

FINAL EVALUATION REPORT

EVALUATION OF THREE ENVIRONMENTAL PROJECTS UNDER THE PRIORITY SECTOR OF AGRICULTURE AND RURAL DEVELOPMENT IN ETHIOPIA

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Partner country (country of implementation):	Project locations:
Ethiopia	Addis Ababa, Awassa, Arba Minch
Title of evaluated intervention in Czech and English: Zvýšení ekologické stability povodí Dijo a Bilate / Increased Ecological Stability of Dijo and Bilate Watershed of Halaba and Sankura Woreda, SNNR, Ethiopia Podpora malých farmářů při zajišťování přístupu k potravinám a zvýšení protierozní odolnosti komunit ve vybraných kebelích zóny Kembata	Specialization: Agriculture and Forestry
Tembaro, SNNPR / Support to smallholder farmers in ensuring access to food and increasing the anti-erosion resilience of communities in selected kebeles of the Kembata Tembaro, SNNPR	
Rozšíření aplikace holistického managementu krajiny a "Climate Smart Agriculture" v Arba Minch Zuria Woreda, SNNPR, Etiopie / Extension of holistic management and climate smart agriculture in Arba Minch Zuria Woreda, SNNPR, Ethiopia	
Coordinator:	Implementer:
Czech Development Agency (CzDA)	People in Need (PIN), GEOtest a.s., Mendel University (MENDELU)
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Management Summary

Evaluated projects

The Ministry of Foreign Affairs of the Czech Republic (MFA) decided to evaluate projects implemented within the sector of Agriculture and Rural Development in the former Southern Nations, Nationalities, and Peoples' Region (SNNPR) in the period of 2019-2021. The following 3 bilateral projects were selected as suitable for the evaluation:

- Increased Ecological Stability of Dijo and Bilate Watersheds of Halaba and Sankura Woreda, SNNR, Ethiopia (Alaba/Silte project, implemented by PIN, grant support modality)
- Support to smallholder farmers in ensuring access to food and increasing the anti-erosion resilience of communities in selected kebeles of the Kembata Tembaro, SNNPR (Kembata-Tembaro project, implemented by GEOtest, public procurement modality)
- Extension of holistic management and climate-smart agriculture in Arba Minch Zuria Woreda, SNNPR, Ethiopia (Gamo project, implemented by MENDELU, grant support modality)

Purpose of evaluation

The main purpose of this evaluation is to **obtain independent**, **objective**, **and consistent findings**, **conclusions**, **and recommendations valuable for making decisions by the MFA**, **in cooperation with the CzDA**, **about the future orientation and implementation of the Czech Republic development cooperation (CDC) in Ethiopia** considering the 2030 Agenda for Sustainable Development and the Development Cooperation Strategy of the Czech Republic 2018 – 2030. Conclusions and recommendations should be relevant for further direction and financing of Czech Development Cooperation in Ethiopia and for the implementation of similar projects in the sector of Agriculture and Rural Development.

Objective

Within the evaluated projects, the CzDA aims to improve year-round access to safe, nutritious, and adequate food for all population groups, which is to be achieved by strengthening the capacity and efficiency of agricultural advisory, supporting sustainable soil and landscape management, the creation of land-use plans, afforestation, diversification of vegetation cover and crops and strengthening the capacity of the landscape to retain water, etc.

Methodology and techniques deployed; observed limitations

Evaluation methodology included individual and group interviews with stakeholders at all levels of public governance, implementers, partner institutions, other donors, and additional relevant stakeholders. Furthermore, two surveys were conducted, one among the farmers in the Kembata-Tembaro project kebeles and the other among the farmers in the Gamo project kebeles. The evaluation team also participated in the evaluation mission, observing the applied practices and measures. The evaluated projects were implemented under the grant support (Alaba/Silte project and Gamo project) or public procurement (Kembata-Tembaro project) modalities. Therefore, the ability of the implementers to respond to the changing needs during the project may vary, as well as the possibility of modifying the initial project design.

Key evaluation findings

Outcomes and impacts of CDC support with regard to soil conservation and mitigation of negative effects of erosion; increasing the resilience of farmers to climate change

The CDC-supported initiatives focusing on soil conservation and erosion mitigation have yielded significant positive outcomes and impacts. Implementation of interventions was successful and serves as good practice for local stakeholders. It has effectively halted or at least slowed down erosion, visibly restoring land and protecting downstream communities from extreme weather impacts. The success extended to enabling farming on previously unusable plots, countering farmland loss. Stakeholder "buy-in", particularly from farmers and administrative structures, was notably high, suggesting a strong commitment to Natural Resource Management (NRM) measures, especially on the part of local farmers.

The CDC's added value was evident in various aspects. One of the areas where added value was manifested was increasing technical capacity of local administration representatives and farmers, coupled with a comprehensive approach to soil rehabilitation that was brought about by the Landscape Management Plans. The combination of physical structures and biological measures, such as tree planting, strengthened effectiveness of interventions and is rarely implemented in non-supported watersheds. The "spotlight effect" created through engagement with implementers at various administrative levels bolstered visibility and local mobilization.

However, challenges emerged post-support, with a decline in motivation and ownership by local administrative structures, posing a risk to sustainability. It was observed that once the direct support is no longer available and the afore-mentioned "spotlight" is turned off, the mobilization and engagement of relevant local institutions and, subsequently, a significant share of local farmers decreases. This was exacerbated by high turnover of the Development Agents (DA) and insufficient coordination.

Introduction of Landscape Management Plans (LMPs) brought added value to soil conservation, offering a systematic approach to erosion-related risks and enhancing the capacity of stakeholders in NRM measures. The participatory planning approach promoted by CDC was recognized as a positive practice, creating a significantly higher appreciation, and understanding of the benefits of watershed management – even if it brings about some limitations, compared to standard top-down approach. The evaluation team did not observe any replication or scale-up of the NRM measures. Although, this was not clearly targeted in the project calls or documents, it should be further monitored to assess ownership and impact of the supported activities within the local stakeholders.

While the CDC's impact was evident within target areas, challenges persisted in replicating successful practices beyond these zones. The need for ongoing support, proper exit strategies, and addressing external factors for sustained impact was underscored, emphasizing the importance of continued intervention for lasting positive outcomes.

Impact of CDC support on agricultural practices

The support provided by the CDC has been instrumental in the reduction or elimination of free grazing of cattle. The success of this initiative can be attributed to a multitude of factors. On the one hand, projects brought the establishment of enclosures on vulnerable communal land where free grazing was prevalent in the past and is now barred. This restriction is compensated by introduction of a cut and carry system, which enables local farmers to utilize grass from enclosures for feeding, marking a shift from the traditional free grazing practices. Furthermore, the CDC-backed projects actively promoted the cultivation of desho grass and other suitable plants for cattle feed in target kebeles. Simultaneously, there was a strong emphasis on capacity building, providing farmers with the necessary knowledge and skills in feeding strategies and fodder production. However, the most significant catalyst for the swift adoption of this new husbandry practice was the observable increase in milk production among cattle. These "quick wins" proves to be essential factors in encouraging farmers to embrace innovative² agricultural practices.

Beyond the transformation in cattle husbandry, evidence also indicated some positive trends in diversification and the introduction of new crops. The average number of cultivated crops increased across all project regions, suggesting a degree of diffusion of innovations among both model and ordinary farmers. However, the predominant shift towards diversification was noted in the cultivation of vegetables and fruits in home gardens, primarily for personal consumption. While positively impacting farmers' nutrition, the broader effects on livelihoods were limited. Diversification of production on a larger scale on the fields of farmers in supported kebeles was much rarer.

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¹ In the context of this evaluation study, added value refers to the measurable and qualitative improvements, benefits, or positive outcomes generated by the projects beyond what would have been achieved through usual practices or activities of local stakeholders. It encompasses the extra benefits, such as increased productivity, sustainability, resilience, or community development, that result from the specific project interventions.

² In the context of this evaluation study, innovation refers to the deliberate introduction and application of novel ideas, technologies, methodologies, or practices that bring significant positive changes and improvements in agricultural processes, resource management, and landscape sustainability. This includes efforts to enhance productivity, environmental conservation, and socio-economic development through creative and effective solutions.

Noteworthy successes were observed in the large-scale cultivation of grass, especially desho grass, with some farmers selling surplus on the market. Additionally, there was some increase in the production of tomatoes for sale, albeit the potential impact could have been greater if the planned strengthening of access to irrigation in one of the supported projects did not fail. Adoption of Conservation Agriculture/Climate-Smart Agriculture (CSA) principles and practices, such as intercropping and changes in tillage, was somewhat limited, emphasizing the challenges in penetrating certain agricultural innovations.

The rate of innovation adoption varied across communities, with more systematic and prolonged support from implementers resulting in higher adoption. However, higher penetration of innovations is conditional on farmers' experience of their profitability. Farmers tend to implement these innovations if they experience direct benefit in short period of time ("quick wins"). If the benefits are to be manifested in a longer timeframe, farmers tend to implement these innovations in a limited scale or not at all and focus on crops and practices that they consider more profitable. This finding again confirms the importance of tangible and short-term gains (e.g., increased yields, profits) in driving behavioral change.

A notable success story emerged in the scaling up of vermicomposting production by zone and woreda administrative structures, extending the impact even to regions not directly targeted by CDC support. The key to this success lay not only in the technical capacity of trained cooperative members and model farmers but also in the close collaboration and alignment between project staff and local institutions. However, the primary reason for this success in promoting organic fertilizers in general lay primarily outside the control of the project – it is mainly a reaction to sharp increase in price of artificial fertilizers and their inaccessibility. Introduced farming practice thus fills the gap created by external factors. Despite these achievements, challenges were evident in the lack of evidence for the uptake of fruit and vegetable processing promoted by some projects, highlighting areas for potential improvement in future interventions.

Conclusions regarding added value of various types of implementers

The evaluation of projects implemented by Geotest, MendelU, and PIN highlights various strengths and weaknesses in their approaches. Geotest demonstrated an understanding of target group needs, introducing relevant innovations; however, sub-optimal implementation caused by inadequate coordination with local stakeholders and a lack of long-term presence as well as serious problems in the implementation of previous projects (not implemented by Geotest) in the area hindered the actual impact on the ground.

MendelU, emphasizing technical knowledge, established a "center of excellence" showcasing best practices but focused less on needs analysis, relying on local team to identify relevant innovations. Due to the motivated local team (especially local coordinator) which was rooted in respective communities, the diffusion of certain innovations was successful, contributing to introduction of more nutritious crops to the diets of local farmers, planting of more suitable and productive varieties of fruit trees and, finally, increased use of organic fertilizers. However, the overall emphasis of the implementer technical excellence while paying less attention to local context and involvement of communities contributed to the failure of soil conservation activities in the area.

PIN's local presence and long exposure to communities provided a strong added value. Its grassroots initiatives were effective, and the organization demonstrated a unique capacity to involve relevant local institutions systematically. However, it has been also observed that initiatives implemented by this organisation are very broad and somehow overstretched in the evaluated project (in line with the project call). A more focused approach, especially in promoting changes to farming practices, could be beneficial according to the evaluation team. The importance of strong local links and presence, along with effective collaboration with local institutions, emerged as crucial factors for project success.

The evaluation emphasized the critical role of local institutions' capacity and motivation in ensuring sustainability. The lack of program-level coordination was identified as a key weakness, with isolated initiatives lacking meaningful collaboration. The absence of effective program coordination at the national and regional levels highlighted the need for enhanced coordination mechanisms to streamline activities and maximize impact.

Identified good practices.

CDC supported initiatives were instrumental in promoting of profound change in husbandry practices, namely gradual elimination of free grazing of cattle. One of the key reasons for this success is the fact that farmers observed immediate benefits of the change. Projects also introduced relevant innovations regarding

fodder production, which would further imprint this change in local population, however, these innovations were mostly not adopted due to deficits in implementation setup.

Supported project have promoted increase in use of organic fertilizers and especially the practice of vermicompost is being upscaled by local institutions. In this regard, support by CDC has brought a relevant response to current crisis regarding access to mineral fertilizers and successfully "took advantage" of this external factor to promote sustainable farming practice.

The elaboration of Landscape Management Plans clearly brings significant added value to watershed management activities and increases the efficiency and effectiveness of soil conservation and mitigation of erosion. However, the (technical as well as personal) capacity of local institutions (mainly woreda NRM specialists) and their insufficient motivation / mobilization clearly represent a bottleneck to adoption of this practice. The participative approach to watershed management and planning (replacing the standard top-down approach) is clearly another good practice introduced by CDC supported projects. This approach promotes ownership and mobilization of local farmers, as it was confirmed in the evaluation. Understanding the benefits and "buy-in" of local population into the soil conservation activities is, among other, a key condition ensuring compliance with the rules and limitations in enclosures.

As noted above, strong position of PIN in local communities and their long-term presence are key conditions for successful implementation of "grassroots" initiatives. Therefore, the rooting of local team of PIN, its overall capacity and reach to local communities across the target region again represent a clear added value on which future projects may rely.

Conclusions with regard to evaluation criteria

Relevance of support is assessed as <u>high</u>. It has been shown that projects responded well to the actual needs of target groups as well as objectives of relevant strategies and policies of Ethiopia and CDC. Projects are mostly demand-driven, profound baseline analysis played in most projects a significant role.

Coherence of support is assessed as <u>rather high</u>. It has been recognised that strong reliance on institutional context and relevant processes and systems of some implementers clearly brought added value to the projects. On the other hand, insufficient links to relevant local institutions and unclear formulation of responsibilities and accountability was among the key factors of failure of some of the supported activities in other projects.

Efficiency of support as a whole is assessed as <u>rather high</u>. One of the good practices contributing to efficiency of support is the fact that it has been embedded to the activities of local institutions – therefore projects could focus on added value and did not need to fund "normal" operation of the system. High level of coordination with local authorities thus had positive effect on the efficiency. However individual cases of low and questionable efficiency have been recorded. On the level of sector, the fragmentation of support had negative effect on its efficiency. Also, the efficiency of some of the implemented activities especially in Kembata-Tembaro project was, very low since some significant share of the delivered equipment is not being used at all.

Effectiveness of individual components of implemented interventions is variable. Effectiveness of implemented NRM measures is high. These interventions were well implemented and undoubtedly contributed to stopping erosion and recultivation of degraded soil in target areas. However, the effectiveness of promotion of CSA / conservation agriculture principles are in most cases rather low as evidence of significant changes in agricultural practices outside animal husbandry are rather sparse (except for home gardens). Although in areas where support was provided for a prolonged period, more evidence of positive changes was seen. As whole, the effectiveness is assessed as rather high.

Impacts of <u>landscape management interventions</u> are <u>high</u>. Farmers perceive clear positive environmental as well as economic. Impacts of activities aimed at <u>farming practices are rather low</u> – although diversification is observed, this mostly concerns crops grown on home gardens used for direct consumption and farmers mostly continue to focus on growing maize or cash crops. The introduction of changes in agricultural practices was observed in some cases (especially in communities supported for a longer period) and diffusion of these practices to farmers who were not directly supported was also confirmed in some cases, however, profound changes to agricultural practices are rather rare (except for husbandry). As whole, the impacts are assessed as rather high.

Sustainability of support is in many cases difficult to assess because the support has phased out quite recently. However, in places where the support phased out longer time ago the sustainability is assessed <u>as rather low</u>. Especially the maintenance of NRM measures and continuation of further construction of these physical interventions is problematic once the support is no longer available.

Following findings and conclusions, several recommendations have been formulated.

Project recommendations:

Recommendation	Level of seriousness	Primary addressee
Increase attention to planning of project activities so that capacity building is	2	CzDA/
implemented in the time periods which are most relevant to farmers' needs.	_	Implementers
Ensure that training of model farmers and/or cooperative members is started early in	2	CzDA /
the project and is repeated multiple times in the form of refresher trainings; cooperate		Implementers
with local structures on capacity building and gradually rely on local specialists to be		
the trainers.		
Project in the field of agriculture and NRM must be rooted in local institutional	1	CzDA /
framework and extension services . Key responsibilities and tasks must be agreed upon		Implementers
and signed with all the relevant local administration stakeholders. Focal persons		
responsible and accountable for coordination with project team must be assigned. If		
more than one office is involved, it is advisable to assign ad-hoc project committee		
responsible for proper implementation and focal person must be designated.		
Continuous presence of the implementer in the project region is highly advisable.	1	CzDA,
		Implementers

Programme or sector recommendations:

Recommendation	Level of seriousness	Primary addressee
Focus on thematic and geographic concentration of support from CDC. Higher degree of concentration needs to be required also on project level.	1	CzDA
In future projects increase the stress on identification and formulation of such measures	1	CzDA /
that would bring "quick wins" early in the implementation – i.e., measures that would		implementer
be seen as profitable by beneficiaries in a short term.		(depending on
		the mode of
		implementation)
Take advantage of proven added value of various implementers to increase the		
effectiveness and efficiency of support. Namely, find in future projects / programme		
ways to combine technical expertise and capacity to introduce relevant and demand-		
driven innovations with strong presence in target regions and proven competence to		
implement grassroots initiatives.		
Alternatively, focus future support on increasing the capacities and quality of soil	2	CzDA / MFA
conservation and mitigation of erosion by upscaling and formalizing the practice of		
Land Management Plans, which have demonstrated added value and may represent a		
relevant response to a gap in the national system of watershed management in Ethiopia.		
However, need for such measure needs to be clearly confirmed.		
Enable longer time frames for implementation of projects in the sector of Agriculture	3	CzDA / MFA
and Rural Development.		

System or procedure recommendation

Recommendation	Level of seriousness	Primary addressee
Strengthen cooperation with other donors and stakeholders on programme level,	1	MFA / CzDA
participate on relevant thematic platforms and working groups.		
Systematically identify complementarities with national programmes and policies	1	CzDA
and take account of these in the formulation and/or review of CDC programme.		

Strengthen programme management of the bilateral cooperation programme, ideally by establishing a permanent administrative capacity of Czech Development Agency in Ethiopia.	2	MFA / CzDA
More precisely delimit the role of grants and procurement as tools to achieve the	2	CzDA
goals of the bilateral programme.		

Information on the evaluators

Naviga Advisory and Evaluation s.r.o. has long been at the forefront of the market in the field of evaluation and consulting for ministries, state administration, and self-government authorities in the Czech Republic. It is a dynamic consulting organization with more than twenty years of tradition on the Czech market. All the members of the evaluation team have extensive work experience with evaluations of various projects, programs, and development cooperation (e.g., Comprehensive evaluation of foreign development cooperation of the Czech Republic in agriculture in Ethiopia in 2016).

1. Introduction

1.1 Evaluation context

Within the Czech Republic's Strategy for Foreign Development Cooperation (2018-2030), Ethiopia holds a place among the priority program countries, building on a longstanding history of mutual relations and ongoing engagements by various Czech entities. The Bilateral Development Cooperation Programme (2018-2023) aims to assist Ethiopia in unlocking economic potential for sustainable and equitable growth, aligning with the Ethiopian government's development goals. The sector of Rural development and agriculture is acknowledging the significant role of agriculture in Ethiopia's economic landscape. The program focuses on ensuring food security, sustainable management of soil and forests, and year-round access to safe, nutritious food. Emphasis is placed on strengthening agricultural advisory capacity and promoting sustainable livelihoods. Given Ethiopia's vulnerability to climate change impacts, including droughts and floods, the program underscores the importance of environmentally friendly farming methods, landscape protection, afforestation, and biodiversity conservation. Geographically, the support is directed to the Southern Nations, Nationalities, and Peoples' Region (SNNPR). The following 3 bilateral projects were selected for the evaluation:

- Increased Ecological Stability of Dijo and Bilate Watersheds of Halaba and Sankura Woreda, SNNR, Ethiopia (implemented by PIN, grant support modality)
- Support to smallholder farmers in ensuring access to food and increasing the anti-erosion resilience of communities in selected kebeles of the Kembata Tembaro, SNNPR (implemented by GEOtest, public procurement modality)
- Extension of holistic management and climate-smart agriculture in Arba Minch Zuria Woreda, SNNPR, Ethiopia (implemented by MENDELU, grant support modality)

1.2 Purpose of evaluation

The main purpose of the development cooperation evaluations was to obtain an independent, objective, and consistent finding, conclusions, and recommendations valuable for making decisions by MFA, in cooperation with CzDA, about the future orientation and implementation of the projects in Ethiopia. Evaluation was to be performed in accordance with the internationally recognized OECD-DAC criteria, i.e., relevance, coherence, efficiency, effectiveness, impact and sustainability, and other criteria (visibility and crosscutting themes of the Czech development cooperation). Conclusions and recommendations are relevant for further direction and financing and for the implementation of similar projects in the sector of Agriculture and rural development in other program countries.

1.3 Information on the evaluators

Naviga Advisory and Evaluation s.r.o., a dynamic consulting organization with over two decades of experience, specializes in evaluating and advising on public expenditure programs and projects for ministries, state administration, and local authorities in the Czech Republic. All the members of the evaluation team have extensive work experience with evaluations of various projects, programs, and development cooperation (e.g., Comprehensive evaluation of foreign development cooperation of the Czech Republic in agriculture in Ethiopia in 2016).

2. Information on the evaluated intervention

2.1 Addressed intervention in wider context

Alaba/Silte project and Gamo project were carried out using the grant support type of implementation. Kembata-Tembaro project was in the form of procurement procedure. However, all the projects were designed mainly by the implementing partners.

2.2 Implementers and main stakeholders

The 3 relevant partners implementing the evaluated projects are the Mendel University in Brno (MENDELU), non-governmental organization People in Need (PIN), and the company GEOtest, a.s., (GEOtest). Following key stakeholders were identified (for more detail see the Input Report):

Ministry of Foreign Affairs of the Czech Republic (MFA), Czech Development Agency (CZDA), Embassy of the Czech Republic in Addis Ababa, Reference group.

Local stakeholders: Bureau of Finance and Economic Development (BoFED), Bureau of Agricultural and Natural Resource Development, Zonal Bureau of Agriculture and Natural Resource Development, Zonal Bureau of Water and Irrigation, Woreda Agriculture Office, Woreda Extension Office, Woreda Cooperative Office, Woreda Water and Irrigation Office, NGOs or donor representatives in the area, communities' representatives, farmers, etc.

2.3 Logic of the projects

Increased Ecological Stability of Dijo and Bilate Watersheds, Halaba and Sankura Woreda, SNNR, Ethiopia (2019–2021)

Implemented by People in Need, this grant-supported project aimed to enhance ecological stability in the Dijo and Bilate watersheds of Halaba and Sankura Woreda. Executed in two stages, the first phase covered 14 kebeles in (former) Alaba Special Woreda and Sankura Woreda from 2016 to 2018. The second phase expanded the initiative, incorporating additional kebeles. The project addressed land degradation issues by supporting farmers through various interventions, including Farmer Training Centres (FTCs) worker assistance, watershed rehabilitation, adoption of good agricultural practices, and agricultural diversification.

Support to Smallholder Farmers in Ensuring Access to Food and Increasing Anti-erosion Resilience, Kembata Tembaro, SNNPR (2019-2021)

Implemented by GEOtest, a.s., this tender project aimed to enhance food security and community resilience in Kembata Tembaro Zone. The project focused on agricultural extension services, training, and introducing sustainable processing technologies. Additionally, it emphasized nutritionally balanced diets. While addressing issues from the previous project (not implemented by GEOtest), the initiative sought to increase the efficiency of animal husbandry and promote sustainable farming practices ensuring the successful phase-out.

Extension of Holistic Management and Climate-Smart Agriculture, Arba Minch Zuria Woreda, SNNPR, Ethiopia (2019-2020)

Implemented by Mendel University, this grant-supported project in Arba Minch Zuria Woreda, Gamo Zone, focused on Climate-Smart Agriculture and holistic landscape management. A follow-up to a previous project, it elaborated Landscape Management Plans, implemented anti-erosion measures, and aimed to reverse soil degradation trends. The project involved community engagement, tree planting, and the establishment of a Permaculture Centre, promoting sustainable model farming practices and supporting local production groups.

2.4 Key assumptions and risks of intervention

Implementing partners identified the following assumptions and risks of the interventions. Their validity and relevance (as well as occurrence) within the implementation of the projects was subject of evaluation:

Key assumptions:

- Continuation of favourable security and political situation
- Continuation of the Watershed campaign approaches
- Government offices favour offered interventions

Key risks:

- Lack of interest on the part of target and key farmers
- Unreliability of target groups
- Reluctance to change
- Risks related to utilization of delivered machinery
- Limited functioning of the irrigation infrastructure supported within the previous project (relevant for the Kembata-Tembaro project)

3. Evaluation methodology

3.1 Methodology approach

To process the evaluation project and answer the evaluation questions the following evaluation methodology was applied. Details of the evaluation methodology are presented in the evaluation matrix and in the Input Report.

Desk research

Desk research involved the search, collection, analysis and evaluation of already existing and available information and relevant documents (see the List of studied documentation and other resources). The aim of the desk research was to study and evaluate the available documents and information. The desk research method was used mainly at the initial part of the evaluation. Through a careful and structured analysis of relevant documentation, we got a basic overview of the evaluated projects and current situation in the sector of agriculture and landscape management in Ethiopia.

The subject of desk research in this evaluation is mainly the documentation of the evaluated projects provided by the CzDA in July and August 2023. Furthermore, relevant strategic documents of the target country were analysed. In addition, the outputs, and the evaluations of the related projects were analysed (e.g., first phase of the project implemented by PIN and the provided evaluation of the projects implemented by PIN).

In-depth interviews (IDI)

The evaluation team organized individual and group interviews in Ethiopia during the evaluation mission and in the Czech Republic before and after the mission. For more detail see the annex List of interviews and group discussions. On the top of IDI in the target country that took place during the evaluation mission, the evaluation team had series of preliminary (introductory) phone interviews before the evaluation mission, held by the local expert and some even after the mission. These calls were also helpful to address all the logistical issues and to collect data necessary for all the evaluation methods (distribution of questionnaire among farmers, focus groups, etc.). The length of the interview varied depending on the group of respondents. Usually, the interview took between 30 and 90 minutes.

IDI in the Czech Republic with Czech speakers were conducted in Czech. IDI with other stakeholders in Ethiopia were conducted in English. IDI at the level of supported communities were conducted according to the respondent's preference, but mostly in English or Amharic using interpretation. During the focus group, the language of the local community (if used) was translated into English.

Focus groups

Focus groups were introduced as community meetings. Focus groups were implemented in supported communities/kebeles with local farmers. We organised various combinations of respondents based on the needed data and their availability. The following groups were included:

- Model farmers
- Ordinary (non-model) farmers
- Technical voluntary farmers
- Watershed Management Committee
- Development Armies (also group with only DAs)
- Women (also 2 only female groups)
- Cooperative members

The evaluation team tried to always include and encourage the poorest or the disadvantaged members of the communities to participate and if needed, a safe space was provided to allow any communication of their opinions separately during or even after the focus group. Focus groups were consecutively translated from English into the local language. Two translators and one local expert were always present to ensure easier communication.

Survey

The printed questionnaires were distributed to several trained local stakeholders. They were then able to collect the answers while being present in the kebeles after the evaluation mission.

There was an end-line survey available in the case of the Alaba/Silte project. Therefore, no additional survey was necessary. The questionnaire survey targeted two communities in the case of the Kembata-Tembaro project and in other two communities in the case of the Gamo project. In each community, the evaluation team approached at least 50 households. Overall, 231 farmers participated in the survey. Interviewers were instructed to include women, people of various age, non-model farmers, people who are not part of any cooperative and ask always only one member from each household.

The investigation was fully carried out in the form of face-to-face interviewing. Interviewers were trained during the evaluation mission. The local expert was available to ensure quality of the output, translate the materials, and answer any questions. The questionnaire was programmed into an online application, so the interviewers were able to record the answers on a mobile phone or tablet (or, according to the interviewer's preference, record the answers in a paper questionnaire and then transcribe them into the online tool). Interviews were conducted in the local language of the community.

3.2 Methodological and other obstacles

The evaluation team effectively applied lessons learned from their previous evaluation in Ethiopia, skillfully addressing all anticipated risks in a timely manner. Consequently, no significant obstacles were encountered. While some meetings posed challenges in connecting with key individuals due to increased fluctuations, such as in the case of DAs, and incorporating vulnerable groups into discussions during focus groups and addressing them in surveys proved more demanding, the overall evaluation mission and all applied methods were executed successfully.

The evaluated projects were implemented under the grant support (Alaba/Silte project and Gamo project) or public procurement (Kembata-Tembaro project) modalities. Therefore, the ability of the implementers to respond to the changing needs during the project may vary, as well as the possibility of modifying the initial project design.

3.3 Evaluation team

When putting together the implementation team, great emphasis was placed on the theoretical knowledge and practical experience of all the team members. The evaluation team included the following members:

- **Project manager and main evaluator** with an extensive experience in project management and practice in the field of evaluation of programs / projects financed from public funds, including evaluation of development cooperation projects of the Czech Republic in Ethiopia,
- Senior expert and quality guarantor³ with extensive experience in the regional development, local economic development and more generally policy consultancy for many institutions and partners in the Czech Republic and abroad,
- **Senior expert** with experience in development cooperation in the field of regional and local development and evaluations for institutions and partners in the Czech Republic and abroad,
- Local expert with rich experience in evaluating development projects of foreign donors in the target country, unique knowledge of the local context and experience with projects focused on rural development and local agriculture development,
- Local coordinator responsible for technical and logistical planning of the evaluation mission and communication with respondents and other entities, including additional data collection after the evaluation mission,
- **Junior evaluator** supporting the evaluation team before and after the mission in the process of the initial data collection and analysis in the Czech Republic,
- Other members of the evaluation teams working as interpreters, interviewers, drivers, etc.

³ In addition, the division of positions into a manager and a quality guarantor ensured their substitutability if needed.

4. Evaluation findings

The evaluation aimed at answering the following 4 evaluation questions:

- EQ1: What is the interconnection and coherence of the individual parts of the project (especially in relation to outputs of previous projects)?
- EQ2: In what ways and to what extent are the projects or their individual parts innovative?
- EQ3: What is the added value of various types of implementers?
- EQ4: Is it possible to identify good practice within the existing projects which can be further replicated?

The evaluation team conducted the first phase of the desk research in August 2023 based on the provided project documentation and publicly available information. The CzDA project manager shared the relevant tender documentation, proposal calls, project documents and reporting documentation. The evaluation team requested some additional documents, which were provided by the project manager, implementing partners or local authorities. In the text below, the findings related to evaluation questions are presented. Information is structured in accordance with the structure of indicators that were proposed (and accepted) in the evaluation matrix (see Annex J) and do *de-facto* formulate a set of sub-questions that analyse the evaluation questions to higher detail.

Since the evaluation questions 3 and 4 are rather aiming at synthesis of findings, the questions are not elaborated upon in this section, and they are answered in the following chapter – Evaluation conclusions. Similarly, conclusions related to evaluation criteria are presented in the chapter Evaluation conclusions.

4.1 EQ1: What is the interconnection and coherence of the individual parts of the project (especially in relation to outputs of previous projects)?

Coherence of support with national strategies and policies in the field of agriculture and protection of landscape / environmental protection.

The strategic goals of Ethiopia are described in the following documents:

- Climate-Resilient Green Economy (CRGE) Strategy
- Ethiopia's Agriculture Sector Policy and Investment Framework (2010–2020) External Mid-term Review
- Ethiopian National Drylands Restoration Strategy
- Ethiopian Sustainable Land Management Investment Framework
- Growth and Transformation Plan
- National Biodiversity Strategy and Action Plan
- Soil and Water Conservation Programs
- The Ethiopia 2030: The Pathway to Prosperity Ten Years Perspective Development Plan (2021 2030)⁴

Ethiopia's commitment to sustainable development and environmental sustainability is evident through various strategic documents and initiatives. The Climate-Resilient Green Economy (CRGE) Strategy underscores the nation's dedication to building an economy that is both environmentally conscious and resilient to climate change, emphasizing low-carbon growth and sustainable development practices. In parallel, the Ethiopian National Drylands Restoration Strategy addresses the critical need for restoring arid ecosystems, focusing on sustainable measures to combat land degradation and enhance resilience in dryland regions. Ethiopia's focus on responsible land and resource management is encapsulated in the Ethiopian Sustainable Land Management Investment Framework, which charts a course for investments in sustainable land practices to boost agricultural productivity while mitigating environmental degradation. The country's comprehensive Growth and Transformation Plan serves as the overarching blueprint for economic and social development, highlighting goals for poverty reduction and sustainable growth. The Ethiopia 2030 plan outlines a comprehensive roadmap for the country's progress over the next decade, aiming to achieve

⁴ This strategy has been publicly available since 2023, therefore none of the stakeholders could utilize it during the project design or implementation. However, it should be considered during the future project planning and implementation.

prosperity through strategic initiatives and sustainable growth with a focus on economic diversification, social inclusivity, and environmental sustainability.

Furthermore, Ethiopia's commitment to biodiversity conservation is articulated in the National Biodiversity Strategy and Action Plan, emphasizing the importance of preserving the nation's rich biodiversity. Concurrently, soil and water conservation programs play a pivotal role in sustainable agriculture, preventing erosion, and ensuring water resource availability. These strategies collectively underscore Ethiopia's holistic and forward-looking approach to fostering a resilient, green economy and sustaining its environmental resources.

Above-mentioned strategic goals of Ethiopia are reflected in all three evaluated projects. Firstly, the adoption of Climate Smart Agriculture and Conservation Agriculture principles reflect Ethiopia's commitment to promoting climate-resilient farming practices. Secondly, capacity building for agricultural extension services, including Farmer Training Centers (FTCs) and Development Agents (DAs), is crucial for disseminating knowledge and best practices among rural farmers. This aligns with Ethiopia's focus on strengthening institutional capacity and empowering rural communities to make informed decisions. Lastly, the objectives related to landscape management and environmental protection underscore Ethiopia's commitment to safeguarding its natural resources. The implementation of Landscape Management Plans contributes to the conservation of ecosystems and the protection of watersheds.

Moreover, the activities of all three supported projects demonstrated a strong alignment with the objectives and practices of relevant institutions at both the zonal and woreda levels. These projects complemented and supported the ongoing efforts of these institutions. In another words, projects supported by CDC bring added value to "standard" operation of local institutions in the field of agriculture and NRM. The primary added value of these projects lies in their ability to mobilize local communities and forge connections with existing institutions. This mobilization effect enhances community engagement and ensures that activities are closely aligned with local needs and priorities. In particular, the projects emphasize biological measures like tree planting, which demand an initial financial investment for seeds and careful site selection, therefore, they would not be applied without the project support. This approach helps address the unique challenges, weak points, and risks specific to the territory, making these initiatives instrumental in achieving the goals of relevant strategies while promoting long-term environmental sustainability.

The activities of the supported projects, especially the Alaba/Silte project and the Gamo project thus exhibit a high degree of complementarity with relevant government institutions and other stakeholders in the target area. This effective collaboration with local institutions reflects a best practice, as the projects successfully align and connect with these institutions while adding significant value to the ongoing efforts. This collaboration is best facilitated by maintaining a constant focal point, ensuring continuous communication and coordination.

However, taking full advantage of this added value was in some cases, especially in the Kembata-Tembaro project, constrained by the limited involvement of local government institutions and collaboration within the community. In effect even some inefficient use of CDC support (see below, especially with regard to supplied pumps)can be attributed to this issue of weak coordination with local institutions.

Coherence of the support with the activities of other stakeholders (NNOs, other donors, etc.) in target area; cooperation and collisions

The cooperation with other donors presents some challenges. There is substantial room for more collaboration and meetings among various stakeholders, which is currently hindered by the lack of sufficient platforms for coordination. The local government's limited engagement in facilitating such collaboration further complicates the situation.

In the Alaba/Silte project area, various development stakeholders operate alongside PIN. These include REDD Plus, FARM Africa, and the Halaba Development Association. These organizations contribute to diverse initiatives, e.g., environmental conservation, agriculture, and overall community development in the project woredas. No indication of strong cooperation or overlapping activities in the area was observed during the evaluation mission, although the project teams could share some unique innovations or benefit from sharing some resources if well planned.

In the Kembata-Tembaro project area, there is the IFAD initiative, which actively supports the production of vegetables and fruits such as avocado, mango, and papaya. The project extends its impact through the distribution of seeds, offering crucial nutrition training for pregnant women and households led by women. Livestock care is emphasized through the provision of fodder, including desho, while 39 households benefit

from solar panels for lighting and solar pumps for irrigation. The IFAD project has been operating in the area since 2017, focusing its efforts on a specific region, Adancho kebeles, and allocating 0.5 million Birr for their initiatives. Again, very little evidence of coordination or even coordination between this initiative and Kembata-Tembaro project has been seen, despite thematic closeness of these interventions.

In the Gamo project, there exists a collaborative synergy with a significant initiative funded by the Ethiopian Agricultural Transformation Agency (ATA). This initial project founded a nursery, where the members of user cooperative work. Within the same space, the establishment of a permaculture center took place. They share a focus on related objectives—such as cultivating grafted fruit trees in the permaculture center and concurrently fostering the growth of tree seedlings. Notably, there is evident synergy, particularly among the individuals actively engaged in both projects. The Gamo project has also cultivated a strong relationship with officers at both the zonal and woreda levels. Some joint activities, including training and collaborative soil restoration projects, highlight a shared commitment to project goals and underscore the effectiveness of their collective efforts.

On the top of these examples there is also the "Green Legacy Initiative" operating in all projects regions since 2019. This government initiative aims to plant every year millions of seedlings in Ethiopia (e.g., avocadoes, mangos, papayas). However, no synergies utilizing this multiplication potential. were observed in the implemented projects, mostly because the initiative started after the project design phase. In future projects it should be considered, and similar significant initiatives should be noted even during the implementation to avoid any possible overlaps.

No evidence regarding coordination on institutional level has been recorded. There is a potential for the donor or for the implementing partners to join some ongoing platforms to meet other stakeholders like the Soil platform (e.g., GIZ is participating there).

Representatives of regional administrations ruled out that there might be any conflicting or duplicated activities implemented within the project region. According to these institutions (Bureau of Agriculture, Bureau of Finances), it is the responsibility of regional administrations to facilitate distribution of support provided by international donors and other stakeholders to ensure maximum efficiency.

This claim has been confirmed in the field in the case of soil restoration / NRM measures. No case of conflicting or duplicated implementation of these measures has been observed. The reason for this is the fact that all activities aimed at physical restoration of eroded land are embedded in the approach of local institutions (at zonal and / or woreda levels) and rely on resources mobilized by them. Due to this close interconnection between the project activities and agenda of local institutions no collision or duplication could occur – sites where the land restoration would be supported by the donor has been selected by local authorities, which, in most cases, selected sites most severely affected by erosion, whereas rehabilitation of other sites was implemented by "standard" approach – without involvement of third parties.

However, the same cannot be claimed in the case of CSA / Conservation agriculture approach. At least two cases of duplication and/or promotion of at least partly contradictory approaches have been recorded:

- 1. As it has been indicated, there were strong functional similarities (and thus potential synergies) observed between Kembata-Tembaro and IFAD initiatives in target kebeles in Angacha woreda. First, there were strong thematic overlaps. IFAD project aimed at introduction of planting of fruit, desho grass, fodder for cattle, etc. Apart from trainings and demonstrations in this regard, the project also supplied (solar) pumps and even distributed farming tools. Similar activities were implemented by Kembata-Tembaro project as well in the same time frame. Moreover, there were also overlaps when it comes to local resources IFAD as well as Kembata-Tembaro projects relied in their implementation on the cooperative and capacities of (the same) DAs. However, despite these potentially strong synergies there was no coordination or cooperation between the two projects and thus activities were mostly duplicated (it should be noted, though, that IFAD project focused only on a part of the area of the supported kebele). This seemingly inefficient use of resources can be attributed primarily to the general deficits of coordination with local institutions that was observed in the Kembata-Tembaro project tasks, responsibilities and accountability were not sufficiently established, which resulted in low ownership and involvement of local institutions in this project.
- 2. Second example is less explicit, however relevant in this context. In some of the regions (especially in Alaba and Silte zones), the production of chilli peppers as cash crops is rather widespread. These crops are traditional in the area; however, it has been further supported by national institutions as well as other stakeholders (donors e.g., Farm Africa). The crops are an important part of the livelihoods of local farmers, however, related farming practices are rather contradictory to the principles of Conservation

agriculture, especially in its strong reliance on artificial fertilizers. In effect, it has been observed that farmers do apply some CSA practices (intercropping in the case of maize, cultivation of Desho grass, etc.), however, this is rather restricted to smaller plots and cultivation of cash crops as well as maize hybrids is promoted by relying on conventional agricultural practices. In effect, extension services promote intensive usage of fertilizers (if available), which is in direct collision with CSA principles. This finding was independently confirmed by project implementers as well as during several focus groups.

Complementarity of support to previous initiatives and its contribution to long-term exposure of target groups to initiatives supported by the CDC.

Agricultural projects require longer durations, with the initial year dedicated to preparation (and collection of the baseline data if possible). The sector's susceptibility to weather fluctuations necessitates consistent good harvests for significant results. Therefore, long-term exposure to support and sustained efforts are crucial for the projects to demonstrate positive outcomes.

In project implementation, the repetition of certain activities over an extended duration is not necessarily incorrect. Particularly in the context of introducing agricultural innovations, it becomes crucial to not only offer training at the opportune moment but also to repeat and consistently monitor the success and potential obstacles during implementation. Instances, such as the adoption of silage practices, highlighted that if farmers face challenges in their initial attempts with new methods—attributable to factors like inadequate skill acquisition, insufficient inputs, or unfavorable weather conditions—their motivation to persist in innovation diminishes significantly. Consequently, project teams and local institutions need to proactively address these issues and remain present in some form over several years. A strategic focus on a more limited range of innovations, with intensified attention, can yield more substantial and enduring impacts compared to a fragmented approach that proves ineffective for farmers. An illustrative case are the documented storages in both Kembata-Tembaro project areas with unused pumps, and cooperative members struggling to find suitable applications without assistance. The equipment remained unused for several years without any intervention from the local government or donor.

In the case of the Alaba/Silte project, the evaluation team visited communities with different levels of exposure. The community members, which did not receive the support in past years, expressed during the focus group lower motivation, especially knowing, that the project team is still active in some neighbouring areas. During the focus group, they talked about the lack of support from the local government, stating, that the project material support was higher (e.g., provision of stones for gabions, and seeds). On the other hand, the communities with continuous support showed better results in the soil protection and implementation of the new agricultural practices.

Coherence of support with the needs of target groups; relevance of identified needs of target groups.

The limited identification of needs and the absence of a baseline in some cases may appear as potential challenges, but it is crucial to approach this aspect with caution, recognizing that the context and the projects' unique circumstances play a significant role. In the context of projects like Alaba/Silte projectand Kembata-Tembaro project, there is evidence of initial analyses conducted during the first year, which formed a solid foundation for their activities. Conversely, MENDELU's approach may lack a detailed initial analysis, but the project coordinator's ability to adapt activities based on real-time needs is noteworthy.

PIN carried out a detailed baseline analysis in 2016 (phase 1) and in 2019 (phase 2) providing the general sociodemographic but also sector-specific data. PIN did the only baseline study data collection, which was later utilized while collecting data for monitoring and evaluation purposes. The data collection included face-to-face interviews using a semi-structured questionnaire, complemented by focus group discussions. The field data collection covered all 21 kebeles in the project area intervention woredas. A tailored questionnaire, aligned with project indicators, was administered to 371 households during the baseline survey. Notably, the M&E team conducted additional key informant interviews with government representatives, such as zonal agriculture bureau leaders, watershed management committee focal persons, and kebele representatives, ensuring the identification of the needs but also involvement of the local authorities in the project design.

"We must look at the basin and it is obvious that the kebeles must work together. Several organizations work only with threatened farmers. However, watersheds do not respect administrative boundaries and measures must also be taken by communities that do not experience any direct impacts." PIN representative

Within the Kembata-Tembaro project the comprehensive analysis comparing two target regions and detailing crop utilization was prepared. The assessment involved an analysis of the current natural resources management system, the knowledge, and capacities. The integrated approach involved stakeholder engagement, including visits to farmers' project groups, meetings with Cooperative representatives, and engagements with local authorities such as the Tax Office for Economic Cooperation and the Bureau of Agriculture. Additionally, interactions were held with partners at the zonal level, including the Kembata Tembaro Agricultural Office and the Cooperative Office. Local market visits in Hawassa aimed to assess the current agricultural and agroforestry product offerings and prices considering the conditions prevailing in the area. However, the collected data do not have the character of a baseline study and a more participatory needs assessment would be beneficial.

This comparison underscores the importance of a dynamic approach to needs identification and responsiveness. While Kembata-Tembaro project had a well-identified start but faced challenges adjusting activities during the project, Gamo project demonstrated flexibility in adapting to evolving needs although also in this project, no actual baseline study was prepared. This contrast highlights the significance of a sustained project implementation team's presence and adaptability over an extended period to ensure alignment with the target group's changing requirements. These observations collectively reflect the practicality and complexity of project implementation in response to the needs of target groups, emphasizing the need for flexibility and adaptability to achieve effective outcomes.

Ownership of project outcomes at local institutions.

High level of "buy-in" with respect to anti-erosion and soil restoration activities has been observed among the employees of relevant institutions at zone and woreda levels throughout the interviews (agricultural, water and irrigation and cooperative offices). Dedicated natural resources specialists have been employed throughout the woreda agricultural offices that were visited and interviewed throughout the evaluation. It has been also assessed that these specialists have sufficient knowledge regarding construction of NRM on affected slopes. Activities aimed at capacity building (trainings, exposure visits, etc.) are therefore assessed as rather efficient.

However, it has been also observed that this high level of "buy-in" and motivation on the part of local (woreda) officials and DAs is not being sustained after direct support from the projects phases out. Once the external assistance is no longer present, the motivation and support that woreda officials and Das are providing to technical voluntary farmers and affected kebeles in general decrease. This negative effect of a phase-out has been recorded across all projects (although with varying intensity); thus, it is not directly related to the modalities of project implementation or even the local presence of implementer.

During community meetings / focus groups in all project regions it has been noted that the attention that is being given to physical implementation of NRMs and other anti-erosion measures has lowered significantly in kebeles where the support has phased out. Attendees of the focus groups in all these kebeles pointed out that the number of farmers who take part in the annual Watershed campaigns has significantly decreased after the phase-out and similarly the material support has diminished.

"At the beginning everyone was motivated, and a lot of work has been done. Now only few people join us during the Watershed campaign." (One of Technical voluntary farmers during FG in Bercho Kulufo kebele; similar statements expressed also during FGs in Kembata Tembaro zone and in Chano Mile / Chano Dorga).

In effect, after the phase-out local farmers are only capable of maintaining constructed NRMs (and not even that in some cases). It has not been observed that these communities would receive sufficient support from local authorities and extension services to continue with further construction of physical anti-erosion measures. The opposite has been observed in communities that phased out recently (3 visited kebeles in Alaba/Silte project) where the motivation of local farmers as well as their perception of support provided by local institutions is still high and positive.

In conclusion, these findings suggest that support from CDC does not only increase capacities and bring added value to soil restoration activities, but also provides a "spotlight" – targeted communities receive sufficient support from their local institutions and local farmers are highly motivated to take part in activities that reduce their vulnerability to negative impacts of soil and water erosion. However, findings from all project regions agree that once this "spotlight" is turned off, the level of engagement decreases. This conclusion suggests that ownership of soil regeneration initiatives on the part of local institution has not been sufficiently created.

When it comes to the ownership of CSA principles by local institutions, it has been shown above, that these are not yet fully integrated within the local extension services, especially by DAs. During evaluation visits to FTCs, we have noticed that conservation agriculture approach has been sufficiently applied at some demonstration fields, however, as noted above, local extension services are still rather stressing the conventional farming principles – e.g., intensive application of fertilizers (if available). Systematic promotion of more sustainable agricultural practices by DAs has been rather rare.

4.2 EQ2: In what ways and to what extent are the projects or their individual parts innovative?

Exposure of farmers to sustainable and soil-conservation practices and basic concepts of Climate Smart Action, understanding their benefits.

Targeted farmers understand sustainable and soil-conservation practices, coupled with an understanding of some Climate Smart Agriculture principles and its associated benefits. They are inclined to prioritize actions that offer immediate benefits, such as introducing new profitable crops. Importantly, on communal lands, they have a comprehensive understanding of the adverse consequences of erosion, including increased flooding and landslides. They can also visibly witness the positive effects of land rehabilitation and individual project measures on previously degraded lands. Nonetheless, the challenge lies in extending these conservation practices to their own fields. While there has been some adoption of intercropping, it has occurred to a limited extent.

The Alaba/Silte project has played a pivotal role in fostering awareness among farmers regarding the importance of land management practices. As a result, farmers confirm that there has been a significant improvement in the condition of soil and the productivity of rehabilitated sites. This awareness has sparked a strong interest among farmers to reinforce soil and water conservation activities, aimed at elevating agricultural production and overall farm productivity. Additionally, these conservation activities have effectively rejuvenated previously unproductive lands, leading to increased agricultural output. The supported projects, particularly the Alaba/Silte project, closely align with local institutions and government strategies. The successful rehabilitation can lead to the return of some households originally displaced due to the high level of erosion and soil degradation, which was mentioned multiple times during the field visits.

Good practice was discussed also during the meeting with the GIZ team. GIZ is similarly focused on achieving tangible outcomes, specifically in soil fertility and productivity. The approach involves introducing both organic and inorganic fertilizers, resulting in a noteworthy improvement of 50-60% in production within the first year, sparking interest from farmers and partners. The key to success lies in achieving a visible impact within the initial year of implementation. Although it's common for a drop in results to occur post-project termination, GIZ emphasizes evaluating the extent of this decline. Typically, about 3 out of 5 project components are sustained, with the core concepts retained. Success in transitioning beyond the pilot phase hinges on commitment and demonstration of viability. Importantly, activities are fully executed by partners, ensuring that success is inherently tied to their efforts. During the phase-out, GIZ prioritizes creating local ownership, avoiding the employment of additional personnel on-site.

Implementation of CSA farming practices at demonstration fields of FTCs or cooperatives and their capacity to provide sufficient support to relevant farmers

Demonstration fields at Farmer Training Centers (FTCs) represent established practices functioning within local institutions. FTC in Kulufo and partially Feten, which were visited during the evaluation mission, showcase best practices, illustrating not only the implementation of new crops and their requirements but also the results that can lead to increased yields and, consequently, higher incomes for farmers' households. FTCs conduct trials with different crop varieties.

Similarly, to FTCs, cooperatives can benefit from additional resources, allowing them to take higher risks and experiment with environmentally friendly yet income-generating solutions. However, even established cooperatives and FTCs require continuous project support, as demonstrated in the Kembata-Tembaro project, where insufficiently supported cooperatives proved highly inefficient in utilizing provided equipment and training.

The system of model farmers has certain limitations in all the projects, including challenges in organized and targeted know-how transfer. There is evidence of a more grassroots approach where knowledge is shared among farmers based on community ties. There is a limited record of non-model farmers actively seeking assistance from model farmers, suggesting that the formal system may have room for improvement. The term

model farmer is not used much by farmers themselves. There is also potential for some conflicts in the communities caused by unequal support, which should be considered in the project design (see the example of Chana Dorga and Chano Mile in Gamo project).

"The model farmers are still farmers, and they don't have time and money to support others. So, they get some training and material, but they don't feel responsible for others."

Local authorities in the Kembata-Tembaro project

On the other hand, the steady support for the motivated model farmers offers distinct advantages, including higher retention of knowledge and a more organized form of assistance, which was visible during the field visits and focus groups. Model farmers, benefiting from greater financial resources and know-how, are better positioned to take risks and introduce innovative solutions, such as new crop variations, organic fertilizers, or composting. Their proactive engagement in various activities available to them further enhances the effectiveness of this support.

The challenges lie in sustaining the extension services beyond the project's duration. High turnover among Development Agents (confirmed during multiple focus groups, and by PIN) at the local level, impacts the continuity and effectiveness of these services. DAs' motivation and activity levels tend to be highly individual, and while the projects serve as a strong motivator and resource catalyst during the project period, the absence of alternative resources for innovation and training after project completion remains a concern. The projects have a notable mobilization potential, as they enable DAs to access more resources for their activities. These observations underscore the need for a more sustainable and structured approach to extension services, emphasizing continued support and motivation for both model farmers and DAs.

Adoption of sustainable farming practices compliant with Conservation agriculture / CSA principles by local farmers (such as intercropping, diversification of crops, grass strips, etc.); adoption of new crops that were introduced within the projects.

Result from focus groups and interviews with farmers as well as local administrators show that the rate to which farmers introduced new practices or new plants in larger scale is rather low. However, results from focus groups also showed that the level of replication is to some extent dependent on the duration of support that was provided to the kebele. This has been clearly demonstrated in the Alaba/Silte project. In kebeles which were supported for a shorter time (T2 or T0 kebeles) there were rather few farmers who did start to grow new crops in larger scope or did implement some innovation to their farming practices (i.e., not only on home gardens) and these were, almost exclusively, farmers who were directly supported (trained, took part on a field visit, etc.). On the contrary, in kebeles that were supported in both projects (thus at least for 5 continuous years) the rate of accepting of innovations was clearly higher and it penetrated to non-model farmers. This was, for example, the case of intercropping, which is now, according to the results of focus groups, practiced by most of the farmers in kebeles that were supported for longer period, whereas the practice is rather rare in kebeles which were involved exclusively in the first or second project. (According to the endline survey ca. 70 % of respondents practice intercropping, however, this data could not be disaggregated to kebeles or model and non-model farmers.)

Data from surveys confirm this finding to some extent. The average number of crops as well as vegetables or fruits that is produced by model farmers is higher than in the case of non-model farmers. However, a positive trend in all these variables has been recorded both by model as well as non-model farmers. This may suggest that in effect of support some changes are being introduced also by farmers who were not directly supported from the projects. However, more significant changes that have the potential to visibly increase the livelihood of farmers can be, according to focus groups and interviews, seen only in cases where the support was provided for a longer period. In other cases, an increase in diversification can be observed by both model as well as non-model farmers, however, this is mostly related to small scale production on home gardens.

Good example of this diffusion of innovation in small scale have been observed in Gamo project(s). One of the innovations that was brought to the area was an introduction of a plant "chaya", which is a good source of cooking which can be a substitute for widespread gomen or moringa. This plan was introduced to farmers who took part on trainings in the permaculture centre, however, it has spontaneously spread among other farmers, largely by "word of mouth". During the evaluation there were several visits to small farmers households where chaya was planted and grown to the satisfaction of these farmers. They recognized key advantages of the plant, such as higher nutritious value (as well as superior taste to moringa), higher yield and, even more importantly, its high resistance to bad climatic conditions and ease of care as well as multiplication. In effect, in all the home gardens of visited farmers this new plant has largely replaced

moringa or other plants and became one of the key sources of nutrition. However, according to the survey only ca 20 % of respondents have started to grow this new plant (although significantly higher share in Chano Mile where the support was more intensive). In the same area several farmers during the interviews and focus group pointed out to the fact that due to the support farmers started to grow grafted mango and avocado trees, which register higher yields and resistance. In the survey it can be seen, though, that most of the farmers who started to grow these improved varieties or grafted trees are members of cooperative and/or model farmers and the penetration of these improvement outside those groups of farmers was lower (although not negligible). The replication of these practices is, thus, rather lower.

Within the Alaba/Silte project activities, some farmers have, according to the survey, focus groups and field observation, diversified their crop portfolios, introducing newly disseminated food crops such as pigeon peas, root and tuber crops, vegetables, and haricot beans. This diversification holds the promise of expanding the dietary variety of rural households. Furthermore, the use of various vegetable crops has contributed to an increase in household income. The farmers mentioned that what motivates them to apply intercropping practices is the possibility of having multiple products or even having production in different months. This should be considered when introducing this practice since the potential is not yet fully utilized.

The comparison of the 2019 baseline study and 2021 endline study of the Alaba/Silte project uses the Farm Diversity Score⁵. The baseline average farm diversity score of 6.8 experienced an appreciable rise to 8.4 at the end-line, reflecting a positive change of +1.6. These results show a positive trend of cultivating a more diverse range of crops improving access to a healthier and more varied diet. In addition, it fosters resilience and sustainability in local agroecosystems.

The results of the survey in the Kembata-Tembaro project reveal notable improvements in agricultural production. Crops exhibited a substantial increase, with a growth of 16% in the belg season and 30% in the meher season. Over the past 7 years, vegetable production witnessed a remarkable surge of 28%, while fruit farming experienced a commendable 22% growth. A comparative analysis between model non-model farmers showcased an average increase of 21% for model farmers, while non-model farmers observed a higher average growth of 31% in overall production. Similarly, cooperative members and non-members displayed according to the survey a similar trend, with non-members achieving an average production increase of 31%, compared to the 21% average increase among cooperative members. However, the sample is not representative.

Regarding specific crops in the Kembata-Tembaro project, the survey indicated that 58% of respondents had initiated faba bean production, 69% beetroot and pigeon pea production. Furthermore, farming activities for tomatoes, carrots, onions, and desho grass saw an increased adoption ranging from 85-88%. Potatoes, cabbage, and gomen emerged as the most cultivated crops, experiencing growth rates between 96-97%. However, during the field visit, the changes were visible mostly in the house gardens and not in the fields. Additionally, 56% of respondents reported producing compost. Notably, 61% of compost producers had been doing so for the past five years, and 80% of them were model farmers. In the realm of livestock rearing, respondents were asked about their experience with silage production and feeding animals over the last 5 years.

The Gamo project boasts a highly successful and promising example of vermicomposting, as highlighted during discussions with the Soil expert from the newly established Department of Soil Fertility.

According to the Gamo project coordinator, the introduction of new crops like chaya, cabbage, pigeon peas, and medical herbs was successful. The farmers focus especially on the activities, which have the potential to generate additional income. The project coordinator emphasized the user group's potential for income generation through diverse ventures such as bananas, seedlings of avocados and mangos, watermelon, moringa, and sweet potato cultivation. Efforts are underway to transfer maintenance responsibilities to the user group, with a detailed list of sustainable activities outlined. The user group, comprising 18 individuals, with 10-12 being the most actively involved, demonstrates a commitment to the project. They are

several reasons. Firstly, diverse crop production enhances people's access to a more nutritious and varied diet. Secondly, it contributes to the resilience and sustainability of local agroecosystems by promoting biodiversity and reducing dependence on a limited set of crops. For more details see the IndiKit website.

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⁵ The Farm Diversity Score is a metric that quantifies the variety of crop types cultivated by households. The indicator specifically calculates the average number of different crops grown by the target households during the specified period. A higher Farm Diversity Score indicates that households are cultivating a broader range of crops, which is crucial for

trendsetters in the area, setting an example for others to follow. The coordinator expresses confidence that at least 50% of farmers in the vicinity have adopted project initiatives, with an annual training outreach to 100 farmers. While the implementation of fishponds presents challenges, other activities, like the cultivation of various new crops is considered more accessible.

The survey results from the Gamo project provide insights into agricultural production trends over the last 7 years. Notably, there has been a considerable decline in crop production, with a reduction of 23% in the belg season and 34% in the meher season. Vegetable farming also saw a decrease of 13% during this period. Conversely, fruit production exhibited a positive trajectory, experiencing an increase of 32%. A comparative analysis between model farmers and non-model farmers revealed that model farmers witnessed an average decline of 23% in the production of crops, fruits, and vegetables, while non-model farmers recorded an average increase of 31% across all productions. A similar pattern emerged among cooperative members, with non-members experiencing an average 20% reduction in production, contrasting with a 2% increase among cooperative members.

Additionally, respondents in the Gamo project area were asked about the initiation of growing various crops in the last 7 years. For pigeon pea, chaya, grafted avocado, watermelon, eggplant, and aromatic/medicinal plants, more than 75% of respondents reported never planting these crops. However, in the case of the improved papaya variety (dwarf papaya), 53% of respondents had initiated cultivation, with 68% of those who hadn't, belonging to Chano Mile. For cassava, sweet potato, orange-fleshed potato, grafted mango, and coffee, over 60% of respondents had commenced cultivation, with a notable predominance of Chano Mile farmers among those who had never grown these crops. Furthermore, 79% of respondents indicated that they had produced vermicompost, highlighting a significant adoption of this sustainable farming practice.

Economic benefits of new farming practices and crops, including increased grass production.

Perceiving economic benefits is crucial for the success of any intervention aimed at increasing the environmental sustainability of farming and its impact on the quality of soil. The necessity to observe economic benefits has been stressed during interviews with DAs and woreda officials and was also confirmed in interviews with other donors. This need was especially stressed by the representatives of GIZ who claim, that in their projects aimed at landscape management and sustainable agriculture the presence of a "quick win" is a crucial factor of the farmers' accepting and implementing any innovation. The effect of the introduced farming practice and/or crops must be evident very quickly, within the first year of implementation of the project – otherwise the level of introduction of the innovation is low and does not achieve the critical mass necessary for dissemination within the community.

The level to which the farmers observed economic benefits of new farming practices that were introduced within the scope of the CSA / conservation agriculture is rather low. It has been rather rare that farmers observed clera economic benefits of these practices. Only in one community the profitability of intercropping (maze with beans) has been generally confirmed. Another agricultural practice that was seen as beneficial was changing the direction of tillage (horizontal to the slope instead of vertical) – although this change did not have direct effect on yields, farmers did recognize that it decreases the negative effect of heavy rain on their field.

On the other hand, a positive change in animal husbandry practices has been observed in nearly all the visited kebeles. Namely, the practice of free grazing of cattle was abandoned in favor of cattle being fed in the vicinity of the farmers homes. The key impulse for this change was the introduction of area closers which was aimed at lands that were previously used for free grazing. However, farmers unanimously recognize that this change, along with access to grass from closures (cut and carry system) has significantly increased the milk yields of cows (for example of increase from 0,5 litre to 4 litres during the field visit). It is in line with the government strategy to focus on a lower quantity of cattle and higher quality cattle breeds leading to increased milk production per cow.

In effect, the production of grass, most notably Desho grass, has spread across the target region (although mostly in Alaba and Silte zones), which not only further strengthen the practice of home growing cattle, but in many cases also bring additional source of income – namely from selling grass. Also, the cut and carry system brings additional income to the community: in one of the kebeles it was even stressed that due to the income from selling grass that was grown on communal land (within the closed off areas) the school building could be repaired.

Moreover, the Kembata-Tembaro project also included training on silage preparation and urea treatment. Both practices are very relevant in the context of the supported communities and show strong potential to further increase the efficiency of animal husbandry. However, the technology was not adopted by many

farmers according to the local institutions since the technology/procedure requires excessive care and attention and sometimes the farmers failed during their first trials.

In some of the regions it has been observed that support led to higher usage of compost (or vermicompost) as a substitute for artificial fertilizers. It needs to be noted, however, that this increase is largely due to sharp increase of prices (and decrease of supply) of mineral fertilizers that is currently experienced in Ethiopia. Support promoting ecological fertilizers was, in this context, provided in the right time and at least part of the farmers clearly benefited.

Economic benefits of implementation of NRM measures were also observed on the fields – some farmers observe that pieces of land that could not be used for farming due to erosion is now fertile again, thus new fields could have been established. However, these are mostly used for growing cash crops.

Some evidence of economic benefits from introducing new crops have been also observed. However, these benefits are rather limited to:

- Growing vegetables, most importantly tomatoes, for which there is sufficient demand. This was confirmed especially in Kembata Tembaro zone, where even the zone administration maintains that a significant increase in tomato production has been observed in effect of the CDC support. This effect has been observed also in the survey as only 14 % of respondents do not grow tomatoes at all and, on the other hand, more than two thirds of respondents started to grow tomatoes in the last 5 years. However, the potential of this economic benefit has not been fully taken advantage of due to lacking irrigation which was not solved in the project.
- Growing fruits, especially avocado and new varieties of mango.

However, introduction of new plants, such as pigeon pea, that are in line with the CSA principles is, overall, rather low – primarily because farmers do not observe sufficient economic benefits (as it has highlighted in some of the focus groups). Also, the observed increase of vegetables production is often limited to home gardens and has only a small impact on incomes of farmers (with the exception of tomatoes). Overall, the production of maize and cash crops (which are often grown with high fertilizer and pesticide dozes) prevails and effects of the support on introduction of new crops has been rather limited.

Adherence to rules and bylaws set up in closures.

Closures were introduced in two of the three supported projects, namely in Alaba/Silte and Gamo projects. In the course of the evaluation mission, we have visited three closures in Alaba/Silte projects (namely in Lay Bedene, Kulufo, and Feten) and one closure in the Gamo project (Chano Mile / Chano Dorga; the other closure that was set up in higher in the hills in Kolla Shara could not be visited due to security issues – access to the area was restricted by security forces due to recent unrest).

In Alaba/Silte project it is evident that the agreed-upon rules are followed. The closure areas are very well prospering, and the soil is clearly regenerating. The good pace of restoration of the severely affected areas is due to proper technical implementation of NRM measures and, even more importantly, implementation of not only physical, but also biological measures (such as trees and grassing of the terraces / gully closures and other measures). No evidence of cattle grazing or illegal wood cutting has been observed in the areas. This has been confirmed during focus groups with technical voluntary farmers / members of the watershed committees as well as ordinary farmers. Local inhabitants not only observe positive effects of the regeneration of the closed-off areas (see above), but also benefit economically from selling grass surplus within the established cut and carry system.

The opposite is the case in the closure established under the Gamo project. Even during the evaluation visit we have observed free grazing cattle in the enclosure and most trees were cut down to produce charcoal. In effect, it has been observed that the (uncovered) soil is yet again deteriorating due to negative effects of erosion. Terraces / micro basins that were constructed in the area within the project are still largely standing, however, almost all the trees that were planted in these micro basins are gone. It is evident that unless an extensive intervention is implemented soon in the area, it will in time return to the pre-project status and farmers in the lowlands will, consequently, be again suffering from flash floods and runoffs – the slopes will lose their capacity of water retention and slowing down the runoff. Reasons for this status quo are discussed below.

Maintenance of implemented NRM measures and their sustainability.

Benefits of NRM measures are observed unanimously by all farmers in the project target areas. Similarly the results of focus groups as well as survey among farmers⁶ clearly show that NRM measures are perceived as the most important benefit of CDC support, disregarding whether farmers were directly supported or not.

In the Kembata-Tembaro project survey, participants were questioned about their involvement in soil restoration activities on communal land in their kebele over the last 5 years. A notable 68% confirmed their participation in various soil restoration activities during this timeframe. Among these participants, 51% indicated that they had implemented measures to mitigate soil erosion and restore degraded soil on communal land. Common measures employed included tree planting, grassing, and the use of sandbags. Participants were also asked about the perceived impact of these measures on reducing erosion and enhancing soil productivity. The majority, 38%, reported a high contribution, while 33% acknowledged a medium-level impact. Only a small percentage, 3%, stated that the measures had no discernible contribution to addressing erosion and improving soil productivity.

As part of the Gamo project survey, participants were questioned about their engagement in soil restoration activities on communal land in their respective kebeles over the past 7 years. Remarkably, a significant 96% of respondents confirmed their involvement in various soil restoration activities during this timeframe. Among the measures employed by participants to mitigate soil erosion on their individual farms, the most prevalent were water diversions (27%), the use of stones (27%), and the construction of soil bunds (15%). These findings underscore a high level of community participation in soil restoration initiatives, reflecting a collective effort to address soil erosion in the surveyed areas.

"We did not believe that the land we considered dead could function as a field again thanks to the activities of the project. But now we see the result and we would like to continue it."

Farmer, focus group in Adancho

Qualitative data collection fully confirms these findings. As it has been already noted, several participants of multiple focus groups expressed their appreciation that implemented NRM measures that led to sedimentation of silt in closed-off gullies, in the effect of built terraces, etc., significantly increased the fertility of degraded fields (respondents estimate that the yields on those fields have increased 7 – 10 times). In some cases, even new fields could have been established on reclaimed land in areas that were not suitable for farming before the projects (used mostly for growing cash crops, thus contributing significantly to the livelihoods of supported farmers). Another positive effect that has been largely appreciated and agreed upon by the participants of focus groups and individual farmers is lower occurrence of floods, landslides, and loss of arable land due to runoff. Similarly, fruit producers in downstream region have observed positive impacts of activities implemented in the hills in Gamo zone. Implemented NRMs have stopped erosion in the vulnerable slopes and consequently directly protected their orchard and nursery.

Among indirect effects of the implementation of NRM measures the following have been highlighted:

- In Feten kebele local farmers and administrators have observed that several households have earlier migrated out of the region (to Alaba town) in direct effect of unavailability of fertile land and frequent floods and runoffs. After the NRM measures have been implemented, these people have returned to their dwellings in the Feten kebele.
- Closures of vulnerable slopes have been established on communal land that used to be used for free grazing of cattle. In effect of these closures, as well as other measures (promotion of grass strips, sowing of Desho and Elephant grass, better knowledge of animal fodder and correct feeding strategies, etc.) free grazing was eliminated to a large extent (especially in Alaba/Silte project target regions, less so in Gamo zone). This change in husbandry practice has not only led to higher yields of milk, but also indirectly contributed to higher school attendance as children were in the past the ones who took care of free grazing cattle.

In conclusion, farmers have experienced overly positive impacts of implemented NRM measures on communal land as well as on their fields and express their desire to carry on in these activities. However, in several target regions where the project support has phased out about 2-3 years ago a discontinuation of these

⁶ For example, in the PIN 2019 end-line survey 99% of the targets responded that they have gained sufficient knowledge on biophysical anti-erosion measures which includes bunds, check dams, area closures, micro-basins, faaniyajuu, trees & grasses). 81% of the targets responded that, the anti-erosion measure has a high contribution, 15% of them responded as it has a medium contribution and only 0.5 % of them believed as it has no contribution at all.

practices and, in some cases, even lacking maintenance of implemented measures or even failure to adhere to agreed rules for closed-off areas, has been observed. This negative trend reverts, to a large extent, the positive impacts that were achieved with CDC support.

Relevant employees of woreda and zone agricultural offices are aware of the LMPs that were elaborated and implemented within the Alaba/Silte and Gamo projects. During our evaluation visits to the offices these officers were able to (physically) present these plans and demonstrated sufficient capacity to understand them and apply in planning of NRM measures in the field.

Representatives of local offices (woreda and zone levels) observe benefits and added value of existing LMPs when compared to kebeles where NRM measures are being implemented without such material. Benefits of the LMPs are, according to the zone and woreda officials, especially the following:

- Prioritization of specific deficits (e.g., gullies, eroded slopes, etc.) in planning. LMPs can identify the key issues and suggest specific response to this issue. In effect, in planning of construction of NRMs (within the Watershed campaign month), woreda specialists and members of local watershed committees / technical voluntary farmers are capable to focus on the cause of the perceived land degradation, rather than on its effects (i.e. they are not trying to solve specific problems that are demonstrated on farmers' fields, but focus on the root cause of these problems that is usually located higher up on communal land).
- LMPs provide also valuable support for multi-year planning, thus works implemented throughout the years (during Watershed campaigns that usually take place in January/February) can follow up on each other.
- To some extent the specialists also appreciate the fact that suggested interventions are "tailor-made" for the specific problems (based on in-depth knowledge and data on soil composition, etc.). However, this benefit has been brought up only occasionally as it seems that the woreda specialists are rather using general guidelines for implementation of specific interventions based on the interviews with them.

In effect, woreda and zone representatives agree that the recultivation and soil restoration activities are better implemented in target kebeles, compared to non-target ones and their results are better as well. However, in this regard it is not possible to isolate the effect of existing LMPs from other added value that CDC support brings, vis-à-vis "standard" implementation of anti-erosion and soil restoration measures, especially better technical capacity, and knowledge, focus on biological measures (including delivery of inputs) and, finally, the "spotlight" effect discussed above.

However, despite these benefits which are correctly identified by woreda and zone officials, it has not been observed that such practice would be replicated in other kebeles or for specific watersheds. Neither were any of the elaborated LMPs update or amended in any way. Based on individual and group discussions with woreda and zone officials it is evident that they consider the standard practice to be sufficient. Necessary interventions are generally outlined in the "Watershed management plan", which covers a larger area and is rather general. These plans are accompanied by general (national) guidelines on how to solve specific issues and how to correctly implement selected interventions. Based on this, there is a planning phase that precedes the Watershed campaign, during which the specialists of woreda along with Watershed management committees and/or technical voluntary farmers plan on-site which issues will be targeted and what interventions will be implemented. The purpose of LMPs was to "bridge" this overall management plan and operational implementation of NRM measures. However, despite the representatives of local administration do observe added value of this "bridging", they see their current practice as sufficient (thus LMPs are, from their point of view, "nice to have", but not essential). In this regards the efficiency of these activities needs to be discussed.

Investments in water collection infrastructure, processing equipment and in the Permaculture center and their sustainability.

In the Kembata-Tembaro project, the activities related to the irrigation water channel in Lesho, have encountered significant challenges, as outlined by local institutions. Unfortunately, a substantial portion of the channel supported within the previous project remains unconstructed, rendering it non-functional. Woreda was expected to invest into repairs (combined with the CzDA support for pumps and water tanks). Despite an initial estimated cost of 400,000 birr on woreda level, the awarded company secured the tender with a bid of only 100,000 birr, proving insufficient to complete the project. Consequently, the company left with part of the funds, leaving the channel in disrepair. Presently, there is no allocated budget for repairs or construction. The regional budget is stretched thin even for salary disbursements, implies that the reconstruction of just one kilometre of the channel could take up to seven years. The whole length of the

irrigation canal is 3.8 km of which only the first 300 meters is functional, and only 20 (20%) of the farmers, residing within the 300 meters range, benefit from the irrigation.

According to representatives from local institutions, experts diligently monitor construction at different stages, overseeing 7 or 8 irrigation schemes in the woreda. However, supervision is limited to the dry season, and the challenging nature of cleaning the Lesho irrigation scheme, primarily composed of soil rather than concrete, requires more labor than is currently available. The last visit occurred a couple of months ago, and an upcoming expert visit is anticipated to yield quantifiable data. Despite experts monitoring technical aspects, concerns about cracks and tilted columns were raised during the evaluation team meeting. Increased cooperation and support from donors are sought to address these challenges and ensure the project's success.

The evaluation team visited not only the irrigation water channel in Lesho, but also the communities which received the pumps and processing equipment within the Kembata-Tembaro project. The equipment was locked in storage. Some of the equipment was clearly never properly used. According to the local officers, this equipment was handed to the cooperatives without their knowledge and therefore they don't feel responsible for the current situation. If communicated properly, they could ensure that the farmers are trained, and the equipment is being used. They missed a local focal point person, who would communicate everything during the project implementation. The training should be carried out in the right season and there should be enough training materials prepared. The local cooperative members expressed worries about the proper use of the pumps although they have some ideas about how it could be utilized. They are not sure if it will be profitable given the increasing fuel prices and they would prefer solar pumps. Some additional guidance is necessary for the proper use of this equipment.

Individual water tanks distributed to community members were utilized, particularly for gardens, including one instance for cultivating chat⁷ as a cash crop in the Kembata-Tembaro project. Cooperative members had the option to rent a water tank for a year at a fee of 1,000 birr, a cost they perceived as reasonable, witnessing a significant increase in produce. The water supply was deemed sufficient in all visited cases, with one family even having two water tanks. However, the potential for more effective use lies in combining these tanks with pumps to distribute water more efficiently across fields. Growing interest from cooperative members in renting these water tanks has led to the establishment of fair rotation systems within cooperatives, overseen by their representatives. Continuous monitoring of these fair distribution schemes by the Czech Development Agency is crucial if these activities will be further supported. Like the introduction of new crops, this initiative brings early successes, motivating farmers to innovate and experiment with new crops and agricultural practices. Ongoing support and training on the best practices and utilization are necessary for sustained success.

Innovations regarding cooking and eating habits and their effects on the nutritious value of local diets.

In some cases, the crops, that were introduced, were well-known in the communities even before the project. The families were buying some types of vegetables and fruits in the market. However, the project supported them in planting them on their own.

As part of the Kembata-Tembaro project, a significant focus was placed on human nutrition through a targeted training initiative. A total of 120 women underwent comprehensive training to enhance their knowledge and skills in preparing nutritious meals using locally sourced ingredients. The impact of this initiative was evident in the observed behavioral changes among participants, as their dietary habits shifted from simple meals such as bread and cabbage to incorporating a more nutritious range of foods, including fruits (e.g., avocados) and legumes. The local authorities actively monitored these changes, with regular visits to witness firsthand the positive transformations in the community's dietary practices. Notably, the Woreda, through its nutrition office, played a pivotal role in providing ongoing training on nutrition, further contributing to the overall well-being of the community.

The survey results from the Kembata-Tembaro project noted some dietary changes among respondents. A total of 58 % of respondents answered that either they or someone in their household had received training. When questioned about altering their diet by incorporating a greater variety of food types for cooking, 82% of participants concurred with this transformation. Furthermore, 60% of respondents noted a consistent or notable improvement in food security over the past five years. During the female focus groups, the women

⁷ Chat is regarded as a highly profitable cash crop. However, considering the WHO's classification of it as a drug, the Czech Development Cooperation may contemplate restricting the allocation of limited resources provided within projects for further support of planting such crops.

usually didn't talk about participating in these activities. They also mentioned the lack of access to the seeds for new types of crops in poor households and the lack of female participation in other training.

In the Gamo project survey, participants were also asked about changes in their dietary habits, particularly whether there was a shift towards using a greater variety of food types for cooking. Similarly, to the Kembata-Tembaro project, 75% of respondents affirmed this change. Notably, 95% of those who disagreed with this statement were from the Chano Mile kebele. Additionally, 76% of participants reported a frequent or significant increase in food security over the last five years. A total of 54% of respondents indicated that either they or someone in their household had received training on nutrition. Conversely, for those who answered negatively, a significant majority (83%) were from the Chano Mile kebele. The survey shows that people have different opinions on changes in diet and food security in the surveyed communities with much lower satisfactory results in the Chano Mile kebele.

The evaluation revealed that the food processing activities, integral to both the Kembata-Tembaro and Gamo projects, did not show significant success. The equipment provided under the Kembata-Tembaro project remained unused, with local communities (especially women) expressing a lack of training in its operation. While the currently ongoing Gamo project included plans for fruit processing activities, the reported utilization of the equipment was limited to drying grains, which raised questions about the effectiveness of the allocated funds. Fruit processing, primarily drying, faced numerous challenges in both project areas, including the local population's preference for fresh fruits over dried ones for household consumption and the limited demand for dried fruits in the local markets. This sheds light on the need for more tailored and context-specific approaches in implementing food processing initiatives. The related material support, which was utilized and highly appreciated within the Kembata-Tembaro project was the distribution of metal pots and pans decreasing the needed amount of fuel while cooking.

The incorporation of cooking and nutrition awareness initiatives targeting women represents a positive trend in Czech development cooperation, emphasizing a broader perspective on nutritional challenges within the agricultural sector. However, focusing exclusively on women in these activities, without actively encouraging their participation in other, especially income-generating activities, may perpetuate exclusion and reinforce stereotypes by primarily channeling other know-how and material support to the male household members. While women in all project locations demonstrated a keen interest in participating and expressed their ideas and needs during the focus groups and interviews, these aspects were not fully addressed. Concerns raised by women included the lack of support for low-income households and child malnutrition. They also expressed a strong desire to increase family incomes. During two focus groups, a lack of female participation in training and decision-making processes was addressed by the participants. The project designs should be responsive to these concerns, striving for inclusive practices that consider vulnerable community members, such as women, older individuals, one-parent households, and low-income households, aligning with sustainable development goals and bilateral development programs.

In the PIN 2019 end-line survey, the beneficiaries were also questioned on whether they had enough food for their family members within the last 12 months. Based on the data collected, 75% responded yes and 25% of them responded, as there were no months, they faced food shortage.

Replication of project initiatives outside the target regions.

Replication of project activities / gained know-how outside the directly supported target regions, and thus multiplication of their achievements, has been rather rare.

Generally, there may be two mechanisms how such multiplication can be achieved. In the first mechanism multiplication is brought about due to close cooperation between donors, implementers, NGOs/INGOs and other relevant stakeholders. If appropriate platforms for exchange of know-how and good practice are established along with functioning communication lines, best practices achieved in supported projects can be diffused to the approaches of other implementers and projects or programmes. The second mechanism relies on close cooperation between supported initiatives and local / regional institutions. If supported activities are sufficiently embedded in the mechanisms and processes of relevant institutional framework, there is a potential that added value that these initiatives bring to standard operation of these institutions can be mirrored also in other regions. This mechanism thus relies on learning and capacity building on the part of institutional structure.

As it was indicated above, interaction between projects supported by CDC, resp. their implementers and/or other stakeholders (such as the CzDA or Embassy) with other donors and relevant stakeholders is minimal. In this deficit of systematic exchange of knowledge and good practice any multiplication is difficult to achieve. No evidence of such multiplication has been empirically identified.

The second mechanism is more likely to materialize as it has been shown that at least in two of the supported projects a strong emphasis has been placed on cooperation with zone and woreda institutions and embedding the project activities in "standard" framework of agricultural extension services and landscape management strategy. However, it has also been shown that in most cases the ownership of project outcomes on the part of local institutions is rather insufficient – even sustainability of activities in landscape management in target regions is problematic after the project phase-out, let alone their multiplication in other regions. It can be concluded that such multiplication led by local / regional institutions did not occur naturally unless there is an external pressure.

One of such examples has been identified in the Gamo project. In this project, farmers were, among other, introduced to the agricultural practice of vermicompost - as a sustainable substitute to application of artificial mineral fertilizers. Adoption of this practice on the part of local farmers has been observed in the field and it has also been, to some extent, confirmed quantitatively by the survey (ca. 24 % of respondents have recently started to produce vermicompost; most of them were, however, model farmers and/or cooperative members). This diffusion of the agricultural practice among farmers has been facilitated by the local project coordinators, who are, at the same time, employed at regional / zonal agricultural offices. However, as it has been mentioned above, there is a significant lack of fertilizers in Ethiopia as whole in recent years and in effect, the price of fertilizers has skyrocketed, making it for many farmers too expensive even if available. In effect, the zonal and woreda agriculture administrations have started to promote vermicomposting across the region as an affordable and environmentally friendly alternative to mineral fertilizers. Zonal administration has been bringing this practice to other woredas (buying worms from the Permaculture centre established within the project) and to FTCs in other target kebeles and relevant model farmers. In effect, the representatives of zone administration estimate that ca. 73,5 tons of vermicompost have been produced in the last year (which ended in September) and their plan is to scale up the production of vermicompost in other woredas and FTCs to such extent that as much as 3500 tons of vermicompost will have been produced in the following year.

Limits to diffusion of innovations: barriers, conditions and external factors and their reflection in intervention logic:

Intervention logics and, more generally, project documentations of all three implementers did consider risks and barriers related to low mobilization and interest at the level of kebeles and farmers, risks related to climatic conditions and threat of extreme weather and climatic events (drought, floods, etc.) as well as political stability. To some extent also risks and potential barriers related to administrative processes and engagement of administrative structure was considered.

However, it has been shown that insufficient ownership on the part of administrative structure has been one of the key barriers to long-term sustainability of project outcomes, especially regarding continuous construction of NRMs (including biological measures) and maintenance of the existing ones. This bottleneck is primarily caused by two issues, namely insufficient motivation of officials especially at woreda level and high degree of fluctuation of DAs. Some of supported projects did partially take these risks into account by targeting specific capacity building activities at the employees of administrative structure, whereas other projects did not work with these risks at all, targeting almost exclusively the kbele / FTC levels with capacity building. The evaluation, however, shows that these issues were in general not taken sufficiently into account.

Key importance of high degree of motivation and mobilization of local administrative structures for sustainability of outcomes was confirmed also in interviews with other donors / stakeholders, most significantly in the interview with GIZ representatives⁸.

In this regard the evaluation also showed that well planned, discussed and implemented coordination with local institutions is a crucial factor for the success of the project. Responsibilities and tasks of various institutions relevant for project activities (horizontally – agriculture office, water and irrigation office, cooperative office – as well as vertically) need to be clearly formulated and agreed upon. Including in this administrative setup must be identification of focal persons in relevant offices who are accountable for implementation of tasks and responsibilities assigned to their institution as well as clear coordination and monitoring mechanisms. The evaluation clearly shows that shortcoming in this area can a fundamentally

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⁸ Importance of these factors in GIZ projects can be demonstrated by the fact that this donor regularly assesses the engagement of local administrative structure and if the motivation and mobilization of zone / woreda officials is not sufficient, the support for those locations is phased out.

negative effect on proper implementation and sustainability of project activities and outcomes. This was especially the case of the Kembata-Tembaro project where the lack of clearly defined coordination and monitoring mechanisms (with lacking focal points at offices that should be involved in the implementation) led to a situation where it is not clear whose responsibility it is to address issues related to project outcomes.

Another key external factor that was not sufficiently considered (at least not in all projects) has been the element of cooperation of kebeles in the targeted watershed – including the coordination of such interactions on the part of woreda institutions. This deficit, together with various, especially security factors, had a devastating effect on the sustainability of soil rehabilitation activities in the Arba Minch Zuria woreda (Gamo project). Situation in this has been complicated by the specific delimitation of administrative borders between kebeles. In their effect, the targeted degraded slopes caused serious damage in Chano Mile kebele, however, it is in Chano Dorga administrative borders. As a result, it was the farmers from neighbouring kebele who did benefit from implemented NRM measures on the slopes whereas farmers from the kebele to which these slopes belonged did not experience any direct benefits but had to bear limitations - economic activity in the closed-off area, such as free grazing or use of natural resources (e.g., logging wood) was banned. The project did try to set up a compensating mechanism - farmers from Chano Dorga were supposed to benefit from cut and carry system (cutting grass in the closure and either selling it or feed it to their own cattle) as well as beekeeping and other activities that were permitted in the closed off areas. However, these benefits could not be taken advantage by all farmers – only selected farmers did set up a cooperative which was supposed to take care of maintenance of the area as well as enforce compliance with agreed rules and bylaws. This setup was too fragile to sustain the achieved outcomes in the closure area. Most farmers in the area did not feel any direct benefits (neither environmental nor economic) of the intervention and were not sufficiently motivated to adhere to the rules. Along with that, there was a period of instability and security issues in the area, during which groups of people who were not local inhabitants but were concentrated in the region as day workers on local banana fields illegally cut trees and grass in the closed-off area. In effect, the cooperative did not have any income to sustain maintenance and oversight of the compliance of the rules (could not pay the wages of wardens) and the whole system collapsed. Consequently, it has been observed that the area is yet again severely damaged by free grazing and most of the trees were cut down for charcoal production. The key cause of this failure can be attributed to the fact that cooperation between kebeles was not sufficiently set up and monitored so that all farmers would observe benefits of the intervention.

One last factor that was not sufficiently considered and did significantly affect the outcomes was, in general, interventions of national institutions that affect local farmers. One of the examples of such activity was discussed above, namely the government strategy to ensure self-sufficiency of Ethiopia in wheat production. In effect, farmers were forced to start growing wheat on land plots that were set up for production with higher added value, such as production of vegetables (especially tomatoes). This external factor significantly limited the efforts of implementers to diversify local production and increase the diversity of diets of farmers. Especially in Kembata-Tembaro project it also affected the (already limited) effect of activities aimed at increasing the irrigation capacities of farmers – land plots that could be irrigated with supplied equipment and thus used for growing vegetables have been used for wheat instead.

5. Evaluation conclusions

5.1 Outcomes and impacts of CDC support regarding soil conservation and mitigation of negative effects of erosion; increasing the resilience of farmers to climate change

- 1. Implementation of interventions aimed at stopping the spread of erosion and rehabilitation of eroded land were successful. In all visited cases the land was visibly restored, and erosion was stopped. This clearly increases the protection of downstream communities from negative effects of extreme weather as well as stops the loss of farmland quite on the contrary, farming on new plots that were previously not useable for farming practices was enabled. These effects were empirically observed as well as confirmed by all involved stakeholders.
- 2. A very high level of "buy-in" on the part of farmers as well as administrative structures regarding NRM measures and soil conservation activities in general was observed.
- 3. Farmers experience and appreciate positive effects of NRM measures and are mostly motivated to adhere to agreed-upon rules restricting the use of natural resources from vulnerable areas (enclosures) and are motivated to carry on in construction of further NRM measures, provided they receive sufficient support and inputs.
- 4. On the other hand, a level of implementation of soil conservation measures on own fields was rather less frequently observed as farmers are rather motivated to maximize their profits in given context and conditions. Also, many farmers think that the conservation structures take away some of their land out of production, although this is not the case.
- 5. Representatives of administrative structures observe that soil conservations supported by CDC projects (Alaba/Silte project and Gamo project) generally show significantly better results than similar interventions implemented within the standard approach to landscape management implemented solely by local institutions.
- 6. One of the key good practices in the approach of CDC supported projects to soil conservation and rehabilitation is their strong rooting in national policies and institutional framework with regard to landscape management. Activities of the implementers are realized along with the relevant institutions of zone and woreda levels and lean on resources mobilized by local institutions within the Watershed Campaigns. Projects supported by CDC are bringing added value to this process, thus maximizing synergies with government-organized approach.
- 7. Added value of the CDC support lies primarily in:
 - Technical capacity building of relevant representatives of local administration (NRM specialists of woreda / zone agricultural offices) as well as local farmers members of Watershed Management Committees and Technical Voluntary Farmers
 - A more comprehensive approach to systematic rehabilitation of soil and strengthening of ecological stability of the watershed, embedded in Landscape Management Plans (see below).
 - Accompanying the construction of physical structures (terraces, gully plugs, micro-basins, etc.) with biological measures (sowing grass, planting trees, etc.) which significantly strengthen their effect.
 - "Spotlight effect" engagement of implementers and their linkages to institutional structure on all relevant levels of their hierarchy (woreda, zone, region) brings visibility to the interventions in selected kebeles and, in effect, strengthen the mobilization of farmers and, more importantly, employees of local administration.
 - Additional material support (especially regarding biological measures).
- 8. However, it has also been observed (across all projects, although to various extent) that after support phases out, the mobilization of local administrative structures and their motivation to sustain and further develop achieved results in soil restoration and mitigation of erosion significantly drops. This is mainly due to insufficient ownership on the part of key woreda / zone officials as well as high fluctuation rate.
- 9. In effect, sustainability is clearly at risk. Extreme example of this risk was observed in the Gamo project, where insufficient ownership coupled with lacking coordination of local stakeholders, not optimal exit strategy and unfavourable eternal factors, especially the ongoing security issues in the area, led to an

- almost complete reversal of achieved results unless direct intervention is urgently implemented, the area of the treated watershed will return to pre-project status.
- 10. Added value of elaborated Landscape Management Plans has been clearly confirmed. LMPs enable a more systematic approach to solving the causes of erosion-related risks as well as multi-year planning and clearly increase the capacity of local stakeholders regarding NRM measures, including technical knowledge of their proper implementation. LMPs are clearly one of the reasons why soil rehabilitations of areas that were supported by CDC are more successful than other ones.
- 11. However, no replication of this approach was observed outside the target kebeles / micro-watersheds. Representatives of local administration structure do recognize added value of LMPs, however, assess current practice to implementation of NRM measures as sufficient. Clearly it cannot be expected that local institutions will on their own replicate this good practice.
- 12. Promotion of participatory planning of NRM measures (instead of the prevalent top-down approach) is clearly also a good practice brought about by the CDC support.

5.2 Impact of CDC support on agricultural practices

- 13. Collected evidence show, that support from CDC played an important role in reducing or even elimination of free grazing of cattle in supported areas. The following activities of supported projects were instrumental in achieving this outcome:
 - Established enclosures on vulnerable communal land where free grazing used to be practiced.
 - Enclosures coupled with introducing of cut and carry system which enables local farmers to use grass from enclosures for feeding.
 - Promotion of desho grass and (to a lesser extent) elephant grass, pigeon pea and other plants suitable for feeding of cattle in target kebeles (along with government pushing also for increasing the plots of grass production), especially on the edges of vulnerable fields and on less productive arable land.
 - Capacity building regarding feeding strategies and fodder production which clearly increase the productivity of cattle.
- 14. Key reason for faster adoption of the new husbandry practice (i.e., abandoning of free grazing) is the fact that farmers immediately observe sharp increase in milk production of cattle. It has been shown throughout the evaluation that this kind of "quick wins" are an essential factor in adoption of innovations in agricultural practices.
- 15. Some success of implementation of CDC support has been also observed regarding diversification and introduction of new crops that should, among other, contribute to sustainable farming. Average number of cultivated crops has increased across all project regions. Moreover, this increase has been recorded by both, model as well as ordinary farmers. This finding suggests that some rate of diffusion of innovations can be observed (however, the average number of crops grown by model farmers and/or members of cooperatives is still significantly higher than in the case of non-model farmers / non-member).
- 16. However, this increases in diversification is almost exclusively due to the increase in the number of vegetable and fruit sorts grown at home gardens (i.e., for own consumption). This has a positive impact on the nutrition of farmers, however, impacts on the livelihoods of farmers are limited.
- 17. Among plants that have been introduced to larger-scale farming and do positively impact farmers' incomes is the above-mentioned production of grass, especially desho grass and (to a lesser extent) elephant grass or pigeon pea. Several farmers have increased this production to such levels that they are selling surplus on the market.
- 18. Some increase in tomatoes production to be sold on market, which is partly due to the support of the evaluated project (Kembata-Tembaro project), has also been confirmed. However, the potential of this impact has largely not been used the increase in tomatoes and other vegetables production could have been significantly higher if the component of the project aimed at strengthening access to water had been fulfilled.
- 19. Similarly, the penetration of farming practices compliant with the Conservation agriculture / CSA principles has been rather limited. The uptake of intercropping has been verified in some areas; a notable number of farmers also introduced changes in tillage practices.
- 20. In general, a significantly higher rate of uptake of innovations, such as changes in agricultural practices or the introduction of new crops on a larger scale has been recorded in communities where support from

- implementers has been provided systematically (including refresher training and capacity systematic capacity building of DAs that was also reflected at respective FTCs) and for longer periods.
- 21. Higher penetration of innovations is conditional on farmers' experience of their profitability. Farmers tend to implement these innovations if they experience direct benefit in short period of time ("quick wins"). If the benefits are to be manifested in longer timeframe, farmers tend to implement these innovations in a limited scale or not at all and focus on crops and practices that they consider more profitable. As it has been shown above, the adoption of change in husbandry practices can be attributed to the presence of such "quick win".
- 22. Another agricultural practice that was successfully introduced and there is clear evidence of its diffusion among farmers is the use of organic fertilizers, such as the practice of composting and, even more significantly, vermicompost.
- 23. Practice of production of vermicompost that was introduced with the support of evaluated project is even being scaled up by the zone and woreda administrative structures and has potential to affect many farmers even in regions that were not targeted by the support.
- 24. The primary reason for this success of introduction of a sustainable farming practice lay primarily outside the control of the project it is mainly a reaction to sharp increase in price of artificial fertilizers and their inaccessibility. Introduced farming practice thus fills the gap created by external factors.
- 25. It is evident, that one of the key reasons for the fact that a good practice promoted by a CDC supported project is being upscaled by the relevant institutional structure and extension services is not only sufficient technical capacity of trained members of cooperative and model farmers, but even more the close interlinking between project staff and local institutions (including personal overlap respected and motivated employee of relevant agricultural office in the position of project coordinator).
- 26. No evidence of an uptake of processing of fruits and vegetables, that was promoted by some projects, by cooperative members has been observed.

5.3 Conclusions regarding added value of various types of implementers (EQ 3)

27. Kembata-Tembaro project showed strengths especially in analysing and understanding needs of target groups. It brings very relevant innovations which are well aimed.

28. However, the actual effect of the support on the ground was low. This is partially caused by the failure of previous project; however, the key reasons were sub-optimal implementation capacity lacking proper coordination with key stakeholders, low involvement of local structures and absence of long-term presence in the region. In effect, lack of clear coordination with local stakeholders and definition of tasks / accountability was observed resulting in very low ownership of project outcomes which undermined the successful implementation and sustainability of the promoted practices. Practical impact of these shortcomings is, among other, the fact that it is not clear who (which institution) should follow-up on the project activities and resolve problems that show up⁹.

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⁹ Clear example of this is the issue with pumps that are not being used and most of them were never unpacked. This problem was primarily caused by the late implementation of this deliverable (in the last year of implementation); however, it has a rather simple solution: farmers need to receive more technical training (how to use the pumps, how to irrigate fields properly) and training in business skills. During a joint group interview with representatives of local offices of agriculture, water and irrigation, and cooperatives it was confirmed that specialists of these institutions have sufficient capacity to provide all the necessary training. However, it is not clear who is responsible to initiate and coordinate such activities – the accountability and responsibilities were not agreed upon or clearly defined. Similarly, the practice of production of silage might be a significant benefit for local farmers, however, there was no follow-up of the training after some farmers tried to implement it for the first time, which is the key reason why the practice was not adopted despite the farmers themselves observed the benefits.

At the same time it should also be noted that one of the issues that caused the problem were to a large extent caused by the outcomes of previous project (not implemented by Geotest) were not sustained. Therefore, significant changes to this component of the project had to be introduced. Lengthy process of approval of these changes (partially caused by the selected modality – i.e. public procurement) as well as of the handover of equipment to cooperatives caused that the equipment was delivered at the end of the project implementation – thus proper trainings and other familiarization activities could not be carried out.

- 29. The added value of MendelU as an implementer is clearly its technical knowledge. In this respect, the approach of this implementer focused on creation of a "centre of excellence" where best practices in CSA (and sustainable farming in general) could be showcased and taught to the farmers.
- 30. MendelU, however, focused less that the other two implementers on a comprehensive analysis of needs of farmers. In this respect it rather focused on bringing innovations that should be applicable in local context and, to some extent, left it to local farmers or rather local project team to identify which of these innovations are relevant.
- 31. On the other hand, a significant advantage of Gamo project was the local team, most importantly the local coordinator. This strong and motivated local team was well rooted in local communities and, at the same time, has strong links to relevant institutions. In another words, it had trust of both, local farmers as well as the administrative structures. It was the role of the local team to identify relevant innovations operationally and then help with their dissemination to farmers.
- 32. In effect, the combination of strong technical capacity on the one side and active coordination on the ground on the other side led to successful diffusion of several innovations to local farmers, such as growing of more nutritious crops for own consumption (at home gardens), planting of grafted fruit trees or increased use of organic fertilizer. Thus, this combination enabled the project to generate relevant answers to some of the needs of people on the ground even if profound needs analysis was not implemented.
- 33. However, it was also shown, that this high stress on technical excellence and lower focus on actual needs and local context along with insufficient involvement of communities into the implementation contributed to the fact that another significant component of the project failed namely the soil conservation activities. As it was shown, these were very well technically implemented and, in this regard, created a good practice (excellence on how to approach erosion and soil degradation on vulnerable plots). However, the deficit in profound analysis of needs and involvement of communities was one of the factors why the maintenance system was not well established, and the rehabilitation was in longer timeframe unsuccessful. It should be noted, though, that the key factor in this respect was related to deteriorated security situation in the region.
- 34. The strong local capacity of PIN and long exposure to the population in local communities brought about are a strong added value of this implementer. Its capacity to implement grassroots type of initiatives is unparalleled by any other implementer. PIN is very well known in the local communities and has the trust of local farmers as well as institutions. Sufficient capacity of local team also enables the implementer to implement larger scale interventions with wider regional coverage effectively.
- 35. Another key added value of PIN is its long-term presence in the region and a sizable local team, demonstrating a well-integrated approach by aligning projects with other activities such as education and WASH. The partners (All for Soil) expertise, extensive presence, and a balanced ratio of local and foreign experts in training/consultancy teams contributed to a strong capacity for local coordination and project management.
- 36. PIN is also, due to its local presence, very well rooted in local institutional context and approaches and its approach to systematically involve all relevant institutions into the implementation of supported initiatives is much more effective than in the case of other implementers (in the case of Kembata-Tembaro project it was very weak and in the case of Gamo project it rather relied on individual personal links and was not sufficiently formalized / systematized). The model of involvement of relevant local institutions / focal persons by PIN is a good practice that should be applied in future projects.
- 37. However, it has been also observed that initiatives implemented by this organisation are very broad and somehow overstretched. A more focused approach should be preferred in future initiatives especially in initiatives aimed at changing the farming practices of local farmers. Namely regarding support to diversification project should focus on just a few crops that would have the biggest benefits in increasing productivity and food security of local farmers and potentially broaden its scope first in later stages when the key innovations will have been successfully adopted. It needs to be noted that this broad character of support provided in Halaba and Silte zones was, to a large extent, formulated in the call for proposals, therefore, related recommendation needs to be addressed not only to implementers, but even more importantly to the CzDA.

- 38. In general, the evaluation has clearly confirmed that strong local presence and strong links to local administration are crucial factors of success of implemented projects. Strong links to local institutional context enables synergies to be taken advantage of support in such case provides added value to the standard functions of extension services or even enables actual proper implementation of these functions.
- 39. Similarly, the longer presence of the implementer in the region leads to better and more sustainable results. The initial year is typically focused on analysis, followed by training. Therefore, less than two years are usually left for practical activities and their adaptation and monitoring. It is crucial to monitor activities across multiple seasons to ensure the proper implementation of agricultural practices and Natural Resource Management (NRM) measures. While grant and tender projects have restrictions on implementation time, it is important to incorporate long-term planning, since already there are usually multiple projects following each other in the same area. Activities with a strong focus and extended duration tend to have a higher level of sustainability.
- 40. Grants perform well in the current Czech development cooperation system because they allow implementing partners to stay in the area for a longer period. In contrast, the tender documentation from CzDA, as seen in the Kembata-Tembaro project, lacks detail and doesn't require a specific way of implementation (e.g., the long-term presence of the coordination team). It was noted that the selected modality of this project (along with other factors, such as failure of previous initiatives) was one of the reasons why sustainability of some components of this project is more problematic as it provides lower flexibility in adjusting to changes. Implementing partners are expected to design all activities without a thorough understanding of the area when preparing the log-frame and project document. Therefore, tenders should be used rather for specific technical solutions well defined by CzDA in the terms of reference. Additionally, it's beneficial to always consider whether certain soft activities, such as trainings or awareness campaigns, would be helpful and how these activities should be supported.
- 41. It has been clearly observed that the key bottleneck especially regarding sustainability is the capacity and motivation of local institutions. To overcome this weakness a stronger focus must be put on capacity building on the part of representatives of zone and woreda offices. More stress might also be put on strengthening the top-down approach if key stakeholders on higher levels of institutional structure are on board, it creates pressure on lower structures to avoid complacency after projects phase out.
- 42. Another key weakness that has been observed is insufficient coordination on the programme level. Supported initiatives are isolated and lack any meaningful coordination. This inefficiency is caused primarily by very low level of programme coordination in the priority country, the donor is lacking local presence that would enable him to coordinate activities of individual implementers and enter systematic coordination with other stakeholders as well as with relevant institutions on national and regional levels.

5.4 Identified good practices (EQ 4)

- 43. CDC supported initiatives were instrumental in promoting of profound change in husbandry practices, namely gradual elimination of free grazing of cattle. One of the key reasons for this success is the fact that farmers observed immediate benefits of the change. Projects also introduced relevant innovations regarding fodder production, which would further imprint this change in local population, however, these innovations were mostly not adopted due to deficits in implementation setup.
- 44. Supported project have promoted increase in use of organic fertilizers and especially the practice of vermicompost is being upscaled by local institutions. In this regard, support by CDC has brought a relevant response to current crisis regarding access to mineral fertilizers and successfully "took advantage" of this external factor to promote sustainable farming practice.
- 45. The elaboration of Landscape Management Plans clearly brings significant added value to watershed management activities and increases the efficiency and effectiveness of soil conservation and mitigation of erosion. However, the (technical as well as personal) capacity of local institutions (mainly woreda NRM specialists) and their insufficient motivation / mobilization clearly represent a bottleneck to adoption of this practice.
- 46. The participative approach to watershed management and planning (replacing the standard top-down approach) is clearly another good practice introduced by CDC supported projects. This approach promotes ownership and mobilization of local farmers, as it was confirmed in the evaluation.

- Understanding the benefits and "buy-in" of local population into the soil conservation activities is, among other, a key condition ensuring compliance with the rules and limitations in enclosures.
- 47. As noted above, strong position of PIN in local communities and their long-term presence are key conditions for successful implementation of "grassroots" initiatives. Therefore, the rooting of local team of PIN, its overall capacity and reach to local communities across the target region again represent a clear added value on which future projects may rely.
- 48. Selection of agro-ecologically adaptable and socially acceptable crop plants and varieties based on local needs is a very good practice that can contribute to maximizing production and lead to food and nutritional security. Such crops can contribute to sustainable farming and improved livelihoods. The cases of Desho grass, pigeon pea in all three project areas, and Chaya plant in Gamo project can be mentioned as examples.

5.5 Conclusions regarding evaluation criteria

- 49. **Relevance** of support is assessed as <u>high</u>. It has been shown that projects responded well to the actual needs of target groups as well as objectives of relevant strategies and policies of Ethiopia and CDC. Projects are mostly demand-driven, profound baseline analysis played in most projects a significant role.
- 50. **Coherence** of support is assessed as <u>rather high</u>. It has been recognised that strong reliance on institutional context and relevant processes and systems (such as the system of provision of extension services or implementation of national watershed management strategy) of some implementers clearly brought added value to the projects. On the other hand, insufficient links to relevant local institutions and unclear formulation of responsibilities and accountability was among the key factors of failure of some of the supported activities in other projects. Projects were also, mostly, well linked to previous interventions, except for Kembata-Tembaro project, where the links to previous initiatives were largely disrupted, which again significantly hampered the achievement of formulated goals.
- 51. Efficiency of support as whole is assessed as rather high. One of the good practices contributing to efficiency of support is the fact that it has been embedded to the activities of local institutions therefore projects could focus on added value and did not need to fund "normal" operation of the system. High level of coordination with local authorities thus had positive effect on the efficiency as the implementers could rely on the infrastructure and resources of these administrative structures and could therefore focus on bringing added value on the top of "business as usual". However individual cases of low and questionable efficiency have been recorded. On the level of sector, the fragmentation of support had negative effect on its efficiency and higher concentration (thematic as well as regional) is highly recommended. Moreover, insufficient coordination with other donors and national programmes contributed to lower efficiency (e.g., planting of large number of trees without coordination with big national initiative aiming to plant up to billions of trees). Also the efficiency of some of the implemented activities especially in Kembata-Tembaro project was, very low since some significant share of the delivered equipment is not being used at all.
- 52. **Effectiveness** of individual components of implemented interventions is variable. Effectiveness of NRM measures is high. These interventions were well implemented and undoubtedly contributed to stopping erosion and recultivation of degraded soil in target areas. Evaluation has shown that these effects are much higher in supported areas than in other watersheds where similar interventions were implemented without CDC support. However, the effectiveness of promotion of CSA / conservation agriculture principles are in most cases rather low as evidence of significant changes in agricultural practices outside animal husbandry are sparce (except for home gardens). Although in areas where support was provided for prolonged periods of time, more evidence of positive changes was seen, and effectiveness would be assessed as rather high in these cases. As whole, the effectiveness is assessed as rather high.
- 53. **The impacts** of <u>landscape management interventions are high</u>. Farmers perceive clear positive environmental (less frequent occurrence of floods and soil runoff) as well as economic impacts (fields in rehabilitated areas are significantly more productive). Impacts of activities aimed at <u>farming practices are rather low</u> although diversification is observed, this mostly concerns crops grown on home gardens used for direct consumption and farmers mostly continue to focus on growing maize or cash crops. The introduction of changes in agricultural practices was observed in some cases (especially in communities supported for a longer period) and diffusion of these practices to farmers who were not directly supported

- was also confirmed in some cases, however, profound changes to agricultural practices are rather rare (except for husbandry). As whole, the impacts are assessed as **rather high**.
- 54. **Sustainability** of support is in many cases difficult to assess because the support has phased out quite recently. However, in places where the support phased out longer time ago the sustainability is assessed as <u>rather low</u>. Especially the maintenance of NRM measures and continuation of further construction of these physical interventions is problematic once the support is no longer available.
- 55. **Visibility** of all three projects is high as assessed based on the existing guidelines of the CzDA. The obligations were met, as demonstrated in the reports (e.g., articles, promotion materials) and on the implementation sites (project boards, banners, and stickers on the equipment, visible on the mission photos). Additionally, interviews and focus groups revealed a high level of awareness among stakeholders regarding the role of the Czech Republic in the projects.

5.6 Conclusions regarding cross-cutting criteria

- 57. **Good Governance**: Particularly in the Alaba/Silte project and Gamo project, a significant effort was made to enhance the leadership capacity of local leaders within local communities and institutions. Project activities actively engaged farmers and their organizational structures, such as cooperatives and watershed committees. While there were notable successes in mobilizing communities and fostering local cooperation, particularly through the establishment of grassroots structures, the full potential lies in further boosting community involvement in local governance and decision-making processes.
- 58. **Environment**: All three projects made positive contributions to sustainable development and environmental problems at an overarching level. These impacts align with the objectives outlined in the Bilateral Development Program with Ethiopia, focusing on sustainable land management and agricultural practices. The projects successfully increased local awareness of the environmental impacts associated with agriculture and erosion. Both communal and government levels were capacitated to address climate change impacts locally. Detailed information on the environmental aspects of all the projects is part of the evaluation questions 2 and 3.
- 59. Human Rights and Gender Equality: The evaluated projects did not specifically target the poorest or other disadvantaged community members with dedicated activities. While the implementation of Natural Resource Management (NRM) and accessible agricultural practices did bring some benefits to these groups, the overall impact in this aspect was limited. No specific project activities addressed human rights issues, such as land ownership and access to natural resources. Furthermore, the projects did not have significant effects on women's empowerment in the target areas, although certain activities related to nutrition and cooking were tailored for women. These activities, however, did not generate additional income, and the benefits were equally distributed among all family members. On the other hand, some efforts to include more women (e.g. model farmers) in general activities were carried out by the implementers within the cultural context of the targeted communities.

6. Recommendations

6.1 Project recommendations

Recommendation	Level of seriousness	Primary addressee	Justification /
Increase attention to planning of project activities so that capacity building is implemented in the time periods which are most relevant to farmers' needs.	2	CzDA/ Implementers	If capacity building activities are not implemented in the right time when farmers actually deal with the issue at hand, their effectiveness is decreasing significantly. For example, training in fruit processing must be aligned with fruit harvests, training in operation of irrigation equipment must be implemented in the time when irrigation is required, etc. This has not been always the case.
Ensure that training of model farmers and/or cooperative members is started early in the project and is repeated multiple times in the form of refresher trainings; cooperate	2	CzDA/ Implementers	It has been shown that trainings that are done only once or too late in the project are inefficient. Farmers lack sufficient technical capacity to implement the innovation on their own, any

with local structures on capacity building and gradually rely on local specialists to be the trainers.			failure or improper application of the innovation discourages them from starting again; building local capacities for trainings significantly increases their effectiveness as well as efficiency.
Projects in the field of agriculture and NRM must be rooted in local institutional framework and extension services. Key responsibilities and tasks must be agreed upon and signed with local administration. Focal persons responsible and accountable for coordination with project team must be assigned. If more than one office is involved, it is advisable to assign an ad-hoc project committee responsible for proper implementation and a focal person must be designated.	1	CzDA/ Implementers	Insufficient coordination of project activities with local structures is clearly the crucial factor of failures to deliver expected outcomes and/or their unsustainability. On the other hand, embedding activities in local structures and local processes enables us to take advantage of synergies – projects do not double tasks that are assigned to local institutions (such as extension services or implementation of NRM measures) and concentrate on bringing added value. Establishment of sufficient and formalized "interface" with local institutional context must be required at the level of project formulation.
A strong presence of the implementer in the project region is highly advisable.	1	CzDA/ Implementers	It has been shown that a strong presence is one of the key factors of effectiveness as well as sustainability of project outcomes. If an innovation is to be successfully adopted, ongoing and long-term support to extension services and key stakeholders in kebeles (model farmers, watershed management committees, technical voluntary farmers, etc.).

6.2 Programme or sector recommendations

Recommendation	Level of seriousness	Primary addressee	Justification
Focus on thematic and geographic concentration of support from CDC. Higher degree of concentration needs to be required also on project level.	1	CzDA	The fragmentation of support to a number of approaches, thematic focuses as well as regions is seen as highly inefficient with regard to the overall scope of CDC. Concentration should be achieved not only on programme level, but also on the level of implemented projects – as the evaluation has shown that they are too overstretched and chasing too many goals. This needs to be reflected already in project formulation and formulation of the calls for proposals – too broad formulation leads to overstretched projects.
In future projects increase the stress on identification and formulation of such measures, that would bring "quick wins" early on in the implementation – i.e. measures that would be seen as profitable in a short term.	1	CzDA/ Implementers (depending on the mode of implementatio n)	Evaluation has clearly shown that the perception of immediate benefits was one of the key factors of fast adoption of new husbandry practices, whereas a lack of such immediate benefits in the promoted CSA principles (which focus on benefits in longer term) were one of the key reasons of their rathe slow / long adoption.
Take advantage of proven added value of various implementers to increase the effectiveness and efficiency of support. Namely, find in future projects / programme ways to combine technical expertise and capacity to introduce relevant and demand- driven innovations with strong presence in target regions and proven competence to implement grassroots initiatives.	2	CzDA, Embassy	Capitalization on strengths of various implementers and experience would significantly increase the effectiveness and efficiency of CDC support. In order to achieve this goal, cooperation and coordination of activities of various implementers (in line with the requirement on concentration above) needs to be strengthened. Such an approach could focus on setting up an "incubator" for innovations in agriculture and soil management regarding mitigation of the impacts of climate changes (innovations would be tested and then disseminated on a grassroots level)

Alternatively, focus future support on increasing the capacities and quality of soil conservation and mitigation of erosion by upscaling and formalizing the practice of Land Management Plans, which have demonstrated added value and may represent a relevant response to a gap in the national system of watershed management in Ethiopia. However, the need for such measures needs to be clearly confirmed.	2	CzDA / MFA	The evaluation has clearly shown, that LMPs bring added value to landscape management in supported micro-watersheds. CDC has in this regard a unique know-how that could be upscaled. However, no replication has been observed due to insufficient capacities and motivation at the level of local institutions. See conclusions 10, 11, 12 and 38. However, if this direction is followed, current measures that are aimed at the grassroots level are not sufficient. Such pilot implementations of LMPs must be embedded in a more comprehensive approach that will involve relevant national and regional institutions and technical assistance to capacity building at this level so that the bottom-up as well as top-down approaches to dissemination of this practice are
			approaches to dissemination of this practice are included.
Enable longer time frames for the implementation of projects in the agriculture sector.	3	CzDA / MFA	It has been shown that the length of exposure of a community to support is clearly one of the deciding factors of the successful adoption and diffusion of promoted innovations.

6.3 System or procedure recommendation

Recommendation	Level of seriousness	Primary addresse	Justification /
Strengthen cooperation with other donors and stakeholders on programme level, participate on relevant thematic platforms and working groups.	1	MFA / CzDA	There are other donors and stakeholders in Ethiopia who support initiatives in agriculture and landscape / natural resources management that are very close to the projects supported by CDC. However, potential of cooperation with these actors either by identifying synergies or at least in exchange of experience has not been taken advantage at all. Moreover, cooperation with other donors and stakeholders will increase the likelihood to receive support from larger donors (such as EU) for upscaling of successful initiatives.
Systematically identify complementarities with national programmes and policies and take account of these in the formulation and/or review of CDC programme.	1	CzDA	Embedding some of the supported projects in existing processes formulated by national policies in the area of landscape management has been confirmed as good practice that significantly increases the effectiveness and efficiency of CDC support. However, other potential synergies have not been taken into consideration in the programme / project formulation. One example is the Green Legacy programme, within which Ethiopia targets to plant billions of trees. Projects supported by CDC planted thousands of trees on their own, instead of trying to take advantage of this synergy. In the next years farmers in Ethiopia will be strongly encouraged to plant fruit trees (each farmer should plant at least 100 trees in the course of 3 years). This initiative is again complementary to goals of CDC in the sector of agriculture and environment in Ethiopia.
Strengthen programme management of the bilateral cooperation programme, ideally by establishing a permanent administrative capacity of Czech Development Agency in Ethiopia.	2	MFA / CzDA	Lacking coordination at programme level is a significant barrier to achieving the goals of CDC in Ethiopia in relevant sectors. Support is fragmented to project level and effects at the level of programme as whole are not sufficiently monitored. Moreover, activities aimed at

			increasing the cooperation between projects as well as between CDC and other donors are underrepresented and, to a large extent, left to the project levels. Finally, should a more strategic/sectoral approach be promoted in the future program, sufficient capacity to communicate and coordinate with national and regional authorities is essential.
More precisely delimit the role of grants and procurement as tools to achieve the goals of the bilateral programme.	2	CzDA	As it has been observed, grants and public procurement have been applied, to a large extent, interchangeably. However, some failures especially in Kembata- Tembaro project can be attributed to the fact that a public procurement procedure has been applied instead of a grant scheme. On the other hand, the procurement procedure can be more effective and transparent in cases where more technical deliveries are required and/or indepth identification and formulation have been properly implemented and parameters of required activities can be well formulated (such as specific training or material deliveries).

7. Annexes to the final evaluation report

- A. Summary in Czech language
- B. List of abbreviations
- C. List of studied documentation and other resources
- D. List of interviews and group discussions
- E. Scripts of questionnaires
- F. Analysis of the results of surveys
- G. Scripts of IDI and FGD
- H. Assessment of cross-cutting principles according to the certified methodology (in separate file)
- I. Detailed reports for evaluated projects
- J. Evaluation matrix
- K. Terms of Reference (in separate file)
- L. Comments and suggestions of the reference group, implementers and stakeholders (in separate file)
- M. Presentation of the Final Report (in separate file)
- N. Checklist of the mandatory requirements of the evaluation contract (in separate file)