowers farmers or pastoralists to learn in the group to help them discover a market for their agricultural and livestock products by themselves. In general, FMS is about producing for the market. The plan is to establish 10 FMS groups through community mobilisation, training of trainers and facilitators. The project completed this activity as per the plan. However, the project organized 50% of the FMSs after the second quarter of 2021 and could not provide the anticipated services to the members. The project also trained 10 community facilitators, which is 100% of the plan. The total members of the 10 FMS were 272 (150 males and 119 females).

### **Climate change adaptation and production techniques performance**

VSF in collaboration with the sector offices (agriculture and livestock) was responsible for implementation of this component. There are four activities under this component. These include establishing FFS and PFS groups, training staff of agriculture office and livestock and DAs as PFS/FFS facilitators and water and rangeland rehabilitation.

### **Activity 3.1. Train MoA/L staff & Development Agents as FFS and PFS facilitators**

The major activities under this component were organising the PFS and FFS through community mobilisation, mapping community groups, training of facilitators, monitoring of weekly sessions, input supply, group formation, facilitation for graduation. The project planned to train six FFS and six PFS facilitators. Until December 31, 2021, the project, through VSF-Suisse, trained 56 community FFS facilitators and 56 PFS facilitators for three weeks. Achievement of this activity was as per the plan.

### **Activity 3.2: Facilitate/Train agro-pastoralists organised in Farmer Field Schools**

The role of the facilitator is crucial for community mobilisation and the provision of technical support. FFS facilitators are selected from the FFS group members mainly those who can read and write and are active participants in community activities. The project target was to organise and train 25 FFS groups. Until December 31, 2021, the project organised 25 FFS groups in agro-pastoral areas, particularly those using irrigated crop farming. The groups are currently engaged in both production and marketing of commodities produced on communal farms. The total number of members of these groups was also 610 (287 males and 323 females). In almost all sites, the members contribute start-up capital up to ETB 1000, registration fee of 100 and weekly regular contribution of ETB 10 per member for operating cost of water pumps. Several FFS groups also farm over four hectares of land in common and mostly produce Sudan grass, tomatoes and other vegetables for sale. The amount of revenue they generate and their capital however unknown due to the lack of relevant tracking and monitoring systems.

### **Activity 3.3: Facilitate/Train pastoralists organised in Pastoralist Field Schools**

The target of the project was to organise and train 25 pastoralist field schools (groups) to improve the productivity and marketing of pastoral outputs in target areas. The project organised 25 PFS groups, each group comprising 30-40 households and provided training. Currently, several of them are functioning except for the critical challenges faced by pastoralists. Migration for longer months usually results in the collapse of PFS. The average number of the group was 32 (max 40, min 20), most of whom were men managed by a management committee elected from the community. By the end of December 2021, the number of members of the PFS was 804 (472 males and 332 females). Each member contributed, for example in Hersog ETB 1000 for start-up capital, 100 for the registration fee and a weekly contribution of 10-20 birr (for operating cost). The PFS was actively participating in goat marketing and area enclosure. They generate substantial income from the sales of the goats. Following the severe drought in 2021, the PFS distributed most of the goats purchased for later sale to members who are responsible for tending and feeding them. The declining prices and lack of demand is the major constraint in 2021.

### **Activity 3.4: Plan and implement major water conservation and rangeland development projects using the CAP approach**

The objective of the intervention was to build local capacities for improved land management, using knowledge and techniques that are appropriate for the community's contexts for the sustainable rehabilitation of degraded rangeland. The approach used was participatory, which encourage the community to identify their weaknesses and needs, their strengths and existing assets. Experiential learning approach through PFS was used; and techniques such as historical review of social-environment-livelihood change and their causes, stakeholder mapping, collective visioning, strategic

planning and collective testing of major decisions involving land management. Such a participatory approach improves ownership of the action and encourages communities to make informed decisions and plans

The plan for the project was to implement four participatory range rehabilitation projects through a holistic natural resources management approach. The project achieved most of these targets, introduced conservation practices such as area enclosure, use of invasive plants (*Prosopis juliflora*) for animal feeds, introduced pastoralists and farmers to various feed choppers, and feed mixers. Following the orientation to the technology, the demand is increasing and exposure of the communities to modern animal breeding and feeding practices, feed preservation and storage is improving. The project established enclosures in many areas particularly in 2020. According to the focus groups, enclosures are very productive in protecting soils and increasing biodiversity, shrub and grass biomass. Yet the long dry period and drought in 2021 devastated the enclosures and their productivity and recently none of the enclosures was operational.

The VSF-Suisse also conducted a study on the pumps and identified the number of the pumps operational and which need of heavy and light maintenance. Currently, many of the pump users are suffering from large-scale breakdowns, the heavy cost of maintenance, rising prices of fuel and spare parts. The project also introduced various animal forage seeds and planting materials, supplied other inputs and trained farmers to support irrigated crop and forage production. The FFS groups are the beneficiaries of the water resources/irrigation farming interventions. The lack of alternative energy sources (such as solar and electricity) is also raised as a critical challenge. The number of irrigation schemes along the major hydropower grid lines in Gode can benefit from the electricity for pump irrigation. There is also a huge demand for solar energy that can help to replace diesel pumps.

#### **Activity 4.1: Project Technical Support Committee established and functioning**

As a platform for joint supervision, monitoring and technical support, the project established PTSC with 12 members, from sector offices who also monitor other sector development activities. The committee meets twice per month and discusses issues of project performance and the major challenges faced during implementation. Joint field level monitoring and technical support for established community platforms (VSLAs, Goat groups, FMS, FFS, PFS and CAP) is the strategy of the committee. Accomplishments are as planned achievements are satisfactory. However, limited capacities, frequent turnover of the staff and committee members, commitment are critical challenges for effective decision-making and problem solving. Sector offices usually have limited capacity to provide independent technical support and to solve problems without the financial and logistic support of the project. The extension services provided to the FFS, PFS and FMS is limited, although there are extension workers in every village. The role of the PTSC in the face of critical capacity limitations is therefore critical. Besides, the project organised joint meetings of implementing partners (ADRA and VSF-Suisse) on a monthly basis to discuss the implementation challenges and the way forward.

#### **Activity 4.2: Documentation/Dissemination of lessons learnt**

The project produces quarterly physical and financial progress reports and submits them to the head office regularly following the standard format developed by the donor. The field office shared the reports with relevant stakeholders at the woreda level. While ADRA produces reports on components 1, 2 and 4, the VSF-Suisse is responsible for reporting the progress of the climate adaptation and production technique component of the project. In each reporting period, the critical challenges, lessons learned and best practices are included and shared with all stakeholders. As part of lessons learned and best practices, the project conducted 10 case studies/stories. The project also conducted an impact assessment of the project particularly on VSLA, revolving goat scheme and community action planning. In general, the project accomplished all physical activities under this component as per the plan.

## 4.4. Impact

The main goal of the project, as stated above, is to strengthen the resilience of the most vulnerable people in conflict-affected areas of the Somali Region. While the core of the goal is resilience, the indicator that can measure the resilience of the livelihood system was not available for the project and no baseline benchmark or the target for the three years was not set. To solve this problem, we define a resilient livelihood system in terms of sustained food security and nutrition, productivity, asset accumulation, access to finance, diversification of livelihood (for risk absorption), exposure to risks (vulnerability). Since there is no indicator and baselines for impact assessment, we also adopted qualitative information from the household survey to link resilience with the three components (VSLA, revolving goat scheme and CAP) and compare if there is any difference between the beneficiaries and non-beneficiaries to establish the impact or effect of the project.

**Improved food security:** Improved food security results from the supply (production and productivity), access (purchasing power, income and markets), and utilization (nutrition). Improved production and productivity relate to crop and livestock productivity. For the pastoral households, production and productivity only relate to livestock while for the agro-pastoralists to both crop and livestock production. Crop production is a serious and vulnerable enterprise in both woredas without irrigation. Rainfed crop production is a rarity due to frequent drought and serious moisture stress throughout the crop growing season. Hence, the productivity of crops and the volume of production is a function of irrigation water availability. In this area, pump irrigation is dominant and farmers produce vegetables (mainly tomato and onions) fruits (apple, watermelon, banana) pulses (beans) and cereals (maize and sorghum). Drought affects rangeland resources through eroding pasture and water availability and hence the chance of improving productivity is a rarity. Nevertheless, with adequate rains, production of livestock (milk, meat) is significant and pastoralists have adequate access to food and surplus production for the market.

In general, drought is the deriving force determining production and productivity. According to the household sample survey, participation in VSLA has a significant impact on food security. About 42.2% of the observations stated that being a member of VSLA improved their food security compared to none for their counterparts. Moreover, the level of satisfaction is the highest among the VSLA members than members. In addition, over 46.6% of women and 23.5% of male VSLA members stated that food security improved. Regarding livelihoods, 29.4% of the agro-pastoralists VSLA members agree on the improvement of food security against 59% for pastoral VSLA members compared to none for their counterparts, respectively. For almost all non-VSLA members, food security situation was worsening and/or has shown no change.

The VSLA participants are more food secure, with an average score of 3.0 points compared to 2.3 points for non-VSLA members. Women were more food secure due to their high engagement in VSLAs, income-generating schemes and improved income. Pastoralists were more food secure, with a mean score of 3.8 points than agro-pastoralists (mean of 2.7 points).

The contribution of the revolving goat scheme is also significant in improving food security. The sample survey shows that about 29.3% of women strongly agree/agree that their food security situation is improving over the period relative to none for male beneficiaries. Overall, for 26.7% of the entire beneficiary samples, food security has been improved while for the rest no change and/or deteriorating. The average score was 3.0 points for women and 2.0 points for men. Similarly, the pastoralists who benefited from revolving goat schemes are more food secure than the agro-pastoralists with an average score of 3.4 and 2.7 points, respectively. Although the distribution of goats started in 2020 (about 90% of the total), its impact on the beneficiaries is significant. Beneficiaries with some assets before the project can save what they have to sell during emergencies. Few of them produce milk and improve

child nutrition. Yet the large majority of the households have not obtained the chance. Therefore, the reported significant improvement in food security may be due to the ardent desire for the continuation of the goat scheme to cover as many households as possible. Note also that the severe and long drought in the entire region in general and Gode and Adadle, in particular, eroded the purchasing power of pastoralists, resulting in a significant decline in animal prices and rising prices of food commodities. However, pastoralists survived better than the agro-pastoralists due to the advantages of many animal holding and food aid.

CAP is a bottom-up planning exercise and may not have a direct impact on food security. Thus, only 54.2% of the regular participants and knowledgeable households agree that participation in CAP exercise improved food security (60.7% of the pastoralists, 59.5% of female and 66.7% of literate households).

There is also a positive correlation between being the FMS, FFS and PFS member and food security. The household survey showed that the food security score for members of these associations was \_\_\_ points compared to the non-members. Over two-thirds of the FMS members responded that the food security improved over the period although long drought has a considerable effect on livelihood strategies. Among the comparative group (the non-members), the proportion who witnessed negative or no changes in food security was 100% (while this was only 31% for members). Although none of these platforms is concerned with individual member performances, they improve access to water pumps for irrigation and have deliberation to support members in times of crisis. Several FFS members produced animal feed (Sudan and elephant grass) not only to feed their animals but also for sale. The demand for animal fodder is so high that some households stated they sell up to ETB 150,000 per year. Thus, access to food through increased purchasing power reduced exposure to chronic food insecurity. Regarding the FFS/PFS, 67.7% of the members witnessed improvement in food security while for the entire non- group members there was no change or the situation was deteriorating. These figures or the higher the score of the members regarding food security relative to the non-members show that introducing FFS, FMS and PFS indeed has a positive contribution to food security. See table 5 below.

**TABLE 5. PROPORTION OF RIHA PROJECT BENEFICIARIES WITH IMPROVED FOOD SECURITY**

Indicator		VSLA		Goat scheme		CAP		FMS		FFS/PFS	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Woreda	Gode	59.1%	0.0%	50.0%	0.0%	72.7%	0.0%	81.8%	0.0%	81.8%	0.0%
	Adadle	36.8%	0.0%	13.8%	16.7%	48.6%	22.6%	66.0%	0.0%	64.8%	0.0%
Gender	Male	23.5%	0.0%	0.0%	0.0%	16.7%	27.3%	50.0%	0.0%	50.0%	0.0%
	Female	46.6%	0.0%	29.3%	25.0%	59.5%	16.0%	77.3%	0.0%	75.6%	0.0%
Literacy	Literate	44.0%	0.0%	20.0%	0.0%	66.7%	26.7%	66.7%	0.0%	64.0%	0.0%
	Illiterate	41.5%	0.0%	27.5%	9.1%	51.3%	14.3%	70.0%	0.0%	70.0%	0.0%
Livelihood	Pastoralism	59.0%	0.0%	35.7%	7.7%	60.7%	54.5%	35.7%	0.0%	33.3%	0.0%
	Agro-pastoralism	29.4%	0.0%	22.6%	0.0%	45.0%	4.0%	78.0%	0.0%	78.0%	0.0%
	Total	42.2%	0.0%	26.7%	7.7%	54.2%	19.4%	68.8%	0.0%	67.7%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022

Combining the three components, beneficiaries of the three components are more food secure than those who benefited from one or two. With an increasing number of benefits, the food security situation of households improves significantly. For example, while 44.4% of the households benefited from all (VSLA, revolving goat scheme and CAP) agree their food security situation improved, this was only 5.6% for those who benefit from only one component. The average score for food security was 2.9 points for the agro-pastoralists, 3.4 points for pastoralists who benefited from the three components. The average for VSLA beneficiaries was also 3.1 against 1.3 for non-members, 3.1 for goat beneficiaries and none for non-beneficiaries. Households with knowledge and experience and also active participants in CAP activities and benefited from the three components scored 3.3 points against 2.5 points for those who benefited from only one component.

In summary, VSLAs, revolving goat schemes and CAP has a significant impact on the food security of the households and this finding shows that the selection of the components, as a vital source of resilience is realistic and has a crucial and positive effect. However, the determinants of food security in pastoral areas are beyond the provision of these services. Above all, drought is killing many animals, degrading pasture productivity and forcing people to migrate with their animals. Water supply points dried up. Rainfed crop production is not in place due to significant moisture stress and households could not produce. People are purchasing animal fodder at higher prices to save their animals. The effect of desert locusts was also considerable besides seasonal flood devastating villages, farmlands and pasture areas. Therefore, any positive change regarding food security can be due to chance. Yet the VSLAs, CAP and the revolving fund scheme can reduce vulnerability and improve resilience. According to the focus discussion, have there not been the project support, our livelihood would have been at worst ever.

**Impact on Asset Accumulation:** The focus group discussion and key informant interview showed that there are improvements in asset building of households who obtain goats and participate in VSLAs. Several households engaged, particularly in suburban areas in small business activities (such as teashops, food-catering services, milk sales, small merchandise shops, groceries and others). Income generated from this is significant, which also help them purchase and own other assets such as agricultural tools, renovating houses, purchase of goats for breeding and others. Asset holding improved over the period through saving and loan services introduced through VSLAs. Many households invested in farm inputs, pumps, fuel, which can improve their productivity and income. The impact is significant among households that benefited from irrigated agriculture. The impact is however not better for the VSLA beneficiaries than their counterparts. The proportion of households that observed a significant impact of VSLAs on asset accumulation is 31.1% for members compared to 50% for non-members.



Thus, the difference is in favour of non-VSLA members, in Adadle and among the agro-pastoral livelihoods, women and illiterate households. In Gode, the change in Asset holding is better for VSLA members, given that most members of the VSLA engaged in other income-generating activities. Similarly, women observed significant asset accumulation than men and pastoralists than agro-pastoral communities. Moreover, several beneficiaries of loan services purchased water pumps for irrigation, others purchased a goat for breeding (although the percentage is small), some improved their housing (with value additions) and others improved their access to alternative energy (such as solar panel). Had it not been for soaring inflation, which resulted in excessive price hikes in the last three years, the impact of VSLAs on asset accumulation and retention would have been significant.

The revolving goat scheme also has similar impacts on household assets, although it is not mature to generate income and contribute to asset building. The household survey shows that 25.2% believe that the goat scheme contributes to asset accumulation and 74.8% did not agree. The largest change is for women, literate and agro-pastoral members of the goat group. The average score was 2.6 points (2.8 points for pastoralists, 2.6 points for agro-pastoralists, 2.8 points for women and 1 point for the beneficiaries of the VSLAs). Moreover, none of the goat scheme non-beneficiaries positively responded to the contribution of goats to asset building. According to this result, the revolving goat scheme indeed affects asset accumulation and retention. For households who have no assets before the project, the impact is significant and obtaining two goats freely has been a great success. Yet, it is too early to judge that the goat scheme influenced asset accumulation, as there is no significant transfer and the distribution started only in 2020 and 2021.

The CAP has no significant impact on asset accumulation. Rather, its contribution is on the accumulation of community assets such as schools, water supply points, human and livestock health posts. However, the survey result shows that 41.1% of the observations perceived CAP has a significant impact on asset accumulation at the household level and 58.9% did not. Therefore, households who regularly and actively participate in CAP have an absolute chance of accumulating assets than those who did not participate. The role of CAP is educating people in problem identification and solving, prioritisation planning and implementation of projects of their desire. The role in grassroots decision making, social cohesion, conflict resolution and peaceful co-existence is considerable. Thus, experiences in community level action planning can help not only to develop community infrastructure but also can apply to household livelihoods. Most of the positive impacts on CAP at the household level can also be linked to the ardent desire for the project and because regular participants are VSLA members and beneficiaries of goat schemes.

Irrigated agriculture, production of high-value crops and marketing of livestock generate significant impact for the group members. Several members can retain their assets even during the crisis period. Asset accumulation and retention are higher for the FMS, FFS and PFS members. The average score is 3.55 points for members of the associations and 3.00 points for the non-members. The proportion of members with significant asset accumulation and retention was 50.3% compared to only 25% of the non-members. The illiterate, women and agro-pastoral FMS group members witnessed more changes in asset accumulation. In general, the higher performance of the members shows the positive impact of the FMS. With better access to markets and production techniques, the FFS and the PFS group members perform better than the non-group members do. The proportion of households with improved asset possession was 52.7% of the group members. On the other hand, for the non-beneficiaries there is no change and/or their asset was declining over the period. The males and pastoral households observed a decline or no change. See table 5 below.

**TABLE 6 PROPORTION OF SAMPLES WHO PERCEIVED THEIR ASSET POSSESSION IMPROVED DUE TO THE PROJECT**

		VSLA		Goat		CAP		FMS		FFS/PFS	
Indicator		Yes	No	Yes	No	Yes	No	yes	No	Yes	No
woreda	Gode	36.4%	0.0%	43.8%	0.0%	36.4%	0.0%	81.8%	0.0%	81.8%	0.0%
	Adadle	29.4%	0.0%	17.2%	0.0%	40.5%	16.1%	58.5%	50.0%	59.3%	0.0%
Gender	Male	29.4%	0.0%	0.0%	0.0%	16.7%	36.4%	45.0%	0.0%	45.0%	0.0%
	Female	31.5%	0.0%	29.3%	0.0%	42.9%	4.0%	70.5%	50.0%	71.1%	0.0%
Literacy	Literate	32.0%	0.0%	60.0%	0.0%	44.4%	20.0%	54.2%	50.0%	56.0%	0.0%
	Illiterate	30.8%	0.0%	22.5%	0.0%	38.5%	9.5%	67.5%	0.0%	67.5%	0.0%
Livelihood	Pastoralism	30.8%	0.0%	21.4%	0.0%	32.1%	27.3%	28.6%	50.0%	33.3%	0.0%
	Agro-pastoralism	31.4%	0.0%	29.0%	0.0%	50.0%	8.0%	72.0%	0.0%	72.0%	0.0%
Total		31.1%	0.0%	25.2%	0.0%	41.1%	17.6%	50.3%	25.0%	52.7%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022.

**Diversification of livelihoods:** a large proportion of households engage in one or two livelihood options. Pastoralists depend only on livestock and livestock-related activities, while agro-pastoralists depend on crop and livestock production. A small proportion of peri-urban areas depend on small-scale trade. The lack of diversification results from a lack of access to adequate finance, lack of skills and experience in other economic activities and inadequate support services. The establishment of VSLAs and other project components, which account for a significant number of beneficiaries, have the purpose of diversifying and providing support to households. Diversifying reduces vulnerability to shocks and is a means of fast resilience. VSLAs have a significant effect. The project established VSLAs in the past three years. They are too young to generate income and significant change to livelihoods in addition to low saving and lending capacities, severe and frequent shocks. Yet, about 48.6% of households perceive VSLAs can support diversification of livelihoods. About 59% of pastoralists and 35.3% of agro-pastoral VSLA members stated that their livelihood significantly diversified. The proportion of VSLA members who agree to significant contribution of VSLAs to diversification was 45.6% VSLAs and 0% non-VSLAs. Given women are the largest beneficiary groups they observed more income growth and diversity. Yet, available data show that only 12% of households invested their loans in small businesses and 36% in other investments (goats, pumps farming, and others).

The goat scheme has also a similar effect. Yet the scheme is too young to generate a significant impact on diversification although 45.7% believe the participation in the revolving goat scheme contributed to diversification while 45.5% of non-VSLA members agree they witnessed a positive change in diversification. In several pastoral and agro pastoral kebeles, women started small businesses such as the petty trade of merchandises, village shops (bottled water, soft drinks, soap, salt and other fast-moving commodities), tearooms, food catering, sale of incense. For example, 10.8% of borrowers invested in small businesses, 11.7% in farming, fuel, pumps and other agricultural inputs that improve their productivity and income. Recurrent drought, lack of adequate fodder, diseases and others, however, affected the efficiency of the scheme.

**TABLE 7. PROPORTION OF SAMPLES WHO STATED THAT THEIR LIVELIHOOD DIVERSIFIED DUE TO THE PROJECT**

Indicator		VSLA		Goat		CAP		FMS		FFS/PFS	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
woreda	Gode	59.1%	0.0%	68.8%	33.3%	63.6%	0.0%	72.7%	0.0%	72.7%	0.0%
	Adadle	41.2%	0.0%	33.3%	47.4%	64.9%	12.9%	58.5%	50.0%	59.3%	0.0%
Gender	Male	47.1%	0.0%	50.0%	46.2%	66.7%	36.4%	55.0%	0.0%	55.0%	0.0%
	Female	45.2%	0.0%	45.2%	45.2%	64.3%	0.0%	63.6%	50.0%	64.4%	0.0%
Literacy	Literate	52.0%	0.0%	66.7%	47.4%	88.9%	26.7%	54.2%	50.0%	56.0%	0.0%
	Illiterate	43.1%	0.0%	42.5%	44.0%	59.0%	0.0%	65.0%	0.0%	65.0%	0.0%
Livelihood	Pastoralism	59.0%	0.0%	46.7%	66.7%	71.4%	27.3%	35.7%	50.0%	40.0%	0.0%
	Agro-pastoralism	35.3%	0.0%	45.2%	20.0%	55.0%	4.0%	68.0%	0.0%	68.0%	0.0%
	Total	45.6%	0.0%	45.7%	45.5%	64.6%	11.1%	48.6%	50.0%	61.5%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Access to finance:** pastoral and agro-pastoral communities have inadequate access to affordable financial services. Unlike in the highlands, formal financial institutions such as banks and MFIs are lacking and do not serve the large vulnerable population affected by frequent shocks for fear of financial and non-financial risks. Rural financial cooperatives are also few and weak in capacities to promote and provide saving and loan services. VSLAs are thus affordable financial institutions owned and run by the beneficiaries themselves, which are more self-reliant, stable and dependable financial institutions. Their role in providing financial services and improving access is therefore substantial, as stated by the focus group discussion participants and sample households. According to the sample VSLA households, 56.7% perceived that they have significant access to financial services (saving and loan services) after their engagement in VSLAs. About 61.6% of the women and 35.3% of the men stated they agree VSLAs improved their access to finance. Similarly, 43.1% of the agro-pastoralists and 74.4% of the pastoral community samples showed that their access to finance is highly improved due to VSLAs.

The revolving goat scheme has also an indirect effect on access to finance. Beneficiaries can easily exchange goats with cash in times of emergencies by eroding their assets. The survey shows that there was improvement in access to finance for 65.2% of goat beneficiaries and 47.7% of non-beneficiaries. The proportion of active CAP participants who have knowledge and experience and improved access to finance is 79.2% compared to 19.4% for inactive households.

Members' contribute start-up capital, regular saving and variable registration fees to organize FMS, FFS and PFS. Improved production and effective marketing of crops generate a significant impact on the associations. Currently, several FFS and the PFSs were financially self-reliant and many of them have limited financial constraints. As a result, 73% of the FMSs members observed improvement to access to finance against 50% for the non-members. Females, agro pastoral and literate members of the FMS have witnessed significant improvement than their counterparts. Moreover, the proportion of FFS/PFS members whose access to finance is improved was 71.9% which is substantial compared to the non-members. The average points were also the highest for the members of both the FMS and the FFS/PFS members. See Table 8.

In summary, the three components have the potential to improve access to finance. The contribution of the project to improving the livelihood of women through improved access to finance is considerable than men and pastoralists than agro pastoralists. However, the VSLA focus groups showed that low savings (due to poverty, drought and other shocks), small loan size, rising costs of goods and services, short maturity period are critical challenges for the households who need to engage in profitable

enterprises and to diversify their livelihoods. Promotion activities and extension services supporting livelihood diversification particularly for the VSLA and goat beneficiaries are also lacking. For households with no prior experience and skills in other livelihood options except pastoralism, such support services are crucial. As stated above, the FMS and the FFS/PFS has the potential to increase access to finance although there is no direct benefit sharing between the platform and individual members. The benefits from the communal water pump to irrigate members' farms and the rising prices of and demand for agricultural commodities increased income and access to finance. Many of the informants also stated that members can borrow from the platform in a crisis and are now more confident in their livelihood than before. The growth of assets, diversity of income sources and improved shock coping mechanisms also contribute to improved access to finance.

**TABLE 8. CONTRIBUTION OF THE PROJECT TO IMPROVE ACCESS TO ACCESS TO FINANCE**

Indicator		VSLA		Goat		CAP		FMS		FFS/PFS	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
woreda	Gode	72.7%	0.0%	87.5%	33.3%	90.9%	0.0%	72.7%	0.0%	72.7%	0.0%
	Adadle	51.5%	0.0%	53.3%	50.0%	75.7%	22.6%	73.1%	50.0%	71.7%	100.0%
Gender	Male	35.3%	0.0%	50.0%	30.8%	50.0%	27.3%	57.9%	0.0%	57.9%	0.0%
	Female	61.6%	0.0%	66.7%	54.8%	83.3%	16.0%	79.5%	50.0%	77.8%	100.0%
Literacy	Literate	52.0%	0.0%	66.7%	47.4%	88.9%	26.7%	82.6%	50.0%	79.2%	100.0%
	Illiterate	58.5%	0.0%	65.0%	48.0%	76.9%	14.3%	67.5%	0.0%	67.5%	0.0%
Livelihood	Pastoralism	74.4%	0.0%	93.3%	62.5%	85.7%	45.5%	53.8%	50.0%	50.0%	100.0%
	Agro-pastoralism	43.1%	0.0%	51.6%	30.0%	70.0%	8.0%	78.0%	0.0%	78.0%	0.0%
	Total	56.7%	0.0%	65.2%	47.7%	79.2%	19.4%	73.0%	50.0%	71.9%	100.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Improved social capital:** VSLAs not only provide affordable financial services but also a source of self-reliance, social cohesion, peaceful co-existence, trust and group actions and decision-making. The role of building social capital is substantial. About 44.3% of sample households stated VSLAs has a considerable effect on building social capital (trust and group actions) while 55.7% disagree. Pastoralists perceive the considerable effect of the VSLAs in social cohesion and conflict resolution, group actions and social support, particularly among women than the agro-pastoralists. Moreover, VSLA members responded that their social coexistence, conflict solving capacities, trust and social support are very strong now than in the pre-project period. Women provide support to their members who faced economic and social problems such as health problems, accidents, hunger and debt. They also support each other more than ever in times of a wedding, childbirth and others.

Group actions are also significant among the VSLA members. They contribute from their savings for the rehabilitation of water supply points (birkas), schools and health posts. Trust is also stronger among these groups. According to the focus groups, there is no default for loans delivered to the members. For those who cannot oblige to their commitments due to poverty, drought, chronic illnesses and lack of income, group members support these households from their savings and contribution. The group also discusses the major challenges in their villages, member households and forward solutions. Their group decision making also improved. Many of the VSLAs stated that they have the vision to engage in the provision of merchandise commodities to the communities through their association in the future to solve the marketing problems their members have faced. The knowledge, experience and financial literacy of women also improved through a series of saving meetings. Thus, the impact is very significant for all member households than the non-members of the VSLAs.

The other dimension of the effect of the VSLAs is the economic empowerment of women by improving income. The VSLAs focus group discussion participants showed that the VSLA members are now more dependent on their income than before. Before engaging in the VSLAs, women depend on their husbands' income, although the pace at which this dependence is declining is not significant. In general, VSLAs are empowering members and women and strengthen decision-making power, social support, group actions and self-reliance.

The trend for CAP active participants and revolving goat scheme beneficiaries is similar. There was improvement in social relation for 52.1% of active CAP participants and 47.4% of goat beneficiaries compared to none and 38.2% for inactive CAP beneficiaries and non-beneficiaries of goat scheme.

Saving and credit association such as VSLA beyond smoothing the access of women to affordable credits also aims at empowering women through collective actions. VSLAs are both economic and social institutions. Its voluntary saving and credit, participation in various income-generating activities represent the economic aspect of VSLAs. They are the centre of social relations, exchange of information, learning and experience sharing. It empowers its members through its democratic governance, regular saving and loan meetings, involving most of its members in management committees, encouraging discussion, valuing the ideas of the voiceless women and building self-confidence, respect and ability to resolve conflict. It is an institution of co-existence with a sustainable background. Goat scheme also strengthens social capital and improve social support system and CAP introduce methods and techniques of identifying critical livelihood challenges, ways of solving them and transforming them into action. Although CAP is for community projects, active participant households learn, conceptualise, exercise and translate into their own life experience.

The weekly meetings of members, training and mobilisation activities, savings and contribution, joint farm and conservation works increase the togetherness and relationship between community members and hence builds social relations, trust among the members, joint problem solving, actions and decision making. It also improves the group self-support system and hence resilience and coping with shocks. The FMS, FFS and PFS group members, therefore, benefited from the social relations and their outcomes more than the non-group members did. Table 9 shows that 64.1% of the FMS and 64.6% of the FFS/PFS members agree that their social relations improved compared to only 50% for the non-beneficiaries.

In summary, the three components have substantial contributions to improve social capital and the results are in line with the initial hypothesis/proposal of the project.

**TABLE 9. CONTRIBUTION OF VSLA, CAP AND REVOLVING GOAT SCHEME TO IMPROVE SOCIAL CAPITAL**

Indicator		VSLA		Goat scheme		CAP		FMS		FFS/PFS	
		yes	no	yes	no	yes	no	yes	no	yes	no
Woreda	Gode	68.2%	0.0%	81.3%	33.3%	81.8%	0.0%	72.7%	0.0%	72.7%	0.0%
	Adadle	41.2%	0.0%	30.0%	50.0%	54.1%	25.8%	62.3%	50.0%	63.0%	50.0%
Gender	Male	41.2%	0.0%	50.0%	38.5%	50.0%	36.4%	60.0%	0.0%	60.0%	0.0%
	Female	49.3%	0.0%	47.6%	51.6%	61.9%	16.0%	65.9%	50.0%	66.7%	50.0%
Literacy	Literate	52.0%	0.0%	66.7%	47.4%	77.8%	33.3%	75.0%	50.0%	76.0%	50.0%
	Illiterate	46.2%	0.0%	45.0%	48.0%	56.4%	14.3%	57.5%	0.0%	57.5%	0.0%
Livelihood	Pastoralism	74.4%	0.0%	80.0%	70.8%	82.1%	54.5%	57.1%	50.0%	60.0%	50.0%
	Agro-pastoralism	27.5%	0.0%	32.3%	20.0%	30.0%	8.0%	66.0%	0.0%	66.0%	0.0%
	Total	47.8%	0.0%	47.8%	47.7%	60.4%	22.2%	64.1%	50.0%	64.6%	50.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Behavioural change and financial literacy:** besides growth in income and gender empowerment, VSLAs are vital instruments for behavioural change. The qualitative information from sample participants showed that attitudes and behaviours towards gender roles and equality, engagement of women in IGAs and generating their income, participation in meetings and adhering to group bylaws, respect and conflict avoidance are improving among the VSLA members. Above all, low savings and vulnerability are a function of small income and bad behaviours. Knowledge and experience of saving among pastoral communities are very low. Cash saving is practically not existent and people save in kind (cattle, shoats and other animals). The poor spends a considerable amount of annual cash income on food, clothing and other necessities with no saving for investment and emergencies. Such behaviours are the reason for the high vulnerability of pastoral communities. The VSLAs, the revolving goat schemes and CAP empower people to save for bad years and for investment to diversify their livelihoods. The training provided to the VSLA members, revolving goat schemes and CAP meetings inculcate knowledge, experience in saving and investing. Technical supports and regular supervision and monitoring activities from the project and government improve the saving culture and reduce extravagant behaviours.

Such behavioural change increased the number of savers and relatively reduced vulnerability. The sample survey results show that 38.6% of VSLA members stated that their saving culture is improved and so do 43.8% of CAP active participants and 39% of goat beneficiaries. The figures for the non-beneficiaries of the three components are 0%, 15.4% and 35.3% respectively, reflecting the contribution of the project to behavioural and attitudinal change. On the other hand, drought and several other shocks are deterrents to behavioural change, which need time and effort.

In summary, the project met its objective of influencing behavioural change, and achievements were satisfactory.

**Risk absorption capacity:** Improved food security and asset ownership, diversification, access to finance, income and behavioural change have immense potential to withstand shocks. Over 32% of the households agree that their capacity to cope with shocks is highly improved over the period. VSLA members are more risk absorbents. About 34% of the members agree that they witnessed improvement in risk absorption capacity compared to none for non-members. Most of the improvements are access to finance, significant behavioural change, engagement in the diversification of livelihoods and asset retention and accumulation through saving and loan services. About 33.8% of women VSLA members stated that their ability to cope with shocks increased relative to none for VSLA men members. The proportion of VSLA member women and men who have a better capacity to absorb risks is significantly higher than the non-member women and men. Pastoral VSLA households are also more risk absorbent relative to the agro-pastoral VSLA members (33.3% and 24.5%). Moreover, none of the pastoral and agro-pastoral non-VSLA members reported improved risk absorption capacity.

The revolving goat scheme is also in favour of the women beneficiaries (17.8%) who stated risk absorption capacity improved. None of the beneficiary men and non-beneficiary women and men reported an improvement in risk absorption capacity. It is also in favour of the beneficiaries than the non-beneficiaries (17.8% vs 0%).

Active participation in CAP activities has also the same effect. Women active participants in CAP are more risk absorbent than men and the non-active members of all sexes. The result of the three, in general, shows that engagement in the VSLA, CAP and revolving goat scheme indeed have a positive effect on risk absorption capacity. The effect is more significant for women than men and non-beneficiaries given that a large proportion of VSLA and revolving goat scheme beneficiaries are women.

Owing to the relative growth of income, food security, asset holding, relative to the non-beneficiaries of the FFS and PFS, members have higher risk absorption capacities. Table – shows that the intervention

improved the risk absorption capacity of 63.5% of members of FMS and 64.1% FMS, FFS and PFS. Improved productivity of irrigated crops, improved access to water supply and irrigated fodder production plays a substantial role in improving shock absorption capacities.

The average of the Likert scale for risk absorption capacity for the whole sample is 2.71 points, while this was the highest for VSLA groups (2.77 points), beneficiaries of the revolving goat scheme (2.67 points), women households (2.78 points), pastoralists (3.17 points). The mean for the non-beneficiaries of VSLAs, on the other hand, were 0 points for non-beneficiary of VSLA, 2.0 points for non-beneficiary of goat scheme and 1.46 points for inactive CAP participants. Similarly, households who benefited from all components (VSLA, goat and CAP, FMS, FFS/FPS) have a better capacity to absorb risks than households who benefited from one or two of the components. In all component categories, beneficiaries are by far outperforming the non-beneficiaries. Thus, the components have indeed a capacity to improve risk absorption capacities of beneficiaries and thus; the project has been successful in achieving this goal.

**TABLE 10. CONTRIBUTION OF RiHA PROJECT TO RISK ABSORPTION CAPACITY**

Indicators		VSLA		Goat scheme		CAP		FMS		FFS	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Woreda	Gode	36.4%	0.0%	31.3%	0.0%	27.3%	0.0%	63.6%	0.0%	63.6%	0.0%
	Adadle	25.8%	0.0%	10.3%	0.0%	44.4%	3.3%	63.5%	0.0%	64.2%	0.0%
Gender	Male	5.9%	0.0%	0.0%	0.0%	0.0%	9.1%	57.9%	0.0%	57.9%	0.0%
	Female	33.8%	0.0%	19.5%	0.0%	46.3%	0.0%	65.9%	0.0%	66.7%	0.0%
Literacy	Literate	32.0%	0.0%	40.0%	0.0%	66.7%	6.7%	73.9%	0.0%	75.0%	0.0%
	Illiterate	27.0%	0.0%	15.0%	0.0%	34.2%	0.0%	57.5%	0.0%	57.5%	0.0%
Livelihood	Pastoralism	33.3%	0.0%	14.3%	0.0%	42.9%	9.1%	46.2%	0.0%	50.0%	0.0%
	Agro-pastoralism	24.5%	0.0%	19.4%	0.0%	36.8%	0.0%	68.0%	0.0%	68.0%	0.0%
	Total	28.4%	0.0%	17.8%	0.0%	40.4%	2.9%	63.5%	0.0%	64.1%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Self-reliance and reduced dependency:** The sample survey of households also shows that VSLA groups are less likely to depend on other institutions than the non-members are. Over 17% of the members agree VSLAs reduced their dependence on external sources than 15.9% of the non-beneficiaries. Easy access to saving and loan services in times of emergency and development needs contribute to reduced seeking for other sources for help and free handouts. However, the frequent natural shocks are a deterrent to self-reliance and reduced dependency. Severe droughts, floods and desert locusts degraded a large proportion of the assets of the households, their income and livelihoods, which cannot cope with meagre loans provided by the VSLAs. Hence, a large proportion of households still depends on external resources and seeks significant support. The recent drought already killed many animals, starved hundreds and thousands of households, a large proportion of households migrated with their remaining animals in search of better environments. Floods in rainy seasons in the highlands devastated range and farmlands and eliminated settlement areas. The cumulative effect is the search for help and free handouts from the government and humanitarian organisations. The increasing shocks always increase the dependence of the community on other resources and erode self-reliance. Yet, VSLAs account for the largest contribution to reducing dependencies.

The revolving goat scheme rehabilitated households who lost their animals to drought and other shocks. The targets have the least capacity to absorb risks. Many of the targets were food insecure, have no alternative livelihoods, and other assets to depend on but still sustain large families. The purpose of the goat scheme is therefore to rehabilitate these households so that they build their assets. Although the provided few goats provided given the gravity of the crisis, it has the potential to build livelihoods and self-reliance. Given the small number of goats provided, the recent introduction (only in 2020 and 2021), there is no significant reproduction of these goats to contribute to increased self-reliance.

Therefore, contrary to the assumptions, beneficiaries are no better than the non-beneficiaries in self-reliance. For example, while 11.1% of the beneficiaries stated they are more self-reliant, the proportionate figure for the non-beneficiaries was 15.4%.

The FFS, FMS and the PFS also build capacities through improved knowledge and experience, revenue and productivity growth, improved access to technologies, irrigation facilities, seeds, improved agricultural tools, seeds and planting materials. The FFS are relatively helpful as risk exposure is minimal due to the use of irrigation. The pastoral communities, however, suffer a significant decline in assets and increasing chronic food insecurity. PFS only buy and sell animals with the motive of profit making. Yet, there is a capacity to support the vulnerable group members and build hope and self-reliance. The survey data showed that 69.2% of the members of the FFS/PFS and 68.8% of the FMS stated they were more self-reliant over the period relative to none for the non-beneficiary groups. For these groups, the outcome over the three years is deteriorating or has shown no change.

Despite positive changes, the dependency syndrome is deep-rooted and a matter of long term issues to resolve. The severe drought, pests, floods and other shocks killed many animals and drove many of the pastoral and agro-pastoral households into a poverty trap. Alternative livelihood options/income sources and diversification activities are not in place or at the lowest level. Any drought (severe or moderate) leads many of the households to expect food and cash handouts from year to year. Current intervention is a pint in an ocean given the strong gravity and chronic effect of the problem.

**Income growth:** Both household survey and focus group discussion participants showed that the income of members of the VSLAs increased. Women who participated in various income-generating schemes observed considerable income growth. Therefore, for all informants, income growth was substantial. Table 10 shows that over 36.2% of the VSLA households observed significant income growth (relative to 0% for the non-VSLA members). The table also shows that income growth is more significant among the beneficiaries of VSLAs than the non-beneficiaries and agro-pastoralists. Income growth is also larger for the female than males and illiterate than literate households. Households with large family sizes also observed a significant income change than small families with less than three members.

The finding of the survey also shows that the participation of beneficiaries of the revolving goat schemes is higher as compared to the non-beneficiaries. Participation in CAP activities also has a positive correlation with improved income.

The FMS members also witnessed significant income growth (73.4%) compared to the non-beneficiaries (50%). A significant change was among the women FMS members (79.5%), literate members (79.2%) and the agro-pastoralists (80%) compared with their counterparts. The same positive effect is among the FFS/PFS group members, as stated in the table below.

**IN GENERAL, THE MEAN SCORE FOR INCOME GROWTH FOR VSLA HOUSEHOLDS WAS 2.89 POINTS, WHILE THIS WAS 1.55 POINTS FOR THE NON-VSLA HOUSEHOLDS. THE CORRESPONDING SCORE FOR ACTIVE AND INACTIVE CAP PARTICIPANTS WAS 2.88 AND 1.85 POINTS, RESPECTIVELY. THE AVERAGE LIKERT POINT FOR THE REVOLVING GOAT WAS 2.84 POINTS FOR BENEFICIARIES AND 1.92 POINTS FOR NON-BENEFICIARIES. THE AVERAGE SCORE FOR THE FMS AND THE FFS/PFS MEMBERS, ON THE OTHER HAND, WAS 3.72 AND NONE FOR NON-MEMBERS. THIS SHOWS THAT BOTH INTERVENTIONS HAVE A POSITIVE CORRELATION AND IMPACT ON INCOME GROWTH AND SHOW THE EMPOWERMENT OF WOMEN. IN SUMMARY, THE FIGURES SHOWED THAT THE IMPACT OF THE PROJECT ON INCOME GROWTH IS MODERATE. TABLE 11: CONTRIBUTION OF RIHA TO INCOME**

Indicator		VSLA		Goat scheme		CAP		FMS		FFS/PFS	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Woreda	Gode	56.3%	0.0%	56.3%	0.0%	30.8%	0.0%	81.8%	0.0%	81.8%	0.0%
	Adadle	25.8%	0.0%	24.1%	16.7%	36.8%	6.3%	71.7%	50.0%	72.2%	0.0%
Gender	Male	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	60.0%	0.0%



	Female	38.6%	0.0%	39.0%	25.0%	42.3%	7.7%	79.5%	50.0%	80.0%	0.0%
Literacy	Literate	20.0%	0.0%	20.0%	0.0%	25.0%	0.0%	79.2%	50.0%	80.0%	0.0%
	Illiterate	38.1%	0.0%	37.5%	9.1%	35.7%	5.6%	70.0%	0.0%	70.0%	0.0%
Livelihood	Pastoralism	35.3%	0.0%	35.7%	7.7%	33.3%	0.0%	50.0%	50.0%	53.3%	0.0%
	Agro-pastoralism	36.7%	0.0%	35.5%	0.0%	35.7%	9.1%	80.0%	0.0%	80.0%	0.0%
	Total	36.2%	0.0%	35.6%	7.7%	34.4%	5.0%	73.4%	50.0%	73.8%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Productivity growth:** Most of the agro-pastoral communities along the riverbanks are using pump irrigation for the production of cereals, fruits and vegetables and animal fodder such as elephant and Sudan grass. These households mainly subsist on their production and supply to the market, particularly fruit and vegetables. Significant numbers also start generating cash income from the production of animal forage. The impact of CAP, VSLAs and revolving goat schemes are more apparent in these households than pastoralists who have no access to irrigation land. VSLAs provide loans for a variety of farm activities, particularly for the purchase of seeds, fuel for water pumps, agricultural equipment and tools, and for the purchase of pumps and goats for breeding. Therefore, the impact of VSLA on productivity could be positive. About 23.3% of the VSLA samples agree that the contribution of the VSLAs is high in improving productivity. This includes about 25.6% of pastoral samples, 24.7% of women and 28% of literate VSLA members.

Being a beneficiary of the revolving goat scheme has also a positive correlation with productivity growth. Table 11 shows that 36.4% of samples of Gode, 29% of agro-pastoral samples, 23.8% of women, 50% literate goat scheme beneficiaries improved their productivity.

Although CAP has no direct relationship with productivity, 27.1% of active participants and knowledgeable households agreed that CAP improved their productivity while the proportion of inactive households who agree on increased productivity was only 11.1% showing a positive contribution to productivity growth.

The FFS/PFS and the FMS have a direct contribution to productivity. The training, regular technical support from the project partner and the agriculture through VSLAs and others contributed to the growth of productivity. As stated in table below, 20% of the FFS and PFS due to provision of support services to irrigated farming, the financial access of FFS/PFS group beneficiaries witnessed productivity growth compared to none for the non-beneficiaries. Similarly, the FMS improves marketing and market linkages for crops and livestock. The improved linkages on provision of support the other hand provide an incentive to produce more and supply to the market at reasonable prices. As a result, 21.1% of the group members responded to growth in productivity against none for non-FMS group beneficiaries. Hence, although the proportion of those who witnessed growth is not significant, the percentage is by far greater than that of the beneficiaries reflecting a positive contribution of these platforms to productivity.

In terms of average scores, VSLA households have relatively highest scores than the non-members (2.51 and none points), and the active CAP participants than inactive (2.51 and 2.0 points). Moreover, the average score for goat beneficiaries was 2.61 compared to 2.41 points for non-beneficiaries; and 2.53 and 2.65 points for pastoralists and agro-pastoralist revolving goat scheme beneficiaries. Moreover, the average score for FMS beneficiaries was 2.37 points compared to 2.11 for non-beneficiaries. The average score for the FFS/PFS was 2.35 and 2.17 points for beneficiaries and non-beneficiaries, respectively. In general, beneficiaries and participants, pastoral and women have observed productivity growth in the period than their counterparts. Therefore, the achievement of the five activities towards meeting the objective of productivity growth is moderate.

**TABLE 12: CONTRIBUTION OF RIHA PROJECT TO INCREASED PRODUCTIVITY**

		VSLA		Goat scheme		CAP		FMS		FFS/PFS	
Indicator		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Woreda	Gode	22.7%	0.0%	25.0%	16.7%	9.1%	0.0%	36.4%	0.0%	36.4%	0.0%
	Adadle	23.5%	0.0%	23.3%	23.7%	32.4%	12.9%	17.4%	0.0%	16.3%	0.0%
Gender	Male	17.6%	0.0%	25.0%	15.4%	0.0%	27.3%	20.0%	0.0%	20.0%	0.0%
	Female	24.7%	0.0%	23.8%	25.8%	31.0%	4.0%	21.4%	0.0%	20.0%	0.0%
Literacy	Literate	28.0%	0.0%	50.0%	21.1%	33.3%	20.0%	25.0%	0.0%	23.8%	0.0%
	Illiterate	21.5%	0.0%	20.0%	24.0%	25.6%	4.8%	18.9%	0.0%	17.9%	0.0%
Livelihood	Pastoralism	25.6%	0.0%	13.3%	33.3%	25.0%	27.3%	30.0%	0.0%	23.1%	0.0%
	Agro-pastoralism	21.6%	0.0%	29.0%	10.0%	30.0%	4.0%	19.1%	0.0%	19.1%	0.0%
	Total	23.3%	0.0%	23.9%	22.7%	27.1%	11.1%	21.1%	0.0%	20.0%	0.0%

Source: Derived from own sample survey, December 2021 and January 2022

**Livelihood Resilience:** as stated above, the critical goal of the project is the resilience building of pastoral and agro-pastoral communities affected by shocks. Resilience is a combination of many factors mainly related to wellbeing (assets, income, food security condition, productivity, access to finance, risk absorption capacity, self-reliance, livelihood diversity, social capital, behavioural change and productivity). To assess whether the livelihood of the community is resilient after the project, we need at least a proxy indicator. For this reason, indexing all impact domains into a unique figure with a minimum of 10 and a maximum of 50 points is a necessary condition. Three types and indices one each for VSLA, revolving goat scheme, CAP and FMS/FFS/FPS which is finally summed up and averaged to a single index of resilience. Based on this index, households can be grouped into highly resilient (>44.45 points), resilient (34.45-44.44 points), moderate (24.45-34.44 points), vulnerable (14.45-24.44 points) and highly vulnerable (less than 14.45 points). Such grouping is essential to assess whether the project is on the right track towards meeting its goal of 'strengthened resilience'.

The proportions of households who are resilient and highly resilient were 16.4% of the total samples and moderately resilient 35.6%. The percentage of sample observations, which are vulnerable and highly vulnerable, was 13.7 and 54.2% respectively. VSLA members are less vulnerable with an average index of 23.77 points or 49.5% of the samples compared to 16.46 points or 75.1% for non-members, respectively. Furthermore, the livelihoods of the pastoral communities are more vulnerable than agro-pastoralists who use irrigated farming. The proportion of resilient and moderately resilient pastoral samples was 35.8% compared to 57.4% for agro-pastoralists. Similarly, the livelihood of women is more resilient with an average point of 24.4 points compared to 18.44 points for men. In general, the proportion of women whose livelihood is resilient is 53.9% of the samples while that of men is 29%.

The revolving goat scheme has also the potential to build resilience through asset building and retention, food security and improved nutrition, improved income, and risk absorption. Table 12 shows that 66.7% of beneficiaries of the goat scheme are highly and moderately resilient compared to only 30.5% of the non-beneficiaries with an average score of 26.75 and 19.36 points respectively.

The knowledge and experience, and participation in CAP activities contribute to resilience through training and acquiring new knowledge and experience in the identification of livelihood challenges, solving problems, planning and active engagement and decision-making. Households who apply these community assets to own household livelihoods can be more resilient relative to inactive members of the communities. Hence, the sample survey showed that about 61.8% of active CAP participants are highly resilient and moderately resilient compared to none of the inactive groups.

FFS, PFS and FMS have also a positive contribution in building livelihood resilience and household wellbeing. The expansion of irrigation farming, improved linkage with markets, production of high-value crops, and livestock fodder, and above all training and awareness creation on various technologies, experience sharing and experimental activities, group decision making and planning contributed to higher income, asset building, social capital and diversification of livelihood and hence to build resilience. The table below shows that 44.7% of the group members are vulnerable or highly vulnerable compared to 83.4% of the non-group members and the proportion of resilient and highly resilient members was 17.9% relative to none of the non-members. Moreover, 37.3% of the group members and 16.7% of the non-group members stated that their livelihood resilience is moderate, respectively. All the figures show that the beneficiaries of the FFS/PFS are performing best and their livelihood is more resilient than the non-beneficiary groups. Hence, the platform has a significant impact on livelihood.

The achievement of the project in building resilience and the contribution of the three components of the project is positive. In summary, mean performance is however moderate (26 points) reflecting the need to pursue more active strategies to strengthen project activities that build resilient livelihoods. Note also that resilience could not occur within three years particularly in the condition of frequent and severe shocks. The findings only show the project is on the right track to ensure resilience and selection of strategies complies with the goals.

**TABLE 13: PROPORTION OF HOUSEHOLDS WITH RESILIENT LIVELIHOODS AND THE CONTRIBUTION OF RIHA PROJECT**

Indicator		Household resilience status					Mean score
		Highly Vulnerable	Vulnerable	Moderate	Resilient	Highly Resilient	
woreda	Gode	34.5%	20.7%	24.1%	20.7%	0.0%	21.14
	Adadle	16.7%	35.9%	39.7%	5.1%	2.6%	23.25
Gender	Male	38.7%	32.3%	19.4%	6.5%	3.2%	18.44
	Female	14.5%	31.6%	42.1%	10.5%	1.3%	24.40
Literacy	Literate	16.1%	32.3%	35.5%	12.9%	3.2%	23.85
	Illiterate	23.7%	31.6%	35.5%	7.9%	1.3%	22.20
Livelihood	Pastoralism	26.4%	37.7%	30.2%	1.9%	3.8%	20.25
	Agro-pastoralism	16.7%	25.9%	40.7%	16.7%	0.0%	25.06
Member of VSLA	Yes	13.2%	36.3%	41.8%	8.8%	0.0%	23.77
	No	68.8%	6.3%	0.0%	12.5%	12.5%	16.46
Member of Goat group	Yes	8.3%	25.0%	50.0%	16.7%	0.0%	26.75
	No	32.2%	37.3%	23.7%	3.4%	3.4%	19.36
CAP knowledge	Yes	10.9%	27.3%	52.7%	5.5%	3.6%	24.63
	No	37.0%	41.3%	19.6%	2.2%	0.0%	18.25
FMS group	Yes	14.1%	29.7%	37.5%	15.6%	3.1%	25.41
	No	11.1%	66.7%	22.2%	0.0%	0.0%	20.08
FFS/PFS group	Yes	13.4%	31.3%	37.3%	14.9%	3.0%	25.34
	No	16.7%	66.7%	16.7%	0.0%	0.0%	18.17
	Total	13.7%	34.2%	35.6%	13.7%	2.7%	24.75

Source: Derived from own sample survey, December 2021 and January 2022

Further analysis of the components of resilience also shows that food security and asset holding are the most robust indicators of resilience. The higher the score of the food security, the higher will be the scores of resilience and the higher the assets the better is the resilience of the livelihoods. The poor spends over 60% of the cash income on food and easily dispose assets in times of emergency. Food security and asset possession significantly contribute to building resilient livelihoods. Moreover, access to finance has a strong correlation with the resilience scores and so do diversification of livelihoods.

Income also has similar positive correlations, including productivity. The overall implication is that intervention in vulnerable areas should encourage packaged or integrated approaches and heavy investment. Regressing the 10 indicators against resilience score show that the 10 impact indicators contribute to over 95% of the total variation in resilience with the highest contribution by food security, assets, diversity of livelihood, and access to finance income and productivity. In the FFS, PFS and FMS sample category, the contribution of improved food security, asset possession, behavioural change, risk absorption capacity and income to livelihood resilience is the highest and most significant (Table 14).

Furthermore, the regression on the VSLA households also shows greater correlations with resilience than the whole sample, the goat schemes and active CAP participants. All relationships between the variable scores and resilience are positive and statistically significant (sign  $\leq 0.001$ ). Overall, the result of the correlation analysis showed encouraging progress towards meeting the goal.

**TABLE 14: CORRELATION BETWEEN RESILIENCE AND FACTORS CONTRIBUTING TO IT**

Variables	VSLA		Goat scheme		CAP		FMS, FFS, PFS	
	Beta coef (standard)	correlation	Beta coef (standard)	correlation	Beta coef (standard)	correlation	Beta coef (standard)	correlation
Finance	0.172	0.881	0.007	0.501	0.206	0.889	0.114	0.916
Food security	0.132	0.853	0.021	0.622	0.143	0.851	0.124	0.959
Diversification	0.144	0.783	0.216	0.784	0.127	0.767	0.116	0.908
Social capital	0.153	0.827	0.294	0.827	0.182	0.830	0.115	0.930
Behavioural change	0.117	0.677	0.232	0.653	0.074	0.664	0.123	0.874
Asset	0.121	0.805	-0.026	0.718	0.132	0.808	0.130	0.870
Productivity	0.117	0.792	0.362	0.793	0.149	0.782	0.093	0.208
Risk absorption	0.128	0.744	0.030	0.488	0.088	0.731	0.122	0.896
Self-reliance	0.116	0.478	0.117	0.486	0.026	0.507	0.116	0.894
Income	0.135	0.572	0.078	0.576	0.175	0.518	0.119	0.933

Source: Derived from own sample survey, December 2021 and January 2022

## 4.5. Sustainability

The project is environmentally sustainable, as all project activities (VSLAs, revolving goat scheme and CAP) are small scale or have no adverse impact on both the social and natural environment. It is also socially sustainable and promoted a common platform for conflict resolution, joint decision-making, planning and social relations, social support and building trust between members. Financially, the VSLAs are self-sustaining. However, they need to increase their savings and capital to meet the increasing demand. VSLAs can transform to higher-level financial institutions to obtain government technical, institutional, legal and capacity building support upon the project termination. Another option is to increase the loan fund through revolving seed money so that they can sustain themselves over many years and grow to viable financial institutions. Institutionally, it is difficult for VSLAs to sustain without the support of the project and the relevant government institution. VSLAs require more capacity building, training, coaching and upgrading their institutional status. The cooperative office is also not in a position to take over the VSLAs and provides necessary legal, technical and capacity building support upon closure of the project. Technically, VSLAs are sustainable given that the project provides adequate training, regular technical and follow up support. The training on bookkeeping and accounting, documentation, follow-up of financial flows and reporting are crucial areas in need of attention. Without such support and transitions to a higher level and the devastating and severe recurrent drought, VSLA is less likely to sustain over a longer period.

The revolving goat scheme is the most sustainable intervention given that the project provided goats to the individuals to own and manage by themselves. In all aspects, the goat scheme is the most sustainable enterprise. Yet revolving the goats to the next person is very difficult even currently let alone after the closure of the project. It is also technically sustainable and within the knowledge and experience of the households. All goats distributed so far are local breeds that sustain under traditional management system, feed shortage and are adaptable to the local environment. The CAP may also not be sustainable unless the government adopted and mainstreamed the CAP processes and procedures, principles and objectives into regular programme planning and implementation. Although there is a good understanding of the benefits, the government did not take it seriously as the major tool for development planning, mobilising communities for decision-making. In conclusion, except for the gaps stated above, the VSLAs, the goat scheme are sustainable but needs close monitoring, supervision, regular technical support and coaching.

The FMS and the FFS/PFS have considerable contribution to improving livelihood capital, food security, assets, income, risk absorption and resilience. The knowledge and experience through training on various livelihood issues particularly marketing and production of crops and livestock are encouraging. Yet there is no clear distinction between the marketing and production aspects of these institutions. The associations are not compliant with the legal framework and government strategy for organizing cooperative societies and similar institutions. This may need further strengthening and capacitating the associations to bring them into higher level cooperatives that are self-reliant and self-sustaining. The project also organized most of these associations in 2021 and as a result, they are not functioning and capacitated to full scale. In general, the project has positive contribution, achieved most of the outcome and delivered almost all outputs as per the design. Given there are many outputs, which need further capacity building, follow up and technical support the termination of the project at this stage can result in the collapse of most of the VSLAs, goat scheme, FFS/PFS and the FMS.

## 5. Lessons learned

Targeting the rural poor, particularly women to improve the vulnerable rural livelihood, are the best option to improve the overall wellbeing. The saving and loan promoted through the VSLA approach is also an interesting innovation to improve access of pastoral women to adequate finance to expand rural off-farm and non-farm activities. The distribution of goats proved to contribute to asset accumulation, risk absorption capacities and economic empowerment of women.

CAP became a vital instrument in bottom-up planning, cost sharing, priority setting and implementation of projects through active participation of the community. This also created a sense of ownership to sustain the community projects and maintain them in times of need. It also served as a platform for community mobilisation and learning. Impact on the active members in CAP on livelihoods is also substantial. Voluntary contribution to projects and community problem solving and group decision-making increased empowering the community. It also served as breaking the cycles of dependency.

As a social institution, VSLA is an instrument for building trust and peaceful co-existence, social support and relations, group problem solving and decision-making. It empowers women and vulnerable social groups. As an economic entity, VSLAs improved access to affordable financial services, provide loans for various investments and social problem solving. Diversification is a centre of VSLA objectives and several households are engaged in various small-scale businesses. Impact on food security, asset building and retention, risk absorption capacities and others are significant. It is also a platform for

learning. The regular training, supervision support and behavioural changes also improved financial skills and literacy.

The revolving goat scheme is an alternative to the restocking programme in pastoral areas. It builds assets and improves livelihoods. It benefits most vulnerable groups and women and has a positive effect on food security, poverty reduction, access to finance and improved resilience.

The revolving goat scheme needs an accurate and consistent follow up of the life cycle and reproduction of goats. Without such data and regular follow up revolving goats among the members is very difficult. Above all, the group members should have a close blood relationship, trust and understanding between them.

The number of goats distributed (two per head) seems few given pastoralists used to own and rear large number. In addition, given the high vulnerability and severely eroded household assets, the provision of two goats to revolve from one household to the other is uneconomically and cannot solve the problem faced by the beneficiary. The mirror household approach to rotate goats among these groups also seems tiresome for those on the waiting list and can be a source of fatigue.

Integrated approaches to interventions in shock prone areas have a more meaningful effect on livelihoods than a solitary or single intervention. Those who benefited from the three activities (goat, VSLA and CAP) observed improved food security, asset building and retention, risk absorption capacity, productivity and income to those who benefited from one or two interventions. Resilience is also better for the farmer households than the latter.

Participation in VSLA alone cannot change the life of the people. It is essential to link saving and loans with the diversification of livelihoods, especially with non-pastoral and non-farm activities. Training, awareness creation in business skill is very important.

Drought and flood are the most critical shocks affecting livelihoods. Depletion of assets is considerable and chronic food insecurity is very high. The drought and other shocks also affect the viability of projects to meet the desired goals and objectives.

The FFS and PFS are serving the group. Both are praised by the community, but the role they play to solve the critical issues of production is minimal and group action is limited. The PFS are platforms that buy and sell animals and make a profit. Their contribution to improving pastoral livestock production is low. It is also the most affected by recurrent drought. Both FFS has similarity with producers' cooperatives but with no sharing of the outputs or revenue from the group production.

Although the purpose of the FMS is marketing, there is no clear institutional distinction between the FFS or FMS. The same committee manages both the production and marketing aspects of the production.

It is difficult to eliminate even reduce the dependency syndrome in face of frequent drought, flood, epidemics and other shocks. People will continue to depend on external assistance and expect free handouts once they lost their assets and traditional social support systems. Eliminating or reducing dependency syndrome, at least, needs time and resources to change the livelihood and attitude of the dependent population. Investment that can change life is a prerequisite.

MIS is very critical for any development intervention. The lack of MIS and poor data management affects the efforts to track changes over time and to make an informed decision.

## 6. Conclusion and Recommendation

### 6.1. Conclusion

Over the last three years, the livelihood improvement project has attempted to expand IGAs through organising self-help groups. The project has been successful in achieving the objective of resilience building. The proportion of highly and moderately resilient households is the highest among the beneficiaries than the non-beneficiaries of VSLAs, goats and CAP. Its contribution to food security, asset accumulation, behavioural change, building risk absorption capacity, improving productivity and income is significant. Its impact is also considerable on the livelihood of target groups such as women, VSLA members, goat beneficiaries and active CA participants. The improvements witnessed in all impact domains were encouraging. It is also effective in meeting its objective and delivering the expected activities. There is considerable growth in natural capital, social and physical capital and financial and human capital. Through the CAP procedures, the project mobilised the communities for identification, selection, prioritisation, planning and implementation of the project. Through this system, the project constructed 20 community projects (water supply point, schools and human health costs, vet posts etc.) and the performance is above 100%. However, the CAP cannot achieve a community contribution of at least 50%. Actual achievement is 30-40% of the project cost. The project also established 39 VSLAs (56% above the target) with 760 members. Most of them provide loans for various purposes and up to now, they reached 27% of their members. The proportion that increased their share capital however is unknown for the lack of comprehensive data on the 39 VSLAs. The project also reached 130 households by providing 260 female goats for poor women who lost their animals to drought and other shocks. The number of these goats also grew by 21% between 2019 and 2021. The death rate however is very high (over 9%) and miscarriage over 6% varying significantly from one group to the other. Transfer to the next person on the waiting list (mirror households), however, was not effective and so far no goat is transferred to other waiting households.

At the activity level, all CAP related activities are effective and timely completed except for rising prices of construction materials, inflation, weak participation of the communities, low contribution to project costs, severe drought and vulnerability of households and migration during project implementation. The performance of all VSLA related activities are efficient and completed above the target. The project provided training to village agents (excess above the plan) who provide technical support, establish VSLAs, mobilise the communities and promote VSLAs. The project is also a success in training and providing technical, supervision, follow up support for the VSLA management Committee members as per the plan. The goat scheme activities, including purchase and distribution of goats, formation and training of goats groups all accomplished as per the plan for the period. The FMS however is a failure and not accomplished as per the plan. The project organised only 50% of the required number of groups and provided training for 10 village agents/facilitators.

Despite the significant and encouraging success, the project addressed only a fraction of the pastoral and agro-pastoral communities suffering from severe drought, flood, chronic food insecurity and considerable loss of assets. Therefore, the project needs to scale up and intensify its project activities to address these livelihood challenges. The project should continue or scale up for three reasons. Many of the VSLAs are not self-sustaining without the support of the project or the cooperative promotion office. The cooperative office, on the other hand, is not interested in taking over the VSLAs upon closure of the project, given the VSLAs cannot fulfil the criteria for licensing or certification. Hence, the project should continue to support the VSLAs and transform them into institutions that are self-reliant and stand

by themselves through intensive capacity building and, providing revolving loan funds to increase their capital and ensure their sustainability. Second, the revolving goat scheme aims to transfer the animals to the next person after the first birth of the kid. Without frequent follow up of the project, beneficiaries could not adhere to their obligations. Third, the CAP activities and its theory and practices are only possible through the intervention of the project, given that the technique is not mature and well adapted by the government institutions. Fourth, the FMS activities are on early stage and hence need more promotion, training and start marketing products to the clients of their preference. The FMS, FFS and PFS could be the most difficult project component, which need more awareness creation, training, cooperating with the private and public institutions, and technical support and regular follow up. The government has no such capacities and hence the project should extend its operational life to consolidate and strengthen these activities for sustainability. Fifth, the severe drought in the area, need both development and relief activities. Most NGOs and government institutions are more active in humanitarian support than development. Hence, to improve the livelihood of the vulnerable population the scaling up of the project is a necessary condition.



## 6.2. Recommendations

Loan capital is a critical constraint and challenge to rural IGAs expansion. Saving per member is low. Although increasing the saving rate per week per member is one option, the low income, low productivity, severe and frequent drought and other shocks are critical challenges to mobilise enough saving. Other options such as linking VSLAs with the MFI and other financial institutions are constrained by the lack of legal personality and recognition. Therefore, the injection of the revolving fund is an option to strengthen existing and to introduce new IGAs. The revolving fund, therefore, should be the largest component of the upcoming phase of the project

The government legal framework does not support VSLAs. Unless there is a special provision for VSLAs, the government did not take over these institutions. The project ought to link these institutions with the woreda cooperative promotion offices for an easy and smooth handover and get technical and legal support from the outset. Since there is no such linkage, the VSLAs will not have any support from the government. Therefore, the project has to transform the VSLAs into higher forms of institutions (clusters or RUSACCOs) through intensive capacity building, training, material support, technical follow up support and providing rotating loan funds. Without such intervention, the project should exist in the target area for quite a long time to sustain them

It is also important for the project to focus on the quality of VSLAs than the number of established VSLAs as a final goal. Instead of increasing their number, it is essential to focus on establishing and building a few VSLAs, which are vibrant and self-sustaining.

The project should link VSLAs with income-generating activities. Extension services, technical support and business training for the VSLA members can improve their participation, improve income, food security and reduce their vulnerability. Separating saving for investment and social issues and providing adequate loan funds that can rotate between members and VSLAs can solve many of the challenges.

Saving per member also seems very high in face of the severe drought and associated chronic food security. In almost all VSLAs, regular saving per member per month is above Birr 100. For the very poor households, this amount is unaffordable and a cause of many members leaving the association. This will gradually lead the VSLAs institutions of the better-off households. Thus, it is important to determine an affordable level of saving through technical support and follow up by the project.

The project has not developed a database for all its activities although it received information weekly from each community facilitator. The project needs to upgrade its database, monitoring and evaluation framework. The project has to develop dedicated and uniform database particularly for the VSLAs, revolving goat schemes, FMS and the FFS/FPS.

It is also necessary for the project to provide packaged interventions to improve livelihoods and resilience. The importance of focusing on limited areas under limited resources can improve the impact of the project activities on resilience, reduced vulnerability and asset erosion.

The distribution of goats proved to improve food security, assets, shock absorption capacities, self-reliance and reducing vulnerability. However, given the severe asset depletion due to prolonged and severe drought, two goats do not solve the grave challenges facing households. Increasing the number of goats at least to five will revive the lost assets within a shorter period. The revolving goat scheme, i.e., transferring the doe once she gives birth seems also uneconomical in pastoral areas that have strong social networks and used to rear many animals. In some areas, it may create a conflict between the households (the beneficiaries and the mirror groups).

There is no clear distinction between the FMS and the FFS/PFS. It is important to transform the FMS into formal marketing cooperative for effective service cooperatives to their members and to obtain support from the government and for sustainability.

The FFS were the most vibrant platforms. They are a form of producers' cooperatives farming communal land and produce crops and animal forage for sales. The viability of such farm in face of the growing private farming practices is a point further study. Although the project trained groups for minor maintenance, heavy maintenance of pumps is a difficult challenge for almost all. Therefore, the project should consider organize youth group graduated from the universities and TVET into maintenance cooperatives who provide mobile maintenance services and provide fast moving spare parts to the community at affordable prices.

The rising price of spare parts and fuel is a serious challenge for irrigators. Introducing solar pumps and energy in collaboration with the government and other NGOs can solve many of the problems related to irrigation. Expansion of solar energy can also expand various IGAs in pastoral and agro-pastoral areas.

There are also a number of communities and irrigation farms nearest to the main hydro-electricity grid lines. Providing access to electricity from the grid line has many potential to improve irrigated farming, productivity, food security, diversification of livelihood and resilience to shocks

The PFSs are currently engaged in buying and selling of animals. They generate substantial income. The management is however very weak and could not address the need of individual members. They equally suffer from drought with failing seasonal rain. They have to add values to the animals to generate more income and introduce alternative income. There is a huge potential for incense production and marketing in pastoral areas. Provision of extraction tools and training in modern extraction methods is necessary. Moreover, there is a critical shortage of commodities including food items in these areas. PFS can start providing merchandises commodities such as fuel, food crops such as cereals, manufactured commodities (sugar, salt, soap, others). Currently, the PFS is not a production platform and rather a marketing association. It is necessary to re-organize the PFS into pastoral marketing cooperative, which collect, sale and share profit to its members. The issue, however, needs further study and informed decision. It is also important to design strategies how PFS can engage in fodder production, preservation and storage apart from area closure. Closures are viable only in normal rainy seasons.

With further capacity building and building marketing linkages, the project has to design strategies to link the PFSs to the central and international markets to sustain positive outcome in both normal and bad seasons.

Reorganizing female PFS groups and linking them into sustainable markets is also necessary to boost production, processing and marketing of animal products (milk and milk products, honey). Natural resource based income generating schemes (incense and gum collection), IGAs of manufactured commodities (village shops, catering services, teashops and a number of other IGAs) can be other sideline activities.

Although CAP benefited households and the community, participation in planning, identification and implementation is low. Most of the community participate in resources mobilisation. However, the share of the community, earmarked at 50% at the first and an additional 10% in successive projects is very high for the community that suffers from frequent drought, food shortage, asset depletion and migration. The contribution of the community therefore should consider local contexts, livelihoods and capacity of the community.

## Appendices

### APPENDIX 1: HOUSEHOLD SURVEY QUESTIONNAIRE



Household  
structured question

### APPENDIX 2: SEMI STRUCTURED QUESTIONNAIRE



FGD semi  
structured question

### APPENDIX 3: NUMBER OF VSLAs, MEMBERSHIPS, SAVING, LOAN AND CONTRIBUTIONS



VSLA data

**APPENDIX 4: NUMBER OF CAP PROJECTS, PROJECT COST AND COMMUNITY CONTRIBUTION**

	Woreda	Kebele	Activity description	year implemented	project contribution	Community contribution	Total Cost
1	Adadle	Kayane	School of three rooms	2019	542,920	304,000	846,920
2	Adadle	Harsog	School of two rooms	2019	238,810	192,000	430,810
3	Gode	Lahelow	School of three rooms	2019	542,920	304,000	846,920
4	Gode	Tarfodley	Human health post	2019	398,370	251,850	650,220
5	Adadle	Guabadad	School of two rooms	2020	289,622	214,200	503,822
6	Adadle	Dabafeyd	School of four rooms	2020	542,440	323,400	865,840
7	Adadle	Harsog	Super birka rehabilitation	2020	302,250	168,350	470,600
8	Adadle	B/xagare 02	school of four rooms	2020	542,440	323,400	865,840
9	Adadle	Higlo	Vet post maintenance	2020	309,220	129,650	438,870
10	Adadle	Wardid	School of four rooms	2021	623,640	339,400	963,040
11	Adadle	Higlo	School of six rooms	2021	1,113,340	408,000	1,521,340
12	Adadle	Harsog	Super birka rehabilitation	2021	302,250	168,350	470,600
sub total					5,748,222	3,126,600	8,874,822
13	Gode	Harder	human health post	2020	650,220	251,850	902,070
14	Gode	Ano-kulul	human health post	2020	398,370	251,850	650,220
15	Gode	Ilan-16	Animal health post	2020	398,370	251,850	650,220
16	Gode	Weylo-gir	Human health post	2020	398,370	251,850	650,220
17	Gode	Ubaley	Animal health post	2020	398,370	251,850	650,220
18	Gode	waylo-gir	HHP fence	2021	118,320	56,200	174,520
19	Gode	Ano-kulul	School of four rooms	2021	832,340	339,400	1,171,740
20	Gode	Ilan	School of four rooms	2021	854,040	339,400	1,193,440
sub total					4,048,400	1,994,250	6,042,650
Grand Total					9,796,622	5,120,850	14,917,472

**APPENDIX 5 NUMBER OF FMS ORGANIZED AND THEIR MEMBERS (2019-2021)**

No	Group name	Group Type	woreda	Kebele	Male	Female	Total	Year established
1	Hersog	FMS	Adadle	Hersog	25	15	40	2019
2	Bursardo 1	FMS	Adadle	Bursardo	15	10	25	2019
3	Bursardo 2	FMS	Adadle	Bursardo	25	15	40	2019
4	Kayane	FMS	Adadle	Kayane	15	10	25	2019
5	Karinka	FMS	Gode	Karinka	15	10	25	2019
6	Midnimo	FMS	Gode	Ilan 1	6	16	25	2021
7	Horseed	FMS	Gode	Hardher	11	11	22	2021
8	Nicma badan	FMS	Adadle	Gerablow	10	15	25	2021
9	Hormud	FMS	Adadle	Liban	13	7	20	2021
10	Onkot	FMS	Adadle	Dodeyd 1	15	10	25	2021
Total					150	119	272	

**APPENDIX 6 NUMBER OF FFS ESTABLISHED AND THEIR MEMBERSHIP**

No	Group name	Group Type	woreda	Kebele	Male	Female	Total	Year established
1	Muruq Maal	FFS	Adadle	Bursardo	15	10	25	2019
2	Geleey	FFS	Adadle	Hilogududo	15	10	25	2019
3	K1	FFS	Adadle	Kayane	15	10	25	2020
4	B1(	FFS	Adadle	Biyolo	15	10	25	2020
5	B2(	FFS	Adadle	Biyolo	15	10	25	2020
6	Df1(	FFS	Adadle	Dabafayd	15	10	25	2020
7	Df2(	FFS	Adadle	Dabafayd	15	10	25	2020
8	Barwaqo	FFS	Gode	Karinka	15	10	25	2020
9	Muruq Maal	FFS	Gode	Dud Ade	15	10	25	2020
10	Do1	FFS	Gode	Dolobacad	15	10	25	2020
11	Do2	FFS	Gode	Digino	15	10	25	2020
12	Nicma badan FFS	FFS	Adadle	Garablow	10	15	25	2021
13	Waxsoosaar FFS	FFS	Adadle	Garablow	14	11	25	2021
14	Dalsan FFS	FFS	Adadle	Digino	5	20	25	2021
15	Hodan FFS	FFS	Adadle	Digino	10	16	26	2021
16	Horseed FFS	FFS	Adadle	Wardid	6	19	25	2021
17	Hodan FFS	FFS	Adadle	Wardid	6	19	25	2021
18	Hormud FFS	FFS	Adadle	Liban	13	7	20	2021
19	Hodan FFS	FFS	Adadle	Liban	10	10	20	2021
20	Towfiq FFS	FFS	Adadle	<b>Diri</b>	13	12	25	2021
21	Beeraley FFS	FFS	Adadle	<b>Qaqoley</b>	7	18	25	2021
22	Midnimo FFS/FMS	FFS	Gode	Ilan 1	6	16	22	2021
23	Horseed FFS	FFS	Gode	Ilan 2	6	16	22	2021
24	Xanitur FFS	FFS	Gode	Xidhidole	9	16	25	2021
25	Dhayiga FFS	FFS	Gode	Xidhidole	7	18	25	2021
<b>Total</b>					<b>287</b>	<b>323</b>	<b>610</b>	

**APPENDIX 7 NUMBER OF PFS ESTABLISHED AND THEIR MEMBERSHIP**

Group name	Group Type	woreda	Kebele	Male	Female	Total	Year established
Barwaqo	PFS	Adadle	Gubadad	18	3	21	2021
Midnimo	PFS	Adadle	Higlo	19	1	20	2021
Xoolodhaqato	PFS	Adadle	Higlo	19	1	20	2021
Howl wadaag	PFS	Gode	Ilan1	25	16	41	2021
Horseed	PFS	Gode	Ilan 17	6	15	21	2021
Barwaqo	PFS	Gode	Ilan 18	0	22	22	2021
Xoolodhaqato	PFS	Gode	Tarfodley	10	15	25	2021
Rasmaal	PFS	Gode	Lehelow	25	15	40	2021
Hanti dhowr	PFS	Gode	Weylogir	11	10	21	2021
Barwaqo	PFS	Gode	Weylogir	10	10	20	2021
Horseed	PFS	Gode	Hardher	11	11	22	2021
Tawakal	PFS	Gode	Hardher	10	12	22	2021
Howl wadaag	PFS	Gode	Canokulul	10	19	29	2021
Tawakal	PFS	Gode	Diri	23	17	40	2021
Hodan	PFS	Adadle	Harsog	25	15	40	2019
Barwaqo	PFS	Adadle	Birleys	25	15	40	2019
Hodan	PFS	Adadle	Bursaredo	25	15	40	2019
BH 1	PFS	Adadle	Bohohagare	25	15	40	2019
BH 2	PFS	Adadle	Bohohagare	25	15	40	2019
Gubadad	PFS	Gode	Gubadad	25	15	40	2019
Maandeeq	PFS	Gode	Tarfodly	25	15	40	2019
	PFS	Gode	lehelow	25	15	40	2019
	PFS	Gode	Ilan	25	15	40	2019
Ub1	PFS	Gode	Ubaley	25	15	40	2019
Ub1	PFS	Gode	Ubaley	25	15	40	2019
Total				472	332	804	