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Investing in rural people

Mid-term Evaluation of EU-IFAD Grant

Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale

EU-funded grant 2000000976; IFAD-funded grant: 2000000520

Dr. Urs Bloesch, Adansonia-Consulting mandated by ICARDA; Evilard, 9/5/2019

World Agroforestry

CGIAR RESEARCH PROGRAM ON Forests, Trees and Agroforestry

ICRISAT
INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS

CGIAR RESEARCH PROGRAM ON Water, Land and Ecosystems

ILRI
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

CGIAR RESEARCH PROGRAM ON Livestock

ICARDA
Science for resilient livelihoods in dry areas

CGIAR RESEARCH PROGRAM ON Grain Legumes and Dryland Cereals

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Photo 1. Farmer in Kenya.

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List of acronyms and abbreviations

ADRA	Adventist Development and Relief Agency
CGIAR	Consultative Group on International Agricultural Research
CoP	Community of Practice
CRP	CGIAR Research Program
DAC	Development Assistance Committee
DryDev	The Drylands Development Programme
DS	Dryland Systems
ESA	East and Southern Africa
EU	European Union
FTA	Forests, Trees and Agroforestry
GLDC	Grain Legumes and Dryland Cereals
ICARDA	International Center for Agricultural Research in Dry Areas
ICRAF	International Centre for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IEA	Independent Evaluation Arrangement
IFAD	International Fund for Agricultural Development
ILRI	International Livestock Research Institute
INRAN	Institut National de la Recherche Agronomique du Niger
IDO	Intermediate Development Outcome
FMNR	Farmer Managed Natural Regeneration
MEL	Monitoring, Evaluation and Learning platform
MoA	Memorandum of Agreement
M&E	Monitoring & Evaluation
NARS	National Agricultural Research Systems
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
OVI	Objectively Verifiable Indicator
REGIS-ER	Resilience and Economic Growth in the Sahel – Enhanced Resilience Project
ROM	Results-Oriented Monitoring
SDG	Sustainable Development Goal
SLO	System Level Outcome
ToR	Terms of Reference
UN	United Nations
WAS	West African Sahel
WRI	World Resource Institute

Executive summary

The project entitled "Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale" hereafter called land restoration project is funded by grants from the European Union of € 3,845,630 (2000000976) and from the International Fund for Agricultural Development of USD 1,500,000 (2000000520).

Adansonia-Consulting was mandated by ICARDA to conduct this external and independent mid-term evaluation. The purpose of the mid-term evaluation is to provide accountability and learning to the project stakeholders and describe reasons behind the achieved results and consolidate lessons learnt and best practices for the remaining period of the project. The process followed the IFAD M&E guidelines.

The project is implemented in two of the five regional flagships adopted by the Consultative Group on International Agricultural Research (CGIAR) Research Program Dryland Systems (CRP-DS): West African Sahel and Dry Savannas (Mali, Niger) and East and Southern Africa (Ethiopia, Kenya, and Tanzania). The project is led by the World Agroforestry (ICRAF) in collaboration with other CGIAR centres. ICRAF is implementing the project in Mali and Kenya; the International Livestock Research Institute (ILRI) does so in Ethiopia and Kenya - and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in Niger. Tanzania is primarily a learning site. The International Center for Agricultural Research in Dry Areas (ICARDA) is leading the monitoring and evaluation of the project.

In order to feed the predicted global population of 9 billion people by 2050, food availability (increasing production and reducing losses) needs to expand by 60% globally and up to 100% in developing countries. An estimated 3.5 billion ha of degraded land now lie unproductive due to overexploitation. Climate change is projected to reduce developing countries pastoralism and further reduce yields of major cereals, such as wheat and maize. The number of people affected by drought or floods each year has risen to 150 million. Restoration of degraded land can be a key pathway to achieving food security and reducing poverty for some of the most vulnerable people living in Africa's drylands.

In order to achieve the Sustainable Development Goals (SDGs) of the United Nations (UN), successful restoration efforts need to be taken to scale, both reaching a larger number of farmers and covering larger areas (millions of hectares) over the coming decade. The Agenda 2030 confirms the important place of smallholder agriculture-led growth for achieving the SDGs. Smallholder farming will remain an important part of global food security for at least the time horizon of most current research and development initiatives (Sinclair 2017).

The overarching goal of the project is to reduce food insecurity and improve livelihoods of poor people living in African drylands by restoring degraded land, and returning it to effective and sustainable tree, crop and livestock production, thereby increasing land profitability and landscape and livelihood resilience. Land restoration options are currently implemented with around 10,000 households in Kenya, Ethiopia, Mali and Niger across social, geographic and economic contexts through on-farm planned comparisons to determine which options (innovations) work where and for whom.

The land restoration project has adopted an option by context approach at landscape level. Many of the factors that affect the suitability of agricultural innovations, here referred as options, such as soils, climate, farming practices, household characteristics, markets, social capital and policy, vary at a fine scale. This means that appropriate innovations for farmers to adopt to improve their livelihood systems also vary at a fine scale. Large scale impact requires evidence-based innovations to be widely adopted, for which it is necessary to generate innovations suitable for the range of contexts across large scaling domains and to understand which innovations are suitable for which contexts.

The land restoration project applies the research "in" development approach where research perspectives and methods are embedded within

This research aims at transformative outcomes by placing farmers at the centre of land restoration efforts following an integrated livelihood system approach.

development initiatives, to accelerate their impact through improving the speed and efficiency of learning about the suitability of different interventions for different people and places.

This research aims at transformative outcomes by placing farmers at the centre of land restoration efforts following an integrated livelihood system approach. Participating farmers bring an implicit understanding of their system to the research process by testing and adapting the options (innovations). Co-learning amongst nested communities of practice that bring farmers, community facilitators, NGOs and government extension staff, private sector actors and researchers together, allow to share knowledge and experience about what works, where and for whom on the ground.

Partnerships are of critical importance for the implementation of the project and for scaling up and scaling out successes for expanded and sustainable impact. Key partners for the implementation of the project are the Drylands Development Programme (DryDev), IFAD's country programmes, international and national development-oriented NGOs, National Agricultural Research Systems (NARS), national technical services and authorities. Project action sites have been identified in each country to maximize overlap with and partner development projects (e.g., DryDev, CRP-DS).

The mid-term evaluation has assessed the progress made of the project in view of achieving the outputs, the objectives and the goal defined in the logframe. The OECD/Development Assistance Committee (DAC) criteria including *relevance*, *effectiveness*, *efficiency*, *impact* and *sustainability* have been assessed. It is noteworthy, that after three years and a half only, it is too early to conclusively evaluate impact and sustainability and therefore these two criteria have not been assessed in depth. Since four CGIAR Centers are involved in the project, *Science quality* has also been analysed. Moreover, the cross-sectoral issues *Governance and management*, *Gender equality and women's empowerment*, *Innovation and scaling up*, *Environment and natural resources management*, *Adaptation to climate change*, and *Partnership* have been evaluated.

The evaluation questions listed in the ToR were amended and for each criterion a generic question was elaborated. For each sub-question its indicators, sources of data and methodology were identified. A mixed method approach was applied

The project is currently reaching the impressive number of about 10,000 households, or more than 50,000 beneficiaries in the four action countries.

including document reviews (secondary data) and interviews with key informants, focus group discussions with beneficiaries and direct on-site observations (all primary data). Special attention was devoted to the availability of gender-related data and information.

Key questions were formulated in advance (open-ended questions) for each interview and semi-structured focus group discussion with the stakeholders. Whenever possible the focus group discussion method was used for discussions with the local population (in Swahili in Kenya) while ensuring that all segments of the population participate freely. Open-ended questions helped to stimulate vivid discussions keeping in mind as guidance the pre-established evaluation questions.

The mid-term evaluation has focussed on evidence-based information that is credible, reliable, useful, ethical and of high quality. The triangulation of multiple data sources allowed verifying or cross-checking the data to ensure the validity of the findings.

The project areas in Kenya (East African country and headquarter of ICRAF) and Niger (Sahelian country) were visited. Prior to the field missions, remote interviews with key project informants were conducted with focal points from IFAD Kenya, ICRAF, ICRISAT, and ICARDA.

The field mission to Kenya (18-23 November 2018) allowed the visit of two farms per site (Kalawa, Lower Yatta, Mtito Andei, Mwala) selected and guided by the community facilitator. All four sites offer unique context variations according to the data analyses from the project. In addition, three randomly selected additional farms were visited. In total, 11 farmers were interviewed and a focus group discussion was held with the Mutembuku farmer group. Discussions in the field included partner NGO's (DryDev, ADRA, Caritas, World Vision), local authorities, and technical services.
The field mission to Niger (3-8 December 2018)

allowed visiting farms together with partners at Djilleyni (Dosso Region) and Karabedji (Tillabéri Region) and to participate in the communities of practice in both villages. Moreover, meetings with INRAN, IFAD country office, NGO-REFORM and REGIS-ER were held in Niamey.

The main findings are as follows:

Relevance: The land restoration project is in line with the IFAD Strategic Framework 2016-2025 and the CGIAR Strategy and Results Framework 2016-2030. The project's theory of change describes well how the research "in" development approach induces expected outcomes and impacts by describing the causal interrelationships from the project's outputs to outcomes and impacts. The project targeting the restoration of millions of hectares of degraded land for smallholder-led agriculture may significantly contribute to the achievement of the SDGs, especially for SDG 1 "no poverty" and SDG 2 "zero hunger". Score: 6 (out of 6).

Effectiveness: The Project is on track and all targeted outputs will be achieved by the end of the project. However, an updated planning of activities per country for the remaining project period should be elaborated. Score: 5 (out of 6).

Efficiency: The implementation of the land restoration project is largely based on a broad and well-functioning network of developing partners multiplying the development results in a cost-effective way. The project is currently reaching the impressive number of about 10,000 households, or more than 50,000 beneficiaries in the four action countries. Score: 5 (out of 6).

Impact: To assess the full ecosystem and livelihood benefits induced by the land restoration project in the selected scaling up and scaling out domains it is suggested to conduct a comprehensive impact evaluation study two to three year after project closure. Preliminary score: 5 (out of 6).

Sustainability: As for the impact it is too early to evaluate conclusively the sustainability of the land restoration measures promoted by the project at large scale. Preliminary score: 5 (out of 6).

Science quality: The land project is applying state of the art agricultural research in partnership with many development actors bringing in their complementary experiences. The project has published numerous papers, many of them in peer-reviewed journals. Moreover, an impressive number of factsheets, tools, guides, blogs, videos and conference presentations have been released. Score: 6 (out of 6).

The land restoration project is applying state of the art agricultural research in partnership with many development actors bringing in their complementary experiences.

Governance and management: The project is systematically monitoring and collecting electronic data from the participating farmers. The three annual progress reports are comprehensive and well-presented. However, these annual reports are not enough for quick adaptive management. Moreover, there is no functioning steering committee. At the time of the review there is no updated planning of activities per country for the remaining project period. Score: 4 (out of 6).

Gender equality and women's empowerment: The land restoration project is gender-sensitive and promotes gender equity at project staff and at beneficiary level (lead farmers and participation farmers). The project record and analyse data systematically gender-disaggregated. Gender differences in knowledge and perceptions relating to both causes of degradation and preferences in terms of restoration options are systematically considered by the project. Score: 6 (out of 6).

Innovation and scaling up: Many agricultural innovations, here referred as options, have been identified and tested and adapted by the farmers. The upscaling success is very impressive. As observed during the field visits the upscaling of basin planting in Kenya and Farmer Managed Natural Regeneration (FMNR) in Niger is very quick. Score: 5 (out of 6).

Environment and natural resources management: Most of the promoted best options have had a direct positive impact on the environment and the natural resources at landscape level. The increased yield of cereals and legumes on farms where FMNR or basin planting is applied improves the livelihoods of the beneficiaries and increases also

The increased yield of cereals and legumes on farms where FMNR or basin planting is applied improves the livelihoods of the beneficiaries and increases also their resilience since both options are significantly more drought-resistant.

their resilience since both options are significantly more drought-resistant. Score: 6 (out of 6).

Adaptation to climate change: Most of the land restoration techniques promoted by the project contribute to maintain and enhance the vegetation cover and are important adaptation measures to climate change. The land restoration project is clearly strengthening the environmental vulnerability and the resilience of beneficiary communities at large scale. Score: 5 (out of 6).

Partnership: Numerous development partners with complementary areas of expertise at local, national, and global level contribute significantly to the land restoration a large scale. Communities of practice are a key element of the land restoration project and allow vivid exchange amongst the stakeholders. They are learning platforms amongst stakeholders to enable dialogue, collaboration, communication, sharing of information, and the creation of new knowledge. Score: 5 (out of 6).

Overall the project team left a very good impression by their professionalism and high commitment leading to many vivid discussions during the field mission.

Photo 2. Women in Dosso Region, Niger preparing millet.

1. Introduction

The project entitled "Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale" hereafter called land restoration project, is funded by grants from the European Union (EU) and the International Fund for Agricultural Development (IFAD). The first grant agreement of USD 1,500,000 (2000000520) was signed on 17 March 2015 by IFAD and 4 April 2015 by ICRAF for a period of three years ending on 31 March 2018. This grant was supplemented by EU funding of € 3,845,630 (2000000976) which was signed on 24 May 2016 for project duration until end of September 2019. The programme complements investment of USD 1,500,000 from the CGIAR Research Program Dryland Systems (CRP-DS) and development spending of USD 33 million by national partners also managed by the main grant recipient for this programme in addition to nationally budgeted rural development programme.

Adansonia-Consulting was mandated by ICARDA to conduct this external and independent mid-term evaluation. According to the Gantt Chart (IFAD's Large Grant Design Document), the mid-term evaluation should have been conducted in the middle of the second year of implementation, i.e. in the second half of 2016. However, the mid-term evaluation was postponed for several reasons amongst those:

a. The mid-term evaluation was supposed to be implemented as part of the CGIAR Research Program Dryland Systems (CRP-DS) review of WAS and ESA regions. When the CRP-DS was notified to be terminated at the end of 2016 the plan was changed and the evaluation was scheduled to be implemented in 2017.

b. A further delay took place as a result of the departure of ICARDA M&E Project Leader, Aden Aw-Hassan under which the mid-term evaluation was supposed to take place.

A reference group of six persons composed of key stakeholders has been established for supporting and guiding the evaluation and for quality assurance. Reference group members normally comment on the ToR, the inception report, early findings as well as on the draft final report.

2. Context and background

In order to feed the predicted global population of 9 billion people by 2050, food availability (increasing production and reducing losses) needs to expand by 60% globally and up to 100% in developing countries. Currently, over a billion people live on less than US$ 1.25 per day and more than 800 million are acutely or chronically undernourished. Meanwhile, threats to the natural resource base needed for future food production are rising steadily. An estimated 3.5 billion ha of degraded land now lie unproductive due to overexploitation (CGIAR 2016).

Climate change is projected to reduce developing countries pastoralism and further reduce yields of major cereals, such as wheat and maize. The number of people affected by drought or floods each year has risen to 150 million (CGIAR 2016). Restoration of degraded land can be a key pathway to achieving food security and reducing poverty for some of the most vulnerable people living in Africa's drylands.

Land restoration involves restoring production from land in profitable ways for farmers and pastoralists so that their livelihoods are sustainably improved and the capacity of land to produce in the future is enhanced. Equally important are interventions to avoid further degradation, because they are generally less costly than restoration once land

The project is led by ICRAF but involves collaborating CGIAR centres (ILRI, ICRISAT and ICARDA) within the CGIAR Research Program Dryland Systems (CRP 1.1) which has been closed in 2016. New collaboration and synergy opportunities are offered by the current CRP Grain Legumes and Dryland Cereals (GLDC) which builds on the work done by the three former CRPs Grain Legumes, Dryland Cereals, and Dryland Systems as well as with the CRPs Forests, Trees and Agroforestry (FTA), Livestock and Water, Land and Ecosystems (WLE).

Table 1. Project outputs

Output	Objective targeted
O1: Ingredients of success and gaps in knowledge identified	1, 2
O2: Tools for targeting up-scaling elaborated	2, 3
O3: Enhanced knowledge on "what works where, by how much and for whom"	2, 3, 4
O4: Tools for targeting out-scaling elaborated	4
O5: Nested communities of practice, taking land restoration to scale established	5

Partnerships are of critical importance for the implementation of the project and for scaling up and scaling out successes for expanded and sustainable impact.

has been degraded – and the more degraded, the higher the cost of restoration. Core components of land restoration are recovery of vegetation and improvement and maintenance of soil health. Any land restoration intervention has to be adapted to the specific ecological, economic, sociological and institutional context.

The overarching goal of the project is to reduce food insecurity and improve livelihoods of poor people living in African drylands by restoring degraded land, and returning it to effective and sustainable tree, crop and livestock production, thereby increasing land profitability and landscape and livelihood resilience. Prior to the implementation of the project, there have been few syntheses of the broad effectiveness of land restoration projects in the developing world although there have been many accounts of individual successful efforts that have been summarized as good practice, including a set of lessons learned from the rehabilitation of degraded lands in Sub-Saharan Africa.

The project has five interrelated objectives focussing on *lessons learned and best practice* (objective 1), *proof of application* (objective 2), *tools for scaling-up* (objective 3), *tools for scaling out* (objective 4), *knowledge management and capacity strengthening* (objective 5). These objectives will be attained by five iterative outputs presented in Table 1.

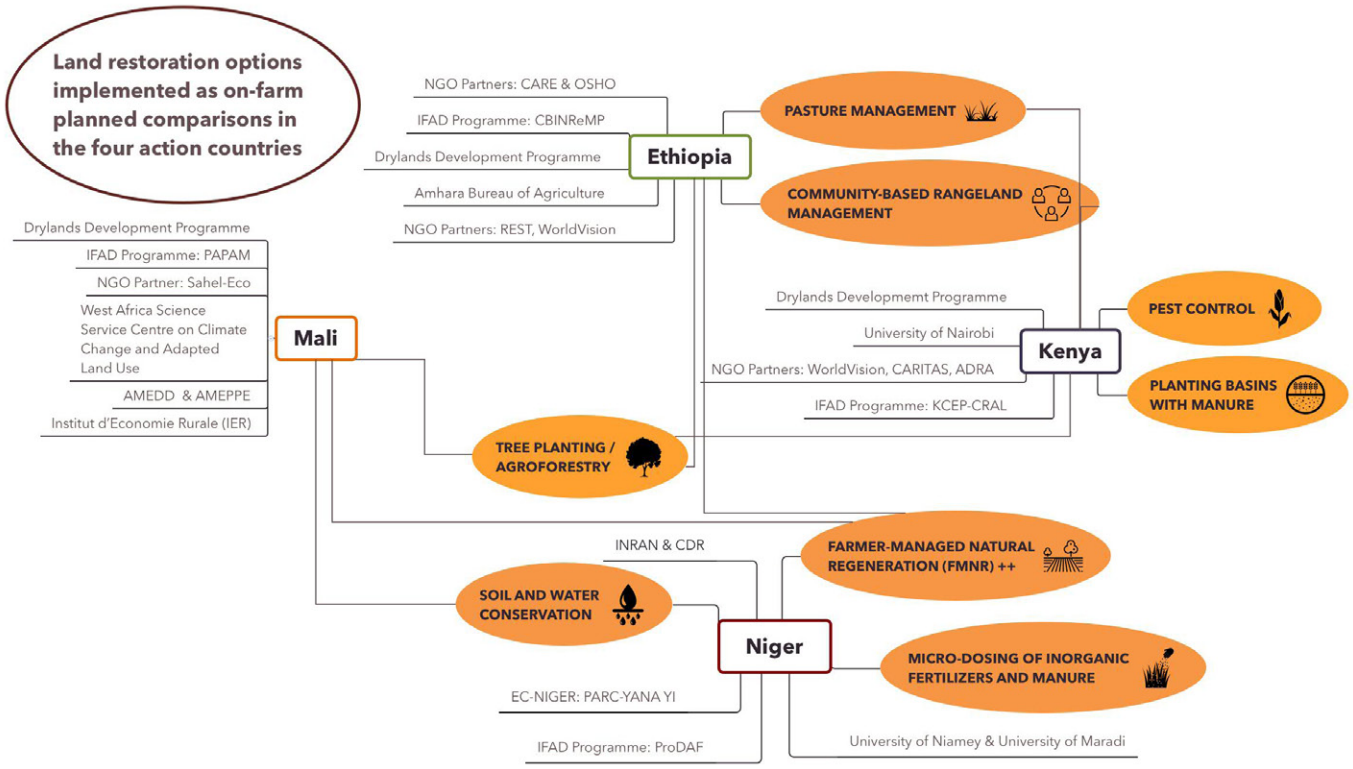
The land restoration project has adopted an option by context approach at landscape level. Many of the factors that affect the suitability of agricultural innovations, here referred as options, such as soils, climate, farming practices, household characteristics, markets, social capital and policy, vary at a fine scale. This means that appropriate innovations for farmers to adopt to improve their livelihood systems also vary at a fine scale (Coe et al. 2014). Large scale impact requires evidence-based innovations to be widely adopted, for which it is necessary to generate innovations suitable for the range of contexts across large scaling domains and to understand which innovations are suitable for which contexts (Sinclair 2017).

The project pursues a widespread uptake of the tested options (innovation) by scaling up and scaling out. These terms are variously used in the literature but here, scaling up refers to where more people adopt an innovation within a particular geography, or scaling domain, with a boundary that may be specified in both biophysical and socio-economic terms while scaling out refers to where innovations generated in one scaling domain are promoted and adopted in another scaling domain.

The land restoration project applies the research "in" development approach. There was a new paradigm shift from research for development

Restoration of degraded land can be a key pathway to achieving food security and reducing poverty for some of the most vulnerable people living in Africa's drylands.

Figure 1. This diagram shows the land restoration options being implemented on farm in each of the four countries as well as the key implementing partners



(R4D) to research "in" development (RinD), where research perspectives and methods are embedded within development initiatives, to accelerate their impact through improving the speed and efficiency of learning about the suitability of different interventions for different people and places (Sinclair 2017). This research aims at transformative outcomes by placing farmers at the centre of land restoration efforts following an integrated livelihood system approach. Participating farmers bring an implicit understanding of their system to the research process by testing and adapting the options (innovations).

Partnerships are of critical importance for the implementation of the project and for scaling up and scaling out successes for expanded and sustainable impact. The research "in" development approach embraced in this project integrates the impact pathway through a "co-learning" engagement cycle with development partners and local beneficiaries in order to accelerate impact on the ground. Co-learning amongst nested communities of practice that bring farmers, community facilitators, development partners, government extension staff, private sector actors and researchers together, allow to share knowledge and experience about what works, where and for whom on the ground.

The project is implemented in two of the five regional flagships adopted by CRP-DS: West African Sahel and Dry Savannas (Mali, Niger) and East and Southern Africa (Ethiopia, Kenya, and Tanzania). Project action sites have been identified in each country to maximize overlap with IFAD country programmes and partner development projects (e.g., DryDev, CRP-DS).

Partnerships among research institutions and between research institutions and development-oriented institutions are a critical characteristic of CRPs as they are the mechanisms for achieving a critical mass of research competence linked via clear impact pathways to specific development outcomes. The land restoration project closely collaborates and builds on the experience of the Drylands Development Programme (DryDev) funded by the Ministry of Foreign Affairs of the Netherlands, with a substantial contribution from World Vision Australia. This integrated program is designed to bring about change for people and landscapes and operates in all four action countries of the land restoration project (and additionally Burkina Faso) with contextually appropriate interventions (options by context).

The land restoration project has been designed considering IFAD's large experience in dryland

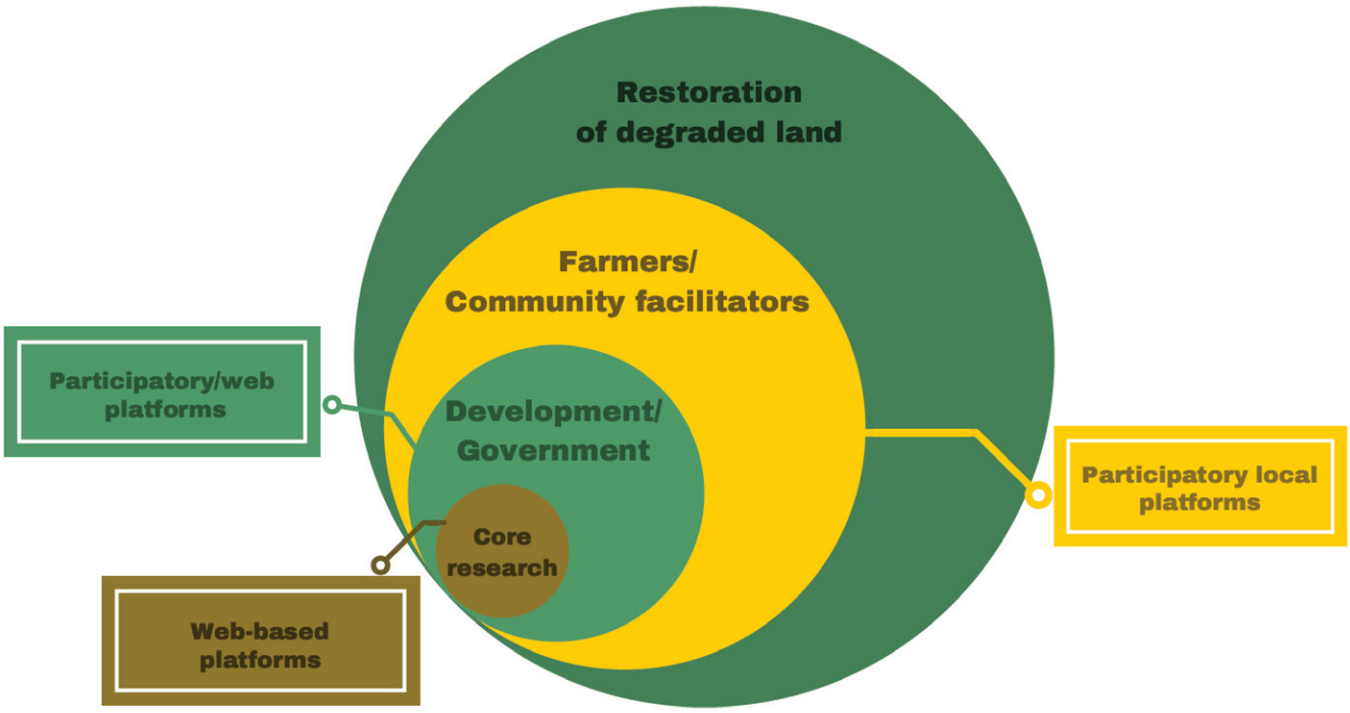
agriculture and is linking with IFAD's country programmes for the project implementation. IFAD is the only United Nations specialised agency and international financial institution focused exclusively on reducing poverty and food insecurity in rural areas through smallholder agriculture and rural development (IFAD 2016). For the project implementation, involvement of local and national authorities and their technical services is key for the take up of the initiative and to enhance the impact in the long-term. The implementation of the project largely rely on international and national non-governmental development organisations including local grassroots projects with relevant thematic experiences (see list of partners in Annexe C).

The project aims at inclusive and sustainable transformation of rural areas and livelihoods. Land restoration options are currently implemented with around 10,000 households in Kenya, Ethiopia, Mali and Niger across social, geographic and economic contexts through on-farm planned comparisons to determine which options work where and for whom.

Farming households are involved in evaluating and adapting land restoration options on their farms, including options for soil and water conservation (including basin planting), tree establishment, post-harvest pest and disease control, community-based rangeland management and Farmer Managed Natural Regeneration (FMNR) with in-situ grafting and micro-dosing of mineral and farmyard manure on their farms. Farmers do their own experimentation and observations and utilise their local knowledge to adapt and modify restoration options to suit their needs and context.

ICRAF is leading the activity in Mali, Kenya and Tanzania; ILRI does so in Ethiopia and Kenya, and ICRISAT in Niger. Tanzania is primarily a learning site included in objective 1 rather than a dissemination target. ICARDA as lead centre for the Dryland Systems CRP-DS is leading the monitoring and evaluation including mid-term and final evaluations. Agricultural research, extension, market and policy institutions in the public and private sector will benefit through capacity strengthening.

Figure 2. This diagram illustrates the nested communities of practices and the tools for communication within and across the stakeholders



Nested communities of practice, facilitated and documented, with refined tools, methods, and guidelines for taking land restoration to scale.

3. Purpose of the mid-term evaluation

The purpose of the mid-term evaluation is to provide accountability and learning to the project stakeholders and describe reasons behind the achieved results and consolidate lessons learnt and best practices for the remaining period of the project. While the donors (IFAD/EU) and government partners are primarily interested in accountability, project management and implementers will be interested in learning and directions that the evaluation can give for the future. Moreover, the mid-term evaluation is expected to inform future potential initiatives for dryland ecosystems in the target countries.

More specifically, the mid-term evaluation has assessed the progress made of the project in view of achieving the outputs, the objectives and the goal defined in the logframe. The OECD/DAC criteria including *relevance*, *effectiveness*, *efficiency*, *impact* and *sustainability* have been assessed. It is noteworthy, that after three years and a half only, it is too early to conclusively evaluate impact and sustainability and therefore these two criteria have not been assessed in depth. Since three CGIAR Centers are leading the project, *Science quality* has also been analysed. Moreover, the cross-sectoral issues *Governance and management*, *Gender equality and women's empowerment*, *Innovation and scaling up*, *Environment and natural resources management*, *Adaptation to climate change*, and *Partnership* have been evaluated.

This evaluation aimed to identify key information, provide lessons and make recommendations to IFAD / EU and the implementing CGIAR partners to adapt and improve the implementation and performance of the programme where necessary (adaptive management). The mid-term evaluation is a key step in the implementation of the project and lays the foundation for the terminal evaluation.

4. Mid-term evaluation approach and methodology

The mid-term evaluation follows the Terms of Reference[1] and the inception report[2]. It considers the IFAD Evaluation Manual[3] and the CGIAR standards for independent external evaluation and the respective Independent Evaluation Arrangement (IEA) evaluation guidance notes (G4 and G5)[4]. It is an objective-based approach as outlined in the ToR, which analyse the impact pathway and the measuring of achievements along the results chain for generating lessons and recommendations for better performance.

In total 12 evaluation criteria will be assessed (not in-depth assessment for impact and sustainability) using the IFAD rating system (see Annexe B). The evaluation questions listed in the ToR have been amended and for each criterion a generic question has been elaborated (see evaluation matrix in Annexe A):

1. **Relevance** focussing on project strategy and design.

   Is the project strategy and design appropriate to meet the intervention's outputs and objectives?

2. **Effectiveness** measures the progress made towards outputs (and objectives) using a Progress Towards Results Matrix; each indicator at objective and output level will be assessed giving an appraisal of their achievement (i.e. not started, in progress and done using the "traffic light system" with the standard colours); a critical analysis of the programme's logframe indicators and targets will be undertaken using the "SMART" criteria (Specific, Measurable, Attainable, Relevant, Time-bound), and specific amendments/revisions to the targets and indicators (quantitative and qualitative) will be suggested, as necessary.

   What is the project's progress toward the end-of-project targets?

1 https://uncareer.net/vacancy/senior-consultant-mid-term-evaluation-eu-ifad-grant-173316
2 https://dx.doi.org/20.500.11766/9044
3 https://www.ifad.org/web/ioe/methodology
4 http://iea.cgiar.org/resources/guiding-documents/

3. **Efficiency** focusing on qualitative and quantitative outputs in relation to the inputs.

   How economically has the project converted its resources/inputs into results?

4. **Impact** focussing on first trends of positive and negative socio-economic and environmental changes induced by the project.

   Is the theory of change (impact pathway) relevant and coherent?

5. **Sustainability** focussing on first trends including financial risks to sustainability, socio-economic risks to sustainability, institutional framework and governance risks to sustainability and environmental risks to sustainability.

   Will the beneficiaries continue to apply best restoration options after project closure?

6. **Science quality** focussing on the conditions that are in place for assuring high quality of science, and the conduct and outputs of research.

   Do the research design, problem-setting, and choice of approaches reflect high quality in scientific thinking, state-of the-art knowledge and novelty in all areas of research?

7. **Governance and management** focussing on oversight and decision-making related to strategic direction, financial planning (governance) and routine decisions and administrative work related to the daily operations of the organisation (management).

   Is the governance and management appropriate and efficient for project implementation?

8. **Gender equality and women's empowerment** focusing on the beneficiaries.

   Have gender issues explicitly been considered in project design and implementation?

9. **Innovation and scaling up** focusing on co-learning.

   What is the potential of best options by context to be scaled up?

10. **Environment and natural resources management** focusing on participatory approaches.

    What is the project's contribution for reducing environmental vulnerability and enhancing livelihood resilience in view of poverty reduction?

11. **Adaptation to climate change** in view of strengthening environmental vulnerability and resilience of local communities.

    Is climate change adaption an integral part of the project strategy?

12. **Partnership** for knowledge management and co-learning based on best practices.

    Will the partnerships established (e.g. communities of practice) continue after project closure?

For each generic question in the evaluation matrix sub-questions with its indicators, sources of data and methodology have been elaborated.

A mixed method approach was applied including document reviews (secondary data) and interviews with key informants, focus group discussions with beneficiaries and direct on-site observations (all primary data). Special attention has been devoted to the availability of gender-related data and information. The desk review has included documents prepared during the preparation phase (IFAD's large grant design document, IFAD's president's report, theory of change, logical framework), CGIAR strategy and results framework (2016-2030), center-commissioned evaluation of the CGIAR Research Program 1.1: Dryland Agricultural Systems, IFAD Strategic Framework 2016-2025, annual progress reports, annual financial reports, national strategic and legal documents, data generated through the monitoring process and other materials relevant for this evidence-based evaluation (full list of documents and reports reviewed see Annexe E). The desk review allowed the analysis of the environmental, economic and socio-cultural contexts of the project areas, the understanding of the stakeholders and the institutional set-up.

The careful selection of stakeholders and their close involvement in the MTR is key for the success of a participatory review. It is generally acknowledged that the more stakeholders have felt consulted during an evaluation, the more likely they are to use the evaluation findings and implement recommendations. The principal actors comprise: NARS, national and local governance bodies, policy makers, extension/advisory services, market actors, NGOs, smallholder farmers, agro-pastoralists and pastoralists. Particular attention is paid to ensure involvement of the beneficiaries of the local communities considering different interest groups, gender and vulnerable groups. The visited sites were identified by the project staff considering access and available time. In addition,

nearby randomly selected farms were visited in Kenya (see chapter 6).

Key questions were formulated in advance (open-ended questions) for each interview and semi-structured focus group discussion with the stakeholders. Whenever possible the focus group discussion method was used for discussions with the local population (in Swahili in Kenya) while ensuring that all segments of the population participate freely. Open-ended questions helped to stimulate vivid discussions keeping in mind as guidance the pre-established evaluation questions. Particular emphasis was placed on the active participation of women. With respect to the principles of an independent evaluation, parts of interviews and more informal discussions were conducted without staff from the project as interviewees might not feel comfortable to speak openly in their presences. The review team made it clear to all interviewed stakeholders that their comments and contributions will remain confidential. The sources of the data presented are not mentioned, so as to preserve the confidentiality of the informant.

The evaluation has considered partnerships among the implementing CGIAR centres, linkages with similar thematic programmes and projects, and partnerships with research and development upon which achieving objectives depend.

The mid-term evaluation has focussed on evidence-based information that is credible, reliable, useful, ethical and of high quality. The triangulation of multiple data sources has allowed verifying or cross-checking the data to ensure the validity of the findings. According to OECD/DAC, triangulation entails the use of three or more sources or types of information, or types of analysis to verify and substantiate an assessment. This allows evaluators to overcome the bias that comes from single informants, single methods or single observations and thus helps to ensure the robustness and reliability of evaluation findings.

Photo 3. Farmer, Ngamuthei Mwangangi in Mumbuni village in Kenuya showing the maize in planting basins. January 2019.

5. Organisation and timing of the evaluation

The project areas in Kenya (East African country and headquarter of ICRAF) and Niger (Sahelian country) were visited. Enrico Bonaiuti from ICARDA accompanied the field missions as observer and facilitator. The itineraries of the field missions and the stakeholders interviewed or consulted are in Annexe F and G, respectively. Prior to the field missions, remote interviews with key project informants were conducted with focal points from IFAD Kenya, ICRAF, ICRISAT, and ICARDA.

The evaluation was conducted prior to the finalization of the annual report 2018 due in March 2019. This limited the access to some data that could be consulted by key stakeholders to find additional reference to the finding of this evaluation.

The field mission to Kenya (18-23 November 2018) allowed the visit of two farms per site (Kalawa, Lower Yatta, Mtito Andei, Mwala) selected and guided by the community facilitator. All four sites offer unique context variations according to the data analyses from the project. In addition, three randomly selected additional farms were visited. In total, 11 farmers were interviewed and a focus group discussion was held with the Mutembuku farmer group. Discussions in the field included partner NGO's (DryDev, ADRA, Caritas, World Vision), local authorities, and technical services.

The field mission to Niger (3-8 December 2018) allowed visiting farms together with partners at Djilleyni (Dosso Region) and Karabedji (Tillabéri Region) and to participate in the communities of practice in both villages. Moreover, meetings with INRAN, IFAD country office, NGO-REFORM and REGIS-ER were held in Niamey.

6. Main limitations of the evaluation

The following constraints to the mid-term evaluation are to be considered:

1. Usually, a team is recruited for carrying out a mid-term evaluation for such a large and complex project and not only a single consultant. The scope of the evaluation according to the ToR was very broad and impact and sustainability cannot be assessed conclusively after only three years and a half of project implementation.

2. The vast project area including four action countries with many testing sites does not allow visiting enough sites to be representative given the shortage of time for the field mission and the time-consuming access to the sites. A more in-depth analysis was conducted for the two visited project countries Kenya and Niger, while the evaluation of Ethiopia and Mali is based on a desk review supported with remote interviews with the country project focal points. A fully representative assessment of the overall project implementation progress and performance is therefore challenging.

3. The project progress is mainly based on the annual IFAD progress reports reflecting the project situation up to 31 March 2018. No document for the whole project area is available compiling and analysing the more recent field data.

7. Main evaluation findings

1) Relevance

The land restoration project is in line with the IFAD Strategic Framework 2016-2025 (IFAD 2016) and operates particularly strongly with respect to its three strategic objectives, i.e. i) increase poor rural people's productive capacities, ii) increase poor rural people's benefits from market participation, and iii) strengthen the environmental sustainability and climate resilience of poor rural people's economic activities.

The land restoration project is in accordance with the CGIAR Strategy and Results Framework 2016-2030 (CGIAR 2016) and contributes directly to several Intermediate Development Outcomes (IDOs) of all three System Level Outcomes (SLOs):

- SLO 1: Reduced poverty;
- SLO 2: Improved food and nutrition security for health;
- SLO 3: Improved natural resources and ecosystems services.

The project's theory of change describes well how the research "in" development approach induces expected outcomes and impacts by describing the causal interrelationships from the project's outputs to outcomes and impacts. The theory of change recognises variation in context from the outset and embeds trials of options across a wide range of context to determine what options work where and for whom what is very relevant for the uptake at large scale. The impact pathway is based on a strong "co-learning" engagement cycle with development partners and beneficiaries using nested communities of practice.

The project's theory of change and its impact pathway is coherent and in accordance with the logframe. Five interlinked objectives with five iterative outputs logically based on each other from exhaustive literature reviews to identify success and gaps in knowledge of land restoration techniques and approaches at country level (output 1) to scaling up and scaling out using nested communities of practice (output 5). While the underlying assumptions of each target are given in the logframe no risk assessment is presented.

> The project may significantly contribute to the achievement of the SDGs, especially for SDG 1 "no poverty" and SDG 2 "zero hunger".

The project's strategy based on an integrated livelihood system approach considering past experiences and applying the research "in" development principle is very appropriate. The project targeting the restoration of millions of hectares of degraded land for smallholder-led agriculture may significantly contribute to the achievement of the SDGs, especially for SDG 1 "no poverty" and SDG 2 "zero hunger".

However, the entry into the complex project is somehow cumbersome because there is no comprehensive project proposal. The large grant design document from IFAD, a relatively short document of 17 pages, is serving as Project Document.

Overall assessment of relevance: 6 (out of 6)

2) Effectiveness

The assessment of the project progress presented in the Table 2 below is mainly based on the three annual donor progress reports from 17 March 2015 to March 2018, the field observations and discussions as well as the literature review. No document for the whole project area is available compiling and analysing the more recent field data from this year due to the timing of the mid-term evaluation. Additional documentation was expected to be produced by the project team and included in the Annual report due on March 2019. The documents would complement the evaluation and posted open access on the project repositories.

After receiving the supplementary EU funds and the project extension up to end of September 2019, the initial Gantt Chart (March 2015 – March 2018, see IFAD's Large Grant Design Document) was not revised for all action countries. The evaluation of the project progress presented in Table 2 below may serve for an updated planning of project activities up to 31 March 2020.

The evaluation mission is confident that the project is on track and all targeted outputs will be achieved

Figure 3. Overall rating by category

Table 2. Progress towards end-of-project objectives and outputs

Target	Intervention logic	OVIs	Objective: Status mid-term evaluation Outputs: Status 31/3/2018 (annual progress report) (Rating score see Annexe B)	Justification rating
Goal	The CGIAR SLOs of improving food security, increasing incomes (reducing poverty) and achieving sustainable landscapes (environmental protection).	Food security, income and ecosystem service provision indicators as monitored for Dryland Systems CRP in 4 countries (Ethiopia, Kenya, Mali and Niger).		Impact evaluation study focussing on ecosystem and livelihood benefits is recommended.
Objective 1: Lessons and best practice.	Identify lessons learned and develop guidelines for restoring productive capacity of drylands.	Analysed information available on successes and failures in land restoration for 5 countries in Africa and globally.	Output 1 has been achieved. SCORE: 6 (Highly satisfactory).	Exhaustive literature review and lessons learned and best practices integrated and promoted in project approach.
Objective 2: Proof of appli-cation.	Obtain detailed information on the impacts of land restoration through action research on scaling-up.	Matrices of land restoration options by context for 5 African countries Ethiopia, Kenya, Mali, Niger and Tanzania.	Options by context matrices have been elaborated for the 4 action countries. SCORE: 6 (Highly satisfactory).	Options tested (large data sets).
Objective 3: Tools, for scaling-up.	To develop and test a set of tools and guidelines for scaling-up land restoration and measuring impact.	Tools and guidelines for up-scaling available and in use by NARS and NGOs in at least 4 African countries.	Numerous tools and guidelines available; testing in 4 action countries ongoing. SCORE: 5 (Satisfactory).	Enhance involvement of national technical services.
Objective 4: Tools, for scaling out	The development of methods, tools and guidelines to identify sites for out-scaling.	Tools, methods and guidelines for out-scaling available and in use by NARS and NGOs in 4 African countries.	Under development. SCORE: 5 (Satisfactory).	Elaborate a scaling out strategy (identify countries and partners).
Objective 5: Knowledge management and capacity strengthening.	Make knowledge generated by the project globally available. Generate capacity within and amongst actors to operate a co-learning paradigm.	A nested set of communities of practice (from local to global scales) functioning. New approaches, methods and tools used by development partners.	Communities of practice are operational at all levels. SCORE: 4 (Moderately satisfactory).	CoPs are active and functioning in all countries with Kenya as a lead example; ensure regular and durable exchange of information/experi-ences within the CoPs.
Output 1: Ingredients of success and knowledge gaps.	Understanding of which land use op-tions are appropriate in different sites and circumstances allows promotion of locally adoptable options.	Option by context matrices and associated guidelines available for 5 countries (Ethiopia, Kenya, Mali, Niger and Tanzania).	100 % -Reported on in 2017. Review of Lessons learned are available online here: https://dataverse.harvard.edu/dataverse/LandRestoration. SCORE: 6.	Exhaustive assessment of successes respectively failure of land restoration options done in 4 action countries; knowledge gaps identified.

Indicator assessment key	Green = achieved	Yellow = On target to be achieved	Red = Not on target to be achieved	Blue = Will be evaluated end of project

Target	Intervention logic	OVIs	Objective: Status mid-term evaluation Outputs: Status 31/3/2018 (annual progress report) (Rating score see Annexe B)	Justification rating
Output 2: Tools for targeting up-scaling.	Tools usable by grassroots staff customise options to key information about context over up-scaling domains.	A set of tools and methods for appropriate use in up-scaling developed and tested for scaling domains in 4 countries.	35% Complete. Guides, tools, methods are currently under development for the upscaling of land restoration activities. Including protocol development of the planned comparisons, electronic data entry for household surveys for farmer and farming system characterisation, implementation of the options by context approach, the acquisition of local knowledge, the development of guides for participatory workshops. SCORE: 5 (Satisfactory).	Farmers are engaged in testing and adapting options considering their local knowledge; protection of tree seedling from browsing goats not explicitly considered in research design.
Output 3: Enhanced knowledge on "what works where, by how much and for whom".	Local capacity for and new understanding from action research (field testing restoration approaches) and structured learning on what restoration strategies work in different contexts.	A refined set of tools and methods for scaling-up land restoration and modelling of associated impacts incorporating learning from Action Research.	50% complete. Data analysis of the household surveys for each of the farmers engaged in the planned comparisons is on-going. This is key to understanding farmer context. Implementation of the land restoration options using the planned comparisons approach to trial various options have already been implemented and monitored for the first season: Kenya (~2000 households) and Ethiopia (200 households) + pastoralist communities and rangeland governance structures in Ethiopia and Kenya, Niger (2700 households) and Mali (2000 households). SCORE: 6 (Highly satisfactory).	About 10,000 household are participating actively in the planned comparisons.
Output 4: Tools for targeting out-scaling.	Tools and methods to identify the out-scaling domains from the up-scaling sites and prioritization of sites and options.	Out-scaling tools, methods and guidelines developed and available to NARS and NGOs in at least 5 countries.	25% Complete. Guides, tools, methods are currently under development for the upscaling of land restoration activities. SCORE: 5 (Satisfactory).	Elaborate a scaling out strategy (identify countries and partners).
Output 5: Nested communities of practice, taking land restoration to scale.	Communities of practice, at a range of appropriate scales established and using appropriate tools, methods and guidelines for up-scaling and out-scaling land restoration successes.	The nested communities of practice (see Objective 5) brought together under a single global Community of Practice with a business plan developed for its subsequent expansion and sustainable management.	50% complete. Communities of Practiced have been launched in each country and each level. Summary brochure is online. Communities of practice guide for farmers and community facilitators are online, as well as communities of practice workshop reports. SCORE: 4 (Moderately satisfactory).	CoPs are active and functioning in all countries with Kenya as a lead example; ensure regular and durable exchange of information / experiences within the CoPs.

Photo 4. Planted trees protected with ring fences of woody sticks in Lower Yatta in Kenya.

by the end of the project, what is supposed to be 31 March 2020 (no cost project extension). All indicators are exclusively quantitative. It would be helpful for the evaluation of the project's impact on food security and livelihoods of the beneficiaries to identify also qualitative indicators.

It is well known that protection from browsing goats is a key factor to ensure tree survival in most developing countries what was confirmed during the field assessment in Kenya. All interviewed farmers recognised browsing goats as decisive factor for tree mortality (about 50%). According to the data recorded by the land restoration project, browsing by goats is identified by the farmers as one of the top three biophysical factors influencing survival including also watering and manure.

As a protection measure some farmers are fencing the individual trees planted. Physical protection of planted individual trees is often not an ideal option especially for a large number of trees, since individual fencing is not very environmentally friendly (cutting of many wooden sticks see Photo 4) or needs considerable woodfuel[5] for firing the bricks for building a ring fence). As a conclusion, the protection from goats as a key factor for the survival of planted trees should be further discussed with the farmers for identifying other socially acceptable protection measures (e.g., controlled grazing and browsing).

The high tree survival rate given after one year for Kenya is quite surprising. It would have been interested to evaluate the current tree survival rate from the last monitoring data from autumn 2018 (data under evaluation at the time of the mid-term evaluation). It is noteworthy, that the regular presence of project staff may positively influence the care for the planted trees by the farmers.

Overall assessment of effectiveness: 5 (out of 6)

5 Firewood and charcoal

3) Efficiency

The total expenditure of the EU funding on 31 October 2018 amounts to € 2,289,480 or 59.5% of the budget spent (see financial situation in Annexe D). The remaining budget of € 1,556,150 should cover the expenditure for the 15 months up to 31 March 2020 (including the no cost extension). If it is not possible to reserve some funds for conducting the suggested impact evaluation study after project closure (see impact) other funds should be identified (CRP-GLDC, CRP-FTA, CRP-LIVESTOCK, CRP-WLE).

Researchers are managing the project what may be more cost-efficient than hiring a manager-administrator. However, the management of the project may suffer because researcher may not be available all the time since there are too much taken by their core business (see also governance and management).

The implementation of the land restoration project is largely based on a broad and well-functioning network of developing partners (research "in" development approach) multiplying the development results in a cost-effective way. The project is currently reaching the impressive number of about 10,000 households, or more than 50,000 beneficiaries in the four action countries which are directly benefiting for their livelihoods from the land restoration project.

Overall assessment of efficiency: 5 (out of 6)

4) Impact

The underlying theory of change and impact pathway is relevant and coherent. However, as said, it is too early to conclusively evaluate impact. The testing of planned comparisons by voluntary farmers started in the field only in the second half of 2016. Widespread upscaling of best options by voluntary farmers on theirs farms and by other farmers (especially neighbours) is very impressive and is gaining further momentum.

To assess the full ecosystem and livelihood benefits induced by the land restoration project in the selected scaling up and scaling out domains it is suggested to conduct a comprehensive impact evaluation study two to three year after project closure. This would also allow assessing the continuation of the process without regular presence of the project staff. The change perceived by the targeted beneficiaries should be included in this study which could be conducted by a PhD student under CRP-GLDC, CRP-FTA, CRP-LIVESTOCK, and CRP-WLE.

The project is currently reaching the impressive number of about 10,000 households, or more than 50,000 beneficiaries in the four action countries which are directly benefiting for their livelihoods from the land restoration project.

The large scale impact on food security and poverty reduction will widely be based on the contribution of the development partners of the sustained upscaling of the land restoration after project closure (see partnership).

Preliminary assessment of impact: 5 (out of 6)

5) Sustainability

As for the impact it is too early to evaluate conclusively the sustainability of the land restoration measures promoted by the project at large scale. The large scale upscaling of best options mainly depends on their technical soundness (see also remarks on tree planting under effectiveness) and on the ongoing functioning of the CoPs at all levels. In addition, the quality and commitment of the extension services provided by the development partners and the national technical services (see partnership) are crucial. The engagement of development partners and national institutions is also necessary for identifying new options to be tested by the beneficiaries.

Preliminary assessment of sustainability: 5 (out of 6)

6) Science quality

The land restoration project is applying state of the art agricultural research in partnership with many development actors bringing in their complementary experiences. The project follows an integrated livelihood system approach. The selected innovations (options) by context are carefully identified and based on exhaustive literature reviews carried out in all participating countries.

The amount of time spent daily for collecting firewood dropped from 2.5 hours to 30 minutes after FMNR has been adopted in Zinder Region in Niger.

The participating farmers are testing and adapting the options bringing in their local site-specific knowledge. The established CoPs serve as important learning platforms supporting the implementation of the best options and their upscaling.

The project has published numerous papers, many of them in peer-reviewed journals. Moreover, an impressive number of factsheets, tools, guides, blogs, videos and conference presentations have been released (see last annual progress report March 2017 – March 2018).

Overall assessment of science quality: 6 (out of 6)

7) Governance and management

The land restoration project is implemented in each action country by a CGIAR Centre having the thematic expertise for the specific country programme. The land restoration project is annually reporting to IFAD and EU. These three annual progress reports are comprehensive and well-presented. However, these annual reports are not enough for quick adaptive management. The progress report from March 2018 was also the only document available with compiled and analysed data for the whole project area what rendered difficult the evaluation of the last seven months of project progress. Moreover, the lack of an updated planning of activities for all four action countries (only Gantt Chart until March 2018) made the assessment even more difficult.

It was not very clear to the mid-term evaluators how the project is steered by the donors and key organisations. Regarding the steering committee, the project has undergone shifts in project management from the IFAD side.

Simple recording formats are used by the enumerators for systematically collecting electronic data from the participating famers (farmer profiling) and from the tested options using the state of the art Open Data Kit mounted on mobile phones. This enables real-time data collection and analysis to assess and evaluate the contextual variables affecting the success of the land restoration activities. An appropriate methodology was developed to analyse these large data sets. A benefit-cost model for assessing the farmer adoption of best options has been developed by ICARDA and the data are currently analysed.

The Monitoring, Evaluation and Learning (MEL) platform is used for reporting, online interaction, sharing of electronic materials, data harvesting and analysis. The web-based MEL platform enables better Results Based Management (RBM), including planning, reporting, coordination, risk management, performance evaluation, and management of legal mechanisms among partners, as well as providing a knowledge sharing and learning venue amongst various stakeholders.

Enough time should be allocated to the researchers managing this complex project (for coordination tasks, relation with donors, external and internal communication...). The hiring of a manager-administrator for a single project is probably not justified. A non-scientific manager-administrator is also lacking the sound understanding of the technical topics and of the research in development approach.

Overall assessment of governance and management: 4 (out of 6)

8) Gender equality and women's empowerment

Women remain particularly disadvantaged in many African countries including the four action countries. They are lacking access to productive assets such as land but they have to provide much of the labour for agriculture without fully sharing in its financial returns. However, the gender situation is quite particular in the project area of Kenya. About 70% of all households are female-headed households since many men have migrated to towns for casual jobs.

The land restoration project is gender-sensitive and promotes gender equity at project staff and at beneficiary level (lead farmers and participation farmers). Data are recorded and analysed systematically gender-disaggregated. Despite the high percentage of youth (<35 years) in the beneficiary communities, they are strongly underrepresented in the project activities (planned

Photo 5. Farmer managed natural regeneration (*Guiera senegalensis*) in a millet field in Dosso Region in Niger.

comparisons, workshops and trainings) probably because they often lack access to land. CoPs were used to explore opportunities to encourage youth engagement.

The project documented the differential impacts of land degradation on men and women from the literature (output 1), including increased workload due to lower productivity and longer distances to collect water, fodder, and fuelwood. Moreover, acquisition of local knowledge about drivers of land degradation has revealed rich understanding and important gender differences in knowledge and perceptions relating to both causes of degradation and preferences in terms of restoration options.

These gender differences have been incorporated into the planning and implementation of the participatory action research in outputs 2, 3 and 4 for taking successes to scale and define the contexts for which they are appropriate.

Men and women benefit differently from promoted options what is considered by the project. For example, women are said to benefit substantially from the adoption of FMNR for the collection of firewood (see Photo 5). The amount of time spent daily for collecting firewood dropped from 2.5 hours to 30 minutes after FMNR has been adopted in Zinder Region in Niger (USAID 2016). Another example is the basin planting (see photo on front page, traditional cultivation practice on the left, basin planting or Zaï pits on the right) in Kenya which can increase women's autonomy compared to the usual cultivation practices of ploughing with oxen since women typically have les access to oxen and plough.

Overall assessment of gender equality and women's empowerment: 6 (out of 6)

9) Innovation and scaling up

Achieving impact at scale is one of the greatest challenges facing the development community. Research by CGIAR and its partners can support the drive to disseminate innovations, but the scaling up effort must be led by national institutions, supported by regional or international development organisations where appropriate. The mid-term evaluation is emphasising this statement from the CGIAR Strategy and Results Framework 2016-2030 (CGIAR 2016).

The engagement of national institutions and development partners is fundamental for the

sustained scaling up and scaling out through anchoring the approach and the best options in the national agricultural strategy (see also partnership). While the project has supported many PhD and MSc studies (see annual progress reports), the involvement and the capacity building of the national line ministries and their technical services in the land restoration project should be enhanced.

Many agricultural innovations, here referred as options, have been identified and tested and adapted by the farmers. The upscaling success is very impressive. As observed during the field visits the upscaling of basin planting in Kenya and FMNR in Niger is very quick without any significant incentives by the project (all labour work is provided by the farmers).

Local radios could be more systematically used for promoting and upscaling the options. It would be interesting to assess the spatial upscaling process on a map to analyse the scaling up pattern.

Regarding the scaling out after project closure, the project should elaborate a strategy with key development partners implementing the process. The CRPs, GLDC, FTA, Livestock, and WLE could monitor and evaluate the scaling out of the best options.

Overall assessment of innovation and scaling up: 5 (out of 6)

10) Environment and natural resources management

Most of the promoted best options have had a direct positive impact on the environment and the natural resources at landscape level. The land restoration measures led to an increased vegetation cover and thereby to better soil conservation. The increased yield of cereals and legumes on farms where FMNR or basin planting are applied improves the livelihoods of the beneficiaries and increases also their resilience since both options are significantly more drought-resistant (see adaptation to climate change).

FMNR has led to a spectacular increase of the tree and vegetation cover over more than half of Niger's farmland beginning in the 80ies in Maradi Region (USAID 2016). The project's grafting of the wild fruit trees *Ziziphus mauritiana* and *Balanites aegyptiaca* is further enhancing the attractiveness of the FMNR by offering additional food and income to the beneficiaries. It would helpful to

FMNR has led to a spectacular increase of the tree and vegetation cover over more than half of Niger's farmland.

define an optimal tree density per ha considering ecological and socio-economic context, tree species and crop planted.

Moreover, it would be very beneficial to find ways how to enhance the natural regeneration of *Faidherbia albida* and *Acacia senegal* in the FMNR approach. While Faidherbia albida is of utmost importance in traditional agroforestry systems, the Acacia is producing the valuable gum arabicum which could become another income generating activity.

Overall assessment of environment and natural resources management: 6 (out of 6)

11) Adaptation to climate change

Most of the land restoration techniques promoted by the project contribute to maintain and enhance the vegetation cover and are important adaptation measures to climate change. For example, FMNR or basin planting are typically more climate-resilient helping to ensure food security in drylands with more extreme droughts expected to increase due to climate change. Therefore, the land restoration project is clearly strengthening the environmental vulnerability and the resilience of beneficiary communities at large scale.

Overall assessment of adaptation to climate change: 5 (out of 6)

12) Partnership

Strategic partnerships with development partners are critical for the success of the project implementation and are fundamental for scaling up and scaling out of promising options. Numerous development partners with complementary areas of expertise at local, national, and global level contribute significantly to the land restoration a large scale.

Of particular importance are the collaboration with and the capacity building of national and local

Most of the land restoration techniques promoted by the project contribute to maintain and enhance the vegetation cover and are important adaptation measures to climate change.

authorities, NARS, and the technical services. The involvement and commitment of these national institutions lay the ground for the sustainability of the land restoration options promoted and the long-term impact on the food security and poverty reduction.

CoPs are a key element of the land restoration project and allow vivid exchange amongst the stakeholders. They are learning platforms amongst stakeholders to enable dialogue, collaboration, communication, sharing of information, and the creation of new knowledge. Each community is both facilitated and documented in order to share learning across the nested scales. The sharing of lessons learned within a particular community across and between the nested communities is crucial but rarely done as was documented in the Tanzania review of past land restoration experiences (output 1).

The challenge is how and by whom to ensure the ongoing functioning of the CoPs and the sharing of lessons between CoPs after project closure. As outlined above, the active involvement and commitment of the national structures may support the functioning of the CoPs.

Niger has a long and rich experience in successfully applying FMNR. Many development partners and research institutes continue to support the implementation FMNR in different contexts. We suggest that ICRISAT is organising a national workshop on Farmer Managed Natural Regeneration (FMNR) in Niger with all relevant national actors (and other interested actors from the Sahel region) for discussing and initiating a national FMNR learning platform.

Overall assessment of partnership: 5 (out of 6)

Photo 6. Farmer David showing his improved maize in the planting basins. January 2018. Kenya.

8. Conclusions

The project is on track. The mid-term evaluation expects that all targeted outputs will be achieved by the end of the project, what is supposed to be 31 March 2020 (no cost project extension). Overall, the performance of the project is satisfactory to highly satisfactory (score: 5 – 6).

The project may significantly contribute to food security and poverty reduction at large scale. The widespread upscaling of best options by voluntary farmers on theirs farms and by other neighbours is very impressive. The sustained dissemination of best options, however, depend on the ongoing functioning of the CoPs and continuous sharing of lessons learned within a particular community across and between the nested communities at all levels. To assess the full ecosystem and livelihood benefits induced by the land restoration project in the selected scaling up and scaling out domains an impact evaluation study is suggested two to three year after project closure. This study will also reveal the sustainability of the best options applied. Gender issues has been systematically considered in the project implementation.

The engagement of national institutions is fundamental for the sustained scaling up and scaling out through anchoring approach and best options in the national agricultural strategy. A comprehensive scaling out strategy should be prepared together with key development partners for implementing the process after project closure.

The governance and management of the project can be approved. There is no updated planning of activities for all four action countries for remaining project period and the project supervision of the donors remains unclear.

Overall the project team left a very good impression by their professionalism and high commitment leading to many vivid discussions during the field mission.

9. Recommendations

The mid-term evaluation makes the following recommendations to the relevant stakeholders:

Donor (IFAD/EU) level

1. Approve a no cost extension up to 31 March 2020 which will give more time to the project implementation and supervision and support (facilitation / training) of the communities of practice;
2. Identify funds for conducting a comprehensive impact evaluation PhD study two to three year after project closure for assessing the full ecosystem and livelihood benefits induced by the land restoration project in the selected scaling up and scaling out domains;
3. Ensure that the planned Results-Oriented Monitoring (ROM) of the EU in Niger and Ethiopia is complementary to this mid-term evaluation (same evaluation criteria).

Central management level (ICRAF Kenya)

4. Elaborate a planning Gantt Chart at activity level for each action country up to the end of the project considering the findings and recommendations from this mid-term review;
5. Identify qualitative indicators for the evaluation of the project's impact on food security and livelihoods of the beneficiaries;
6. Prepare a comprehensive scaling out strategy together with key development partners for implementing the process after project closure; the scaling out process could be coordinated under the CGIAR Research Program on Grain Legumes and Dryland Cereals (GLDC), the CGIAR Research Program on Forestry, Trees and Agro-Forestry and CGIAR Research Program on Livestock;
7. Organise a regional workshop to evaluate and discuss the project findings (based on national workshops in each country) and to discuss the scaling out strategy;
8. Enhance the involvement and the capacity building of the national line ministries and their technical services for playing an active role for scaling up and scaling out after project closure.

Working-level suggestions (project country level)

9. Organise a national workshop on Farmer Managed Natural Regeneration (FMNR) in Niger with all relevant national actors (and other interested actors from the Sahel region) for discussing and initiating a national FMNR learning platform;
10. Evaluate the tree planting experiments (planned comparison) including appropriate protection measures against browsing;
11. Define optimal tree density per ha in Farmer Managed Natural Regeneration considering ecological and socio-economic context, tree species and crop planted;
12. Investigate the possibilities to promote *Faidherbia albida* in FMRN as a key tree species in traditional agroforestry systems (Mali, Niger);
13. Investigate the potential of producing gum arabicum out of *Acacia senegal* as by-product of FMNR (Mali, Niger).

Photo 7. Vincent Bado of ICRISAT with Farmers in Niger.

10. Management response to recommendations

Rec #	Recommendation	Management response
	Donor (IFAD/EU) level	
1	Approve a no cost extension up to 31 March 2020 which will give more time to the project implementation and supervision and support (facilitation / training) of the communities of practice.	Accepted. IFAD Approved a no cost-extension.
2	Identify funds for conducting a comprehensive impact evaluation PhD study two to three year after project closure for assessing the full eco-system and livelihood benefits induced by the land restoration project in the selected scaling up and scaling out domains.	Accepted (Dependant). Management will share this evaluation to the three CRPs with request to sponsor a PhD Study in the period 2020-2022.
3	Ensure that the planned Results-Oriented Monitoring (ROM) of the EU in Niger and Ethiopia is complementary to this mid-term evaluation (same evaluation criteria).	Accepted (Dependant). The Preliminary findings were shared with the ROM Team. However some processes have been repeated.
	Central management level (ICRAF Kenya)	
4	Elaborate a planning Gantt Chart at activity level for each action country up to the end of the project considering the findings and recommendations from this mid-term review.	Accepted. The Team will deliver an updated gantt chart for 2019-2020 by end of May 2019.
5	Identify qualitative indicators for the evaluation of the project's impact on food security and livelihoods of the beneficiaries.	Accepted (Dependant). This should be part of the PhD Study in case funds are secured.
6	Prepare a comprehensive scaling out strategy together with key development partners for implementing the process after project closure; the scaling out process could be coordinated under the CGIAR Research Programs Grain Legumes and Dryland Cereals (GLDC), Forests, Trees and Agroforestry (FTA), and Livestock, and Water, Land and Ecosystems (WLE).	Accepted (Dependant). Management will share this request to the three CRPs working in Mali, Niger, Ethiopia, Kenya and Tanzania to include a strategy in their POWB 2020.

Rec #	Recommendation	Management response
7	Organise a regional workshop to evaluate and discuss the project findings (based on national workshops in each country) and to discuss the scaling out strategy.	Partially accepted. Management agrees that each country team will share project finds with national partners . It may not be feasible to fund a regional workshop but this can be achieved virtually. A project team meeting to discuss the evaluation and prepare the management response was organized in Nairobi on May 6-8 2019. The project planned the dissemination of results in 2019. In Kenya results have been presented at National Scaling workshops and County-level workshops in each action area The same will be conducted for the other countries. In addition the project has identified several events to showcase findings including the Regional African Forest Landscape Restoration (AFR100) and Global Landscape Forum (GLF) in Ghana in October 2019.
8	Enhance the involvement and the capacity building of the national line ministries and their technical services for playing an active role for scaling up and scaling out after project closure.	Accepted. This is part of sharing finding and follow up.
	Working-level suggestions (project country level)	
9	Organise a national workshop on Farmer Managed Natural Regeneration (FMNR) in Niger with all relevant national actors (and other interested actors from the Sahel region) for discussing and initiating a national FMNR learning platform.	National and district level communities of practice workshops are taking place in 2019 in both Niger and Mali.
10	Evaluate the tree planting experiments (planned comparison) including appropriate protection measures against browsing.	Analysis of tree planting planned comparison data are underway to consider all social and environmental factors influencing tree survival, uptake and impact on livelihoods, using the options by context approach.
11	Define optimal tree density per ha in Farmer Managed Natural Regeneration (FMNR) considering ecological and socio-economic context, tree species and crop planted.	This has been conducted since the onset of the project and is included in the reports.
12	Investigate the possibilities to promote Faidherbia albida in FMRN as a key tree species in traditional agroforestry systems (Mali, Niger).	This recommendation will require further discussion in the project team and may not be addressed as management response during the finalization of this report.
13	Investigate the potential of producing gum arabicum out of Acacia senegal as by-product of FMNR (Mali, Niger).	This recommendation will require further discussion in the project team and may not be addressed as management response during the finalization of this report.

11. References

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Photo 8. Nusery operator in Mali sorting the Ziziphus seedlings.

Annex A: Evaluation matrix

Revised and amended evaluation questions of the ToR.

Evaluative questions	Indicators	Sources	Methodology
1) Relevance: Is the project strategy and design appropriate to meet the intervention's outputs and objectives?			
A) Is the theory of change (impact pathway) and their underlying assumptions consistent and coherent with the logframe?	Respect/coherence of the theory of change in the logframe	Logframe and theory of change	Comparison/analysis of logframe and theory of change
B) Is the project consistent with the main goals and System Level Outcomes of the CGIAR?	Coherence between project design and CGIAR strategy and results framework (2016-2030)	Logframe, theory of change, CGIAR strategy and results framework (2016-2030)	Comparison/analysis of project design and CGIAR strategy and results framework
C) Are the indicators and targets of the project logframe "SMART"?	SMART criteria	Project logframe	Analysis of the project logframe
D) Is there evidence of (continuing) demand for the project from intended beneficiaries?	Number of new beneficiaries	Field reports, community facilitator	Analysis of reports, interviews facilitator
2) Effectiveness: What is the Project's progress toward the end-of-project targets?			
A) To what extent have the outputs and objectives been attained in quantitative and in qualitative terms (progress made)?	Logframe indicators	Logframe	Assessment of indicator
3) Efficiency: How economically has the project converted its resources/inputs into results?			
A) How cost-effective is the extent to which the project has achieved its results at a lower cost compared with alternatives?	Ratio project cost activities / alternatives	Accounts from projects, costs alternatives	Cost comparison project activities - alternatives
B) What are the costs per beneficiary?	Total costs/beneficiary	Accounts, community facilitator	Calculation
4) Rural poverty impact: Is the theory of change (impact pathway) relevant and coherent?			
A) Does the initiative show first anticipated impacts on the target group?	Living standards of beneficiaries	Technical reports (impact assessments), beneficiaries, community facilitators, field mission	Analysis of project documents, interviews, focus groups discussions, field observations

Evaluative questions	Indicators	Sources	Methodology
B) Are the activities and outputs of the programme consistent with the intended impacts?	Respect/coherence of the theory of change in the logframe	Logframe and theory of change	Comparison/analysis of logframe and theory of change
C) To what extent have beneficiary incomes changed as a result of the project (counterfactual)?	Difference in living standards project area – comparison groups baseline study DryDev	Technical reports (impact assessments), beneficiaries, NGOs, community facilitators, field mission	Comparison with-without (counterfactual)
D) What changes have taken place in household food security and nutrition and what explains such changes (contribution project)?	Difference in household food security/ nutrition project area - comparison groups baseline study DryDev	Technical reports (impact assessments), beneficiaries, NGOs, community facilitators, field mission	Comparison with-without (counterfactual)
5) Sustainability: Will the beneficiaries continue to apply best restoration options after project closure?			
A) Is there any change in behaviour or management practices of beneficairies?	Change of behaviour and management practices at beneficiary level	Technical reports, beneficiaries, NGOs, community facilitators, field mission	Analysis of documents, interviews, focus groups discussions, field observations
B) What changes in the overall context (e.g. policy framework, political situation, institutional set-up, economic shocks, civil unrest) have affected or are likely to affect project implementation and overall results?	Important changes in the context	National policies or strategies, websites, project staff and partners	Analysis of documents and websites, interviews with project staff and partners
C) Do project activities benefited from the engagement, participation and ownership of local communities, grass-roots organizations and the rural poor?	Possession of approach and techniques by the beneficiaries	NGOs, community facilitators, field mission	Interviews, focus groups discussions, field observations
D) Is there a clear indication of government commitment after the project closing date?	Statements from politicians	National policies or strategies, websites	Analysis of documents and websites, interviews with project staff and partners
6) Science quality: Do the research design, problem-setting, and choice of approaches reflect high quality in scientific thinking, state-of-the-art knowledge and novelty in all areas of research?			
A) Is there evidence that the program builds on the latest scientific thinking and research results?	State-of-the-art publications	Research papers	Analysis of research papers

Evaluative questions	Indicators	Sources	Methodology
B) Are the actions in question truly innovative or are they well-established elsewhere but new to the country or project area?	Innovations promoted in country and elsewhere	Technical reports, stakeholders, field mission	Analysis of project documents, interviews, focus groups discussions, field observations
7) Governance and management: Is the governance and management appropriate and efficient for project implementation?			
A) Are responsibilities, reporting structure and decision making clear and transparent?	Speed, clarity and consistency of decisions	Organisation chart and operating note, data collected throughout the mid-term evaluation mission	Analysis of organisational charts and other information obtained
B) To what extent does the program have good financial management, budgeting, and reporting?	Speed, clarity and consistency of decisions and adaptive management	Financial reports, accounts	Analysis of organisational charts and other information obtained
C) What are the total project management costs in relation to total project costs and how do they compare with similar projects?	Total project management costs / total project costs	Financial reports, accounts	Financial analysis
D) Did the M&E system generate information on performance and impact, which is useful for project managers, and has appropriate action been taken on the basis of this information?	M&E recommendations	M&E system	Analysis of documents, interviews with project staff and partners
E) Were successfully promoted innovations documented and shared with partners and considered in policy dialogue (internal and external communication)?	Documentation and use of innovation in policy dialogue	Factsheets, national sectorial policies	Analysis of documents and national sectorial policies
F) Did the governments and steering committees actively and timely support corrective management actions if required?	Recommended corrective management actions by the steering committees	Minutes steering committees	Analysis of steering committee minutes

Evaluative questions	Indicators	Sources	Methodology
8) Gender equality and women's empowerment: Have gender issues explicitly been considered in project design and implementation?			
A) What were the project's achievements in terms of promoting gender equality and women's empowerment?	Systematic consideration gender elements	Project documents, data collected throughout the MTR mission	Document analysis, interviews with stakeholders
B) To what extent did the project define and monitor sex-disaggregated results to ensure that gender equality and women's empowerment objectives were being met?	Systematic consideration gender elements	Project documents, data collected throughout the MTR mission	Document analysis, interviews with stakeholders
C) Does the project consider gender difference in knowledge and perceptions related to causes of degradation and preferences for restoration options?	Systematic consideration gender elements	Project documents, data collected throughout the MTR mission	Document analysis, interviews with stakeholders
9) Innovation and scaling up: What is the potential of best options by context to be scaled up?			
A) What are the successful restoration options under different contexts (ecological, socio-economic, cultural and institutional) and what are the enabling factors?	Benefit/cost ratio	Database (ODK project data)	Model calculation ongoing (Bayesian Belief methodology)
B) What is the scaling up mechanism for promoting best options?	Characteristics of scaling up mechanism	Technical reports, community facilitators, beneficiaries, field mission	Analysis of project documents, interviews, focus groups discussions, field observations
C) Who is taking up best options?	Profile of new farmers	Monitoring data, community facilitators, beneficiaries	Analysis of data and other sources, comparison farmer profiles (initial – new)
D) To what extent did the project develop the capacity of community groups and institutions for participatory sustainable natural resource management?	Enhanced capacity of community groups and institutions	Technical reports, NGOs, beneficiaries, field mission	Analysis of project documents, interviews, focus groups discussions, field observations

Evaluative questions	Indicators	Sources	Methodology
10) Environment and natural resources management: What is the project's contribution for reducing environmental vulnerability and enhancing livelihood resilience in view of poverty reduction?			
A) To what extent did the project develop an inclusive natural resource management considering gender and vulnerable groups?	Effective participatory natural resource management	Technical reports, beneficiaries, field mission	Analysis of project documents, interviews, focus groups discussions, field observations
B) To what extent did the project follow required environmental and social risk assessment procedures (considering IFAD or national environmental and social standards/norms)?	Respect of environmental and social standards/norms	IFAD or national environmental and social standards/norms, field mission	Analysis of project documents, field observations
11) Adaptation to climate change: Is climate change adaption an integral part of the project strategy?			
A) To what extent did the project demonstrate awareness of current and future climate risks?	Systematic consideration of climate change adaptation	Project documents	Document analysis
12) Partnership: Will the partnerships established (e.g. communities of practice) continue after project closure?			
A) Does the program engaged with appropriate partners, given their roles in implementation and achieving the objectives of the program?	Appropriateness of partnerships	Reports	Evaluation of partnerships
B) In what way has the Project Team facilitated the participation of NGOs and civil society, where appropriate, and what were the implications?	Frequency of exchange with NGOs and civil society	Field reports, meeting and training minutes	Analysis of documents, interviews partners
C) Is there an appropriate exit /handover strategy in partnerships? Are partners prepared and incentivized to take on any necessary responsibilities?	Existing exit/handover strategy	Exit/handover strategy	n.a.

Annex B: Rating system

IFAD Evaluation Manual (2015)

Rating scale	Score descriptor
Highly satisfactory (6)	Under the concerned criterion, the activity (project, programme, non-lending, etc.) achieved or surpassed all main targets, objectives, expectations, results (or impacts) and could be considered as a model within its project typology.
Satisfactory (5)	Under the concerned criterion, the activity achieved almost all (indicatively, over 80-95 per cent) of the main targets, objectives, expectations, results (or impacts).
Moderately satisfactory (4)	Under the concerned criterion, the activity achieved the majority (indicatively, 60 to 80 per cent) of the targets, objectives, expectations, results or impacts. However, a significant part of these was not achieved.
Moderately unsatisfactory (3)	Under the concerned criterion, the activity did not achieve its main targets, (indicatively, less than 60 per cent) objectives, expectations, results or impacts.
Unsatisfactory (2)	Under the concerned criterion, the activity achieved only a minority of its targets, objectives, expectations, results or impacts.
Highly unsatisfactory (1)	Under the concerned criterion, the activity (project, programme, non-lending, etc.) achieved almost none of its targets, objectives, expectations, results or impacts.

Annex C: List of partners

Country	Partner	Joint Activities	Type of Partnership
Niger	IFAD-Niger Country Programme ProDAF	Co-location of action sites in Maradi, Zinder and Tahoua	MoA
Niger	PARC-YANAYI: a development project funded by European Union on Improvement of the the resilience of rural communities risks and climate change	Co-location in Dosso and Zinder	Informal partnership with ICRISAT
Niger	University of Niamey	Joint Students with ICRISAT, collaboration on the farmer profiling	Informal partnership
Niger	INRAN	Joint Student and co-location of field activities	MoA
Niger	University of Maradi	Joint Student with ICRAF- MSc thesis	Informal partnership
Niger	OxFAM, INRAN, PGRC-DU, FAO, DGEF/ MESUDD, Dan-Saga	Engaged in the Stakeholder Workshops	Informal partnership

Country	Partner	Joint Activities	Type of Partnership
Niger	REGIS/Project funded by USAID in Niger and Burkina	Collaboration on activities	MoA
Niger	NGO-CRS	Collaboration on activities and sites	Informal partnership
Niger	NGO-REFORM	Co-location of action sites Tahoua	MoA
Niger	AGRYMET	Joint activities	MoA
Mali, Ethiopia, Kenya	Drylands Development Programme (DryDEV)	Co-locating activities (especially the Planned Comparisons joint staff, collaborating on stakeholder engagement	Strong collaboration on the planned comparisons
Mali	IFAD Country Programme (PAPAM)	Co-location of activities in Sikasso, Segou and Mopti	Informal partnership
Mali	Sahel-Eco	Collaboration on the Planned Comparisons	Agreement with ICRAF through the DryDev Programme
Mali	Malian Association for Awareness Raising and Sustainable Development (AMEDD)	Collaboration on the Planned Comparisons	Agreement with ICRAF through the DryDev Programme
Mali	Malian Association for Public Education and Protection of the Environment (AMEPPE)	Collaboration on the Planned Comparisons	Agreement with ICRAF through the DryDev Programme
Mali	Institut d'Economie Rurale (IER)	Joint coaching of MSc students	Agreement with ICRAF
Mali	Institut polytechnique rural de formation et de recherche appliquée (IPR/IFRA)	Joint coaching of MSc students - profiling of the famers enrolled in the PCs	Agreement with ICRAF

Country		Partner	Joint Activities	Type of Partnership
Mali		WASCAL (West African Science Service Center on Climate Change and Adapted Land Use)	Joint coaching of MSc students - profiling of the famers enrolled in the PCs	Informal partnership
Mali		USAID project SmAt-Scaling: "Scaling-up Climate-Smart Agroforestry Technologies for improved market access, food and nutritional security in Mali (SmAT-Scaling)"	Joint support and coaching of students and farmers	USAID has an Agreement with ICRAF for SmAt-Scaling implementation
Ethiopia		World Vision- Ethiopia	Co-coordinating Planned Comparisons in four woredas	Memorandum of Agreement for hiring of six community facilitators for monitoring
Ethiopia		Relief Society of Tigray (REST)	Coordinating DryDev activities with ICRAF, collaborating on Local Knowledge surveys in Samre woreda	Agreement with ICRAF through the DryDev Programme
Ethiopia		IFAD-Programme CBINReMP	Collaborative identification of research needs with ILRI and joint activities with ICRAF (two MSc students)	
Ethiopia		Amhara Bureau of Agriculture (BoA)	Joint activities on exclosures, both with ILRI (agreement) and ICRAF (supported MSc student)	Joint coordination agreement between ILRI and BoA)
Ethiopia		PRIME and REST-II projects	Projects requested research support in Borana and Guji Zones, Oromia Region	in 2017 ILRI signed an MoU with CARE, OSHO, and World Resources Institute (WRI)
Ethiopia		BRACED project	Afar region, programmed requested research support	Informal partnership

Country		Partner	Joint Activities	Type of Partnership
Ethiopia		University of Copenhagen and Imperial College	Joint MSc students stationed in Ethiopia	Agreement with ICRAF
Kenya		REGAL-IR & AVCD-LC: Burder and Wajir	Assessment of REGAL-IR's implementation of institutional option/ engagement with commu¬nity on technical rangeland management options	Informal partnership with ILRI - This is a new site and partner.
Kenya		SORALO Programme: Olkiramatian & Shompoloe Group ranches, Kajiado	Assessment of SORALO's implementation of institutional option; technical assessment to come.	in 2017 ILRI signed an MoU with SORALO and Olkiramatian and Shompole Group Ranches
Kenya		AVCD- Burder CBNRM committee in Wajir	Assessment of REGAL-IR's implementation of institutional option/ engagement with community on technical rangeland management options; building community institutions for collaborative management and research	No formal partnership required
Kenya		USAID and other programmes: Il'Ngwesi Group ranch, Laikipia	Assessment of past implementation of institutional option/ engagement with community on technical rangeland management options	Informal partnership with ILRI
Kenya		World Vision- Kenya	Co-location of the activities in Kenya, collaboration with field staff of ICRAF	Agreement with ICRAF through the DryDev Programme
Kenya, Ethiopia		Bangor University	Joint MSc students between ICRAF and Bangor- stationed in Ethiopia and Kenya	MoA between Bangor and ICRAF

Country		Partner	Joint Activities	Type of Partnership
Kenya		University of Nairobi	Joint PhD Student	Informal partnership with ICRAF
Kenya		Ministry of Agriculture, Kenya	Collaboration with ward extension officers in Machakos, Makueni, and Kitui	Informal partnership with ICRAF
Kenya		KCEP-CRAL	Collaborative discussions about alignment of workplans and activities.	MoA under review

Annex D: Budget situation of EU grant on 31/10/2018

Category of Expenditure	Budgeted (€)	Total expenditure 31/10/2018 (€)	Remaining funds (€)
Consultancies	241,000	97,686	143,314
Equipment and Materials	200,000	32,896	167,104
Good, Service and Inputs	108,000	111,328	-3,328
Operating Costs	153,000	162,402	-9,402
Salaries and Allowances	2,450,000	1,618,202	831,798
Workshops	188,000	39,288	148,712
Training	163,000	52,591	110,409
Travel and Allowances	227,000	85,941	141,059
Administrative Costs	115,630	89,146	26,484
Total	**3,845,630**	**2,289,480**	**1,556,150**

Annex E: Documents and reports reviewed

Proposal/agreement:

- Large grant design document. IFAD
- President's report on proposed grants under the global/regional grants window to CGIAR-supported international centres and to a non-CGIAR-supported international centre. IFAD. 31 October 2014
- Grant implementation agreement IFAD-ICRAF

Literature review:

- Ethiopia, Kenya, Mali, Niger, Tanzania

Progress reports:

- Three annual project progress reports IFAD/EU "Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale": 17 March 2015 – 31 March 2016; 31 March 2016 – 31 March 2017; 31 March 2017 – 31 March 2018. Submitted by ICRAF
- Community of practice workshop with farmers (Kitui, Machakos and Makueni Counties, Kenya, June 2018
- Community of practice workshop with community facilitators (Mwala and Machakos Counties, Kenya, 25 January 2018)
- ICARDA Semi-annual Progress Report (January - June 2018)

Project factsheets:

- Project overview. January 2016
- Communities of practice. Creating and sharing knowledge
- Ethiopia activities
- Project goal and impact pathway
- Achieving food security and reducing poverty through land restoration
- Risks and opportunities for advancing gender equality
- Field visit to Mwala, Machakos – January 11th, 2017
- Field visit to Yatta, Machakos – January 17th, 2017

DryDev:

- The Drylands Development Programme. Baseline Survey Report. September, 2016
- Community visioning and action planing: Guidelines for integrating the options by context approach. Final draft November 2nd 2015

Divers:

- External Evaluation of the CGIAR Research Program on Dryland Systems
- CGIAR Research Program on Dryland Systems. Program theory of change and impact pathway. Last update December 2015
- ICRAF (2014) Treesilience: An assessment of the resilience provided by trees in the drylands of Eastern Africa. ICRAF Nairobi, Kenya. ICRAF

Legislative and regulatory texts:

- LOI n° 2004-040 du 8 juin 2004 portant régime Forestier au Niger

Annex F: Itineraries of the field visits

External independent Review of IFAD/EC Project: Tentative Agenda

19th – 23rd November 2018 ICRAF Nairobi, Machakos, Kitui and Makueni counties, Kenya

Date	Time	Activity/Description	Facilitation/Participants
	9:00 am- 11:00 am	Meeting at ICRAF	ICRAF team, Urs
Day 1, Nov 19 (Monday)	Nov 19 (Monday)	Travel ICRAF (Nairobi) to Mwala	
	2:00pm – 5:00pm	Field visit at Mwala (2 farms)	ICRAF team, Urs, World Vision representative Silas (CF Mwala)
	Accommodation at Kyaka Hotel in Machakos town		
Day 2, Nov 20 (Tuesday)	8:00am -10:00am	Travel from Machakos to ADRA offices at Kavisuni	
	10:00am -11:00am	Brief meeting with ADRA team	
	11:00am – 4:00pm	Field visit at Lower Yatta (2 farms)	ICRAF team, Urs, ADRA team, Stephen (CF L. Yatta)
	4:00pm-6:00pm	Travel to Kitui town	
	Accommodation at Kitui Cottages in Kitui town		
Day 3, Nov 21 (Wednesday)	8:00am-10:30am	Travel from Kitui to Kalawa	
	10:30-2:00pm	Field visit at Kalawa (2 farms)	ICRAF team, Urs, Mercy (CF Kalawa)
	2:00pm-3:00pm	Meet with Mutembuku farmer group	CRAF team, Urs, Enrico Mercy (CF Kalawa), Caritas Representative, Farmer group
	3:00pm-6:00pm	Travel from Kalawa to Kibwezi	
	Accommodation at Kambua Guest House in Kibwezi town		

Date	Time	Activity/Description	Facilitation/Participants
	8:00am-9:00am	Travel from Kibwezi to Kambu (Mtito Andei)	
Day 4, Nov 22 (Thursday)	9:00- 1:00 pm	Field visit at Mtito Andei (2 farms)	ICRAF team, Urs, Sylvester (CF Mtito), Caritas Representative
	1:00pm- 6:00pm	Travel Mtito Andei to Nairobi	
	Accommodation at Trademark Hotel in Nairobi		
	10:30am-12:30	Meeting at ICRAF with IFAD team. Reflections from the field.	Urs, Enrico, John, Esther, Anne Kuria
	12:30 am- 13:30	Lunch break	
Day 5, Nov 23 (Friday)	13:30- 14:30	Meeting with Fergus Sinclair	Urs, Enrico, Fergus
	14:30- 15:30	Meeting with Karl Hughes	Urs, Enrico, Karl
	15:30-14:30	Meeting with George Okwatch	Urs, Enrico, George

Restoration of Degraded Land for food security and poverty reduction in East Africa and the Sahel: Taking successes in land restoration to scale

Program Mid-term evaluation Niger

Time	Activity	Remarks
	4 December 2018	
09:00-09:30	Departure from Hotel to ICRISAT campus	
09:30-10:00	Debriefing with Dr Vincent, and ICRISAT country representative	
10:00-10:30	Meeting with ICRISAT team	
10:30-11:00	Coffee break	
11:00-11:30	Departure to ICRISAT research station	
11:30-13:30	Visit of Tree-crop experiment at ICRISAT station and travel back to Niamey	
13:30-14:30	Lunch	
14:30-16:30	Free	
	5 December 2018: Field work	
08:30-10:00	Travel to Fakara	
10:00-15:30	Field visits and meeting with farmers	
15:30-17:00	Travel back to Niamey	
	6 December 2018: Field work	
08:30-090:30	Travel to Karabedji	
10:00-15:30	Field visits and meeting with farmers	
15:30-17:00	Travel back to Niamey	
	7 December 2018: Meeting with partners	
09:00-10:00	Meeting with INRAN	
11:00-12:00	Meeting with NGO-REFORM	
12:00-13:00	Meeting with REGIS-ER	
13:00-14:00	Lunch	
13:00-15:00	Wrap up report	

Annex G: List of stakeholders interviewed or consulted

Stakeholder	Persons met
ICARDA	Enrico Bonaiuti Frija Aymen
	Kenya
ICRAF	Fergus Sinclair Leigh Winowiecki Kai Mausch John Nyaga Anne Omollo Macdonald Ngangi Esther Kiura
Community Facilitator	Silas Muthuri Stephen Maithya Mulwa Mercy Musyoki Silvester Muendo
Enumerators	Amos Mwendwa Felix Kioko
DryDev	George Okwach
IFAD	Stephen Twomlow
World Vision	Onesmus Mwatha Mary Kioko
ADRA	Johnson Serem
National Government Administration	Justus Kilo Mwanzia
Agriculture Service	Dominic Omondi
Farmer group	Mutembuku
Farmers	John Nzioki (Mwala) Daniel Mutunga (Mwala) Alice Karuki Pilip (Lower Yatta) Rachel Michael (Lower Yatta) Justicina Ndoko (Lower Yatta) Veronica Ngina Ngau (Kalawa) Rose Mulwa (Kalawa) Elijah Ndonye (Mtito Andei) Mary (Mtito Andei) Francisca Muenii Mulei (Mtito Andei)

Stakeholder	Persons met
	Niger
ICRISAT	Vincent Bado Larwanou Mahamane Buckner Akouete Koffi Sangare Gaston Garba Seybou Sanoussi Laminou Kalilou Adamou Harouna Moukel
INRAN	Abasse Tougiani
REFORM	Rahamatou Ibrahima
REGIS-ER	Habou Maman Lawan
Administration Communale	Amadou Hima
Farmers	Hama Gado Soumana Lamido
	Ethiopia
ILRI	Jason Sircely
	Mali
ICRAF	Patrice Savadogo

Annex H: Communication material

- Project Monitoring, Evaluation and Learning (MEL) Platform: https://mel.cgiar.org/projects/restoration-of-degraded-land-for-food-security-and-poverty-reduction-in-east-africa-and-the-sahel
- Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale: https://data.worldagroforestry.org/dataset.xhtml?persistentId=doi:10.34725/DVN/SBL27O
- Project website: http://www.worldagroforestry.org/project/restoration-degraded-land-food-security-and-poverty-reduction-east-africa-and-sahel-taking
- Understanding landscape restoration options in Kenya: Risks and opportunities for advancing gender equality: http://www.worldagroforestry.org/sites/agroforestry/files/project/broucher/Gender%20land%20restoration%20brief%20IFAD%20EC_V1_MC_0.pdf
- Restoration of degraded land for food security and poverty reduction in East Africa and the Sahel: taking successes in land restoration to scale: http://www.worldagroforestry.org/sites/agroforestry/files/2019-08/2019%20IFAD_EC_Project%20Brief_Land%20Restoration.pdf
- Achieving food security and reducing poverty through land restoration: http://www.worldagroforestry.org/sites/agroforestry/files/project/broucher/Restoration%20of%20Degraded%20Land%20Project%20Brief%20Feb%202018.pdf
- Project blogs: http://www.worldagroforestry.org/project/landrestore/news

World Agroforestry (ICRAF) is a centre of scientific excellence that harnesses the benefits of trees for people and the environment. Leveraging the world's largest repository of agroforestry science and information, we develop knowledge practices, from farmers' fields to the global sphere, to ensure food security and environmental sustainability. ICRAF is the only institution that does globally significant agroforestry research in and for all of the developing tropics. Knowledge produced by ICRAF enables governments, development agencies and farmers to utilize the power of trees to make farming and livelihoods more environmentally, socially and economically sustainable at scales.
www.worldagroforestry.org

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, CGIAR Research Center that conducts agricultural research for development in the drylands of Asia and sub-Saharan Africa. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid or dryland tropics has over 2 billion people, and 644 million of these are the poorest of the poor. ICRISAT and its partners help empower these poor people to overcome poverty, hunger and a degraded environment through better agriculture. ICRISAT conducts research on five highly nutritious drought-tolerant crops: chickpea, pigeonpea, pearl millet, sorghum, and groundnut.
www.icrisat.org

The International Livestock Research Institute (ILRI) is a CGIAR Research Centre that works with partners worldwide to enhance the roles that livestock play in food security and poverty alleviation, principally in Africa and Asia. The outcomes of these research partnerships help people in developing countries keep their farm animals alive and productive, increase their livestock and farm productivity in sustainable ways, find profitable markets for their animal products, and reduce the risk of livestock-related human diseases.
www.ilri.org

Established in 1977, the International Center for Agricultural Research in the Dry Areas (ICARDA) is a non-profit, CGIAR Research Center that focusses on delivering innovative solutions for sustainable agricultural development in the non-tropical dry areas of the developing world. We provide innovative, science-based solutions to improve the livelihoods and resilience of resource-poor smallholder farmers. We do this through strategic partnerships, linking research to development, and capacity development, and by taking into account gender equality and the role of youth in transforming the non-tropical dry areas.
www.icarda.org

CGIAR is a global research partnership for a food-secure future. CGIAR science is dedicated to reducing poverty, enhancing food and nutrition security, and improving natural resources and ecosystem services. Its research is carried out by 15 CGIAR centers in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations and the private sector.
www.cgiar.org