

**PROJECT DOCUMENT**

Upon request from the Government of (Enter Country Name), represented by the Ministry of (Enter Ministry Name);

the Food and Agriculture Organisation of the United Nations (FAO) will provide technical assistance for the following Project:

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| **Project Title:** | AVACLIM: Agroecology, ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions |
| **Project Symbol:** | GCP/GLO/927/GFF |

Upon signature of this project document by the duly authorized representatives of both parties, the project will be implemented in accordance with the background, rationale and management arrangements described herein.

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| On behalf of the Government: | | On behalf of:  FAO | |
| Name: |  | Name: |  |
| Title: |  | Title: |  |
| Date: |  | Date: |  |

**FAO GEF PROJECT DOCUMENT ANNOTATED TEMPLATE**

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| **Project Title:** | AVACLIM: Agroecology, ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions |
| **Project symbol:** | GCP/GLO/927/GFF |
| **Recipient Country(ies):** | Global  Co-financing collects lessons from primarily:  Africa: Burkina Faso, Senegal, Ethiopia, South Africa, Morocco,  Asia: India  Latin America: Brazil |
| **Executing Entity (ies):** | Centre for Actions and International Realisations (CARI) |
| **Expected EOD (Starting Date):** | 1 July 2019 |
| **Expected NTE (End Date):** | 31 December 2022 |
| **Contribution to FAO’s Strategic Framework:**  **(Indicate as appropriate)** | Strategic Objective/Organizational Outcome: 2 Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner/204 Stakeholders make evidence-based decisions in the planning and management of the agricultural sectors and natural resources to support the transition to sustainable agricultural sector production systems through monitoring, statistics, assessment and analysis  Organizational Output: 20401 Strategic knowledge products developed addressing regional or global issues that integrate information on sustainable production, climate change and environmental degradation |
| **Contribution to GEF TF Focal Area Strategic Objectives and Programs:** | CCM 2 – Programme 4  LD 4 – Programme 5 |
| **Environmental and Social Risk Classification** | low risk |
| **Gender Marker[[1]](#footnote-2)** | G2a |
| **Total Budget:** | **TOTAL: USD 9,285,460**  **GEF TF: USD 1,137,215**  **TOTAL Co-financing: USD 8,148,245** |
| **Executive Summary**  Human population is growing and the demand for food in constantly increasing. Unsustainable agricultural practices to meet the demand are leading to the degradation of soil and water resources as well as biodiversity which results in decreasing agricultural production and increasing number of people suffering from hunger and malnutrition. There is mounting evidence that agroecology could be an adequate means to guide the required agricultural transition. However, the mainstreaming of the agroecology approach is pre-empted by the limited evidence-based information available on the effects of agroecological innovations. The AVACLIM project – funded by GEF and FFEM – will address this knowledge gap by evaluating the multidimensional effects of agroecological innovations at the social, economic and environmental levels from the local to the landscape scale across drylands, as well as the success factors thereto.  CARI will be the Operational Partner and FAO the GEF Implementing Agency for the AVACLIM project. Implementing partners – EMG, IRD and Both ENDS – as well as CARI will each be in charge of the implementation of one out of the four project components. In addition, one NGO per country has been selected to coordinate the interventions at the national scale in each targeted country.  The outcomes and main outputs of the AVACLIM project’s components are:  1) Actionable knowledge on agroecology will be compiled through the evaluation of 35 agroecology initiatives and will be made accessible on an open database. A dynamic national community of practice on agroecology will be established in each targeted country to facilitate knowledge sharing.  2) A multi-criteria assessment tool and user guide will be developed by scientists and practitioners – building on existing tools – to assess the effect of agroecology initiatives and identify the drivers of success. It will be tested on 14 agroecology initiatives and validated. The tool and the evidence-based results of the evaluations undertaken will be shared widely.  3) An advocacy strategy will be designed and implemented based on the results of Components 1 and 2 on the qualitative and quantitative effects of agroecology for the integration of this approach into policy-making processes. The targets for the advocacy interventions will be policy makers, CBOs, NGOs, journalists, politicians, international organisations and donors within the targeted countries and beyond.  4) A communication strategy will be developed and implemented to ensure that the project objective and activities, progress and results are shared in a timely manner with all project partners. A thorough monitoring and evaluation plan will also be implemented to enable adaptive management, and availability of information on project progress and results in due course.  The implementation of the project interventions under these four components will generate multiple global environment benefits including: i) supporting the transition towards improved agricultural practices enabling the sustainable management of land, soil, water and forest resources, and promoting the restoration of degraded land; ii) increasing carbon storage; and iii) supporting biodiversity.  The AVACLIM project interventions will provide reliable information on and advocate for the integration of the agroecology approach into development planning across drylands. This will enable the mainstreaming of agroecological innovations across drylands to increase food security, diversify agricultural livelihoods, reduce environmental degradation and increase soil carbon sequestration. | |

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**ACRONYMS**

|  |  |  |
| --- | --- | --- |
| **Acronym** | **English name** | **Original name** |
| ADB | Asian Development Bank |  |
| AFD | French Development Agency | Agence Française de Développement |
| AFO | Administrative and Financial Officer |  |
| ARFA | Association for Research and Training in Agroecology |  |
| AVACLIM | Agroecology, ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions |  |
| AWP/Bs | Annual Work Plans and Budgets |  |
| BH | Budget Holder |  |
| BOC | Budget and Operations Officer |  |
| CAATINGA | Centre for Advice and Support for Workers and Non-Governmental Alternative Institutions | Centro de Assessoria e Apoio aos Trabalhadores e Instituições Não Governamentais Alternativas |
| CALAO | Project to build on actors' experiences for the development of resilient agroecological techniques in West Africa | Projet pour la capitalisation d’expériences d’acteurs pour le développement de techniques agroécologiques résilientes en Afrique de l’Ouest |
| CARI | Centre for Actions and International Realisations | Centre d'Actions et de Réalisations Internationales |
| CBO | Community-Based Organisation |  |
| CCM | Climate Change Mitigation |  |
| CIRAD | International Cooperation Centre in Agricultural Research for Development | Centre de coopération Internationale en Recherche Agronomique pour le Développement |
| CoP | Conference of Parties |  |
| CSO | Civil Society Organisation |  |
| DAFF | Departments of Agriculture, Forestry and Fisheries |  |
| DScaTT project | Agricultural Intensification and Soil Carbon Sequestration in Tropical and Temperate Farming Systems Dynamic of Soil Carbon Sequestration in Agricultural Systems project |  |
| ECOWAS (CEDEAO) | The Economic Community of West African States | Communauté Economique des Etats de l’Afrique de l’Ouest |
| EMG | Environmental Monitoring Group |  |
| ENDA Pronat | Environment and Development Association – Acting for Nature Protection | Association pour l'Environnement le Développement agissant pour la Protection de la Nature |
| FAO | Food and Agriculture Organisation of the United Nations |  |
| FFEM | French Global Environment Facility | Fonds Français pour l'Environnement Mondial |
| FLO | Funding Liaison Officer |  |
| FMS | Financial Monitoring Specialist |  |
| FPMIS | Field Programme Management Information System |  |
| GBS | Gran Bharati Samiti |  |
| GDP | Growth Domestic Product |  |
| GEF | Global Environment Facility |  |
| GGWI | Great Green Wall Initiative |  |
| GHG | Green House Gas |  |
| GKP | Global Knowledge Products |  |
| GSDM | Direct Seeding Group in Madagascar | Groupement Semis Direct Madagascar |
| GTD | Desertification Working Group |  |
| GTAE | Working Group for Agroecological Transitions | Groupe de Travail sur les transitions Agroécologiques |
| HQ | Headquarters |  |
| IDEA | Sustainability Indicator for Agricultural Exploitations | Indicateurs de Durabilité des Exploitations Agricoles |
| IFOAM | International Federation for organic agriculture initiatives |  |
| INRA | French National Institute for Agricultural Research | Institut National de la Recherche Agronomique |
| IPCC | Intergovernmental Panel on Climate Change |  |
| IRD | French National Research Institute for Sustainable Development | Institut de Recherche pour le Développement |
| ISD | Institute for Sustainable Development |  |
| LD | Land Degradation |  |
| LoA | Letters of Agreement |  |
| LTO | Lead Technical Advisor |  |
| LUME | Methods for the Economic and Ecological Analysis of Agroecosystems | Método de Análise Econômico-Ecológica de Agroecossistemas |
| M&E | Monitoring and Evaluation |  |
| MESMIS | Framework for the evaluation of management systems incorporating sustainability indicators | Marco para la evaluación de sistemas de manejo incorporando indicadores de sustentabilidad |
| NAPA | National Adaptation Programme of Action |  |
| NGO | Non-Governmental Organisation |  |
| OED | Independent Office of Evaluation |  |
| OP | Operational Partner |  |
| OPA | Operational Partners Agreement |  |
| PASANAO | Programme to Support Food Security in West Africa |  |
| PIR | Project Implementation Review |  |
| PMC | Project Management Costs |  |
| PMU | Project Management Unit |  |
| PPR | Project Progress Report |  |
| PSC | Project Steering Committee |  |
| RADDO | Association Network for the Sustainable Development of Oases |  |
| RAPTA | Resilience, Adaptation Pathways and Transformation Assessment |  |
| ReSaD | Sahel Desertification Network | Réseau Sahel Désertification |
| RIAM | Network of Agroecology Initiatives of Morocco | Réseau des Initiatives Agroecologiques au Maroc |
| SAFA | Sustainability Assessment of Food and Agriculture systems |  |
| SeCURE project | Soil Ecological function Restoration to enhance agrosystem services in rainfed rice cropping systems in agroecological transition project |  |
| SLM | Sustainable Land Management |  |
| SoCa project | Beyond climate, soil carbon sequestration to sustain tropical family farming project | |
| UMR | Mixed Research Unit | Unité Mixte de Recherche |
| UNCCD | United Nations Convention to Combat Desertification |  |
| UNFCCC | United Nations Framework Convention on Climate Change |  |
| WOCAT | World Overview of Conservation Approaches and Technologies |  |
| WB | World Bank |  |
| ZBNF | Zero Budget Natural Farming |  |

# ****SECTION 1 – RELEVANCE****

### PROJECT CONTEXT

### *The situation in drylands*

1. In 2017, the number of undernourished people is estimated to have increased to 821 million – around one out of every nine people in the world[[2]](#footnote-3). The food system globally is at a crossroads. With the global population expected to reach 9.6 billion by 2050, agriculture must meet the challenges of hunger and malnutrition in a context of increased pressure on natural resources including soils and water, the loss of biodiversity, and the uncertainties associated with climate change. This is true globally but the situation is particularly concerning in the fragile ecosystems of drylands across continents. Drylands represent ~41% of the planet’s surface area[[3]](#footnote-4) and are home to two billion people[[4]](#footnote-5). They contain 44% of the world’s cultivated systems and 50% of the world’s livestock[[5]](#footnote-6). They also hold 30% of the total area of sites of important biodiversity and 35% of the global Biodiversity Hotspot Area[[6]](#footnote-7).
2. Drylands are characterized by rainfall deficit lasting more than eight months. They usually receive less than 500 mm of rain per year. The average annual temperature is 20 to 25°C, with average maximums exceeding 45°C. The thermal amplitude is important between day and night; the evening minimum temperatures can reach 0°C. These areas are also characterized by high evaporation rates. Using production terms, drylands are defined as ecosystems whose production is limited because water is lost to the atmosphere in the production process at rates that are faster than rates of replacement[[7]](#footnote-8). Farmers face constraints such as low water availability, low soil fertility and high density of weeds and pests. Agriculture is mainly food based on cereals and legumes. Production is based on rainwater systems or irrigation techniques specific to these areas. In addition, the heat limits the storage capacity, which reduces the life of the products. Livestock is relatively small because of the scarcity of pastures. As result, people in dryland face serious food security challenges.
3. Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate[[8]](#footnote-9). Regions at disproportionally higher risk include arctic ecosystems, dryland regions, small-island developing states, and least developed countries. A global increase of 1,5°C will likely mean a regional warming of 3°C in drylands. For example, the effects of increased temperature on natural and managed ecosystems is expected to be higher than in humid land (with a high level of confidence). In drylands, climate change is expected to lead towards a decrease of average annual rainfall while average temperatures will increase. At the same time, extreme weather events will likely multiply and intensify. Climate scenarios thus predict an increase in the frequency of droughts, heat waves and floods. Regarding the agricultural and food security sector, in West Africa and Sahel, the expected increase of temperature will likely lead to: i) reduced production of staple crops such as maize and sorghum production, with suitable land for maize production reduced by as much as 40%; and ii) increased risks for under-nutrition. In Southern Africa savannahs, higher temperature will likely result in reductions in water availability and lead to high risk for undernutrition in communities dependent on dryland agriculture and livestock among other effects[[9]](#footnote-10).

### *Selected countries*

1. The seven selected countries are spread across drylands over three continents: Africa, Asia and South America. The target countries are Brazil, Burkina Faso, Ethiopia, India, Morocco, Senegal and South Africa. They are all signatories of the three Rio Conventions. Large part of the population in these countries is amongst the poorest of smallholders. It is also in these countries that the stakes involved in development and the fight against poverty are highest.

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| **Brazil** |  |
| Physical/  Environmental/  Climatic | Brazil is confined mostly to tropical latitudes. Nearly 59% of the Amazon, the largest humid equatorial rainforest and river basin in the world, is in Brazil, contributing to the country’s rich biodiversity, various climates, and extraordinary wealth of ecosystems. Annual average rainfall generally exceeds 2000mm. However, the north-east of the Brazilian plateau is a relatively dry zone, averaging less than 750mm per year in places and with large variations from year to year resulting in prolonged droughts. This region corresponds mainly to the Caatinga (i.e. thorny shrub) biome, it is the semi-arid with average temperatures of 23˚C to 28˚C. |
| Social | The population size was 209,288,278 inhabitants in 2017 according the World Bank[[10]](#footnote-11). An estimated 8,7% of this population lives under the poverty threshold. It is ranked as 79 out of 188 according to the Human Development Index 2016. 62% of the population is less than 30 years old. |
| Economic (particularly the agricultural sector) | Agricultural land covers 33,8% (i.e. 2,877,044 km2) of the territory and contribute for 4,6% of the Gross Domestic Product (GDP). Agriculture provides 10% of the job. Family farming employs 74% of all labour in the field. Main agricultural activities are livestock husbandry (i.e. cattle, goats and poultry), manioc, corn and beans production, as well as fruit trees, vegetables and fodder crops. Brazil has the fourth largest area under organic cultivation in the world (i.e. 1,766,000 ha). |
| Institutional | There are three main ministries involved in the management of natural resources:   * the Ministry of Agriculture, Livestock and Supply mostly responsible for the regulation of the commercial Organic agriculture segment; * the Ministry of Environment, the Department of sustainable rural development under this ministry is responsible for agro-environmental policies and rural landscape planning; and * the Special Secretariat of Family Agriculture under the Presidency of Republic (former Ministry of Rural Development), responsible for the technical assistance of family farmers and administrating current public policies for the deployment of the agroecology approach in this segment of producers. |
| Natural resources | The intensive use of land for agriculture, livestock, forestry, and mining is the principal vector for desertification. There is a great pressure on the vegetation in the Caatinga biome. It has been systematically and increasingly withdrawn for agricultural and pastoral expansion (including through burning), and for the use of firewood. It is also generally overgrazed and intensively exploited with machines and agrochemicals, determinant factors to accelerate soil degradation by compaction and increase erosion processes. |
| Climate change | Based on estimation from 2005, 48,19% of Green House Gas (GHG) emission were generated by the agricultural sector in Brazil, this percentage is expected to be higher today.  Over the period 1960-2010, there has been a decrease in the volume and intensity of rainfall, an increase in the temporal and spatial irregularity of precipitation, as well as an increase in temperature. These changes are expected to worsen over time. |
| **Burkina Faso** |  |
| Physical/  Environmental/ Climatic | Located in Sub-Saharan Africa, Burkina Faso is a land-locked country of 274,200 km2. It comprises three climate zones: i) South Sudanese zone: average annual rainfall between 900 and 1200 mm, rainy season lasting six months, average annual temperature of 27°C, zone of gallery forests along the rivers; ii) Sudano-Sahelian: average annual rainfall of between 800 and 900 mm during four to five months, average annual temperature of 28°C, more dense forest formations, and a more continuous herbaceous cover. This is the largest zone and the one which is the most affected by human activity; and iii) Sahelian: average annual rainfall of between 300 and 600 mm and lasts for only three months, average annual temperature of 29°C. The vegetation there consists of steppes with trees, shrubs and thick bushes. The Sahelian zone is the most arid one. |
| Social | The country has a growing population of 19 193 380 inhabitants[[11]](#footnote-12). It is one of the poorest countries in the world. It is ranked as 185 out of 188 according to the Human Development Index 2016. 44% of the population lives under the poverty threshold. The population is mainly young with an average age of 21,8 years old and 45,3% of people younger than 15 years old. |
| Economic | Agriculture represents 28 % of GDP. While the industry sector represents 21% and the tertiary sector 42%[[12]](#footnote-13). Agricultural land covers 44,2% of the territory (274,220 km2). Cereals (i.e. mil, sorgho, maize, rice, fonio) are the main agricultural products in the country. |
| Institutional | The main government institutions involved in natural resources management are:   * Ministry of Agriculture and Water Management and its regional and provincial directions who are in charge of the implementation of the agricultural policy, and support rural development; * Ministry of Environment, Green Economy and Climate Change which focuses on the sustainable management of natural resources, environment protection, and mitigation of and adaptation to climate change under the international conventions; * Ministry of Scientific Research and Innovation particularly the National Institute for Environment and Agricultural Research; * Ministry of Livestock and Fish Resources whose mandate include to support the adoption of improved livestock husbandry practices; and * Ministry of Water and Sanitation. |
| Natural resources | Burkina has a rather rich biological diversity, but this biodiversity is decreasing because of habitat destruction and droughts. There has been a reduction of water availability in the last 50 years while the demand is increasing. Climate change (i.e. decrease in rainfall, soil erosion, desert progression) and human activities (i.e. mining, use of chemical inputs, deforestation) are leading to the degradation of soil resources. |
| Climate change | Regional Intergovernmental Panel on Climate Change (IPCC) report for West Africa and Sahel shows that – in the last 50 years – average temperature has increased, and the number of cold days and cold nights have decreased. There has been a significant warming of between 0.5°C and 0.8°C between 1970 and 2010. By the end of the 21th century, the temperature is expected to rise by a couple more degrees. Rainfall have also been increasingly erratic (increase in the frequency of droughts and floods) and unpredictable. |
| **Ethiopia** |  |
| Physical/  Environmental/ Climatic | Ethiopia is the most elevated part of north-eastern Africa and has great geographical diversity with prominent topographic features, which include high and rugged mountains, extensive highlands, deep river gorges, and the Great Rift Valley. Ethiopia is landlocked country with four climatic zones: super arid, arid, semi-arid and dry-sub humid. Drylands cover 75% of the country. |
| Social | There are 104,957,438 inhabitants[[13]](#footnote-14) in the country which makes it the second most populated country in Africa. 29,6 % of which lives under the poverty threshold. It is ranked as 174 out of 188 according to the Human Development Index 2016. Median age is 17,9 years old. 60% of the population in Ethiopia is under the age of 25. |
| Economic | Ethiopia has one of the fastest growing non-oil economies in Africa but also one of the poorest[[14]](#footnote-15). The country is heavily reliant on agriculture which represents 46% of the GDP[[15]](#footnote-16) and provides 68% of employment. It covers 36,3% of the territory (i.e. 1,104,300 km2). The main crops are finger millet, wheat, maize, teff, chick-pea, lentil and mung bean. Traditional livestock production is also a major economic pillar. In addition, Ethiopia has the third largest organic agriculture area in Africa (i.e. 186,155 hectares, after Tanzania and Uganda). |
| Institutional | The political situation seems to be improving. Ethiopia is undergoing a reform stage and ethnic tensions are now calming down.  The main government institutions involved in the management of natural resources are:   * Ministry of Environment, Forest Development and Climate Change; and * Ministry of Agriculture and Livestock Husbandry. |
| Natural resources | There is a high level of endemism in Ethiopia and high biological diversity. Although characterized by shortage of moisture, there is a high level of endemism as well as dry forests and dry woodlands in Ethiopia’s drylands. A major problem is soil fertility loss due to: poor land management, overgrazing, soil erosion (e.g. flooding), decreasing vegetation cover, and climate change. |
| Climate change | Since the past few decades, pastoralism and agro-pastoralism in Ethiopia have shown continuous signs of vulnerability due to frequent and extended droughts.  The average annual temperature in Ethiopia is projected to increase by 1.1°C to 3.1°C by the 2060s. A higher frequency of heat waves as well as higher rates of evaporation are expected. Contrarily to most dryland countries, Ethiopia will likely experience increased annual rainfall. However, this will translate into an increased frequency and intensity of heavy rainfall events which are expected to lead to soil erosion and higher stream sediment loads. It will therefore have a negative impact on water quality. |
| **India** |  |
| Physical/  Environmental/ Climatic | India has a particularly high variety of climatic regions, ranging from tropical in the south to temperate and alpine in the Himalayan north. Temperatures vary from arctic cold to equatorial hot, and rainfall from extreme aridity with <100 mm per year (e.g. in Rajasthan) to humid in the northeast with up to 1,141 mm. This varying environmental situation in the country has resulted in a greater variety of soils. The country has been grouped into 20 agro-ecoregions. Eight of them – covering the eastern half of the country – are arid (i.e. 12% of the total surface of India) and semi-arid (i.e. 29% of the total surface of India). |
| Social | India has 1,339,180,130 inhabitants according to the estimations of the World Bank[[16]](#footnote-17). In 2011, it was estimated that 21,9% of the population lives under the poverty threshold. It is ranked as 131 out of 188 according to the Human Development Index 2016. The median age of the population is 27,9 years old. |
| Economic | The agricultural sector employs 43% of the population and accounts for 15,5% of the GDP. It employs 70% of the population. Main agriculture crops include cotton, castor, Taramira (brassica), Bajra (pearl millet), barley, green gram, cowpea, guar (*Dolichos fabaeformis*) and mustard. 60,4% of the country (i.e. 1,985,507 km2) are agricultural land. India has the largest number of organic producers in the world, according to the World of Organic Agriculture Report 2018. With 835,000 certified organic producers, it is home to more than 30% of total number of organic producers in the world. |
| Institutional | The ministries and institutions involved in the management of natural resources in India are:   * Ministry of Agriculture and Farmers welfare * Ministry of Environment, Forest and Climate Change * Ministry of Science and Technology * Ministry of Water Resources * Ministry of Earth Sciences * Integrated Wasteland Development Board * research institutions such as Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research, and Indian Council of Forestry Research and Education. |
| Natural resources | Overgrazing, deforestation and unsustainable forest management have led to ecosystem degradation in eight Indian states which now have 20% wasteland[[17]](#footnote-18). In addition, inadequate agricultural practices (e.g. poor crop rotation, inadequate water management, burning of crop residues, inappropriate organic matter input, excessive tillage and use of heavy machinery, overuse of pesticides and fertilizers) are causing soil and water contamination, degradation of soil structure, declining soil organic and nutrients content. |
| Climate change | Indian agriculture produces 21% of the national GHGs emission and corresponds to 7% (403 Mt CO2eq) of total GHGs emission from global agriculture.  The frequency of heat waves has increased in the last couple of decades as well as the frequency and intensity of floods and landslides, more severe and frequent droughts, and tropical cyclones, and this trend is expected to strengthen. Increases in the frequency and intensity of droughts and floods in semi-arid areas are predicted to negatively impact food security, economic growth, infrastructure and human health. |
| **Morocco** |  |
| Physical/  Environmental/  Climatic | Located in the North-West of Africa between the Atlantic and the Mediterranean Sea, climatic conditions in Morocco are very diverse with a hot and Mediterranean climate in the coastal region, and semi-arid and continental climate inland. Rainfalls are concentrated and the main chain during three months of the year. Arid and semi-arid land with less than 600 mm per year cover two thirds of the country. The geographical diversity of Morocco results in various forms of agriculture, with crops ranging from cereals, legumes and vegetables to fruits and nuts. |
| Social | The size of the population has estimated by the World Bank in 2017 is 35,739,580 inhabitants[[18]](#footnote-19). Poverty rate have reduced from 25% in 2004 to 8,2% in 2014. It is ranked as 123 out of 188 according to the Human Development Index 2016. |
| Economic | Agriculture and fisheries contribute more than 14 per cent of GDP and are the main employers in rural areas, providing 73,7% of employment[[19]](#footnote-20). Unemployment is increasing with a current rate of 9,1%. Young people are the most affected by the lack of employment opportunities in the Morocco, with an upward trend in unemployment particularly among young people aged 15 to 24, who represent 25% of the young population.  Agriculture plays a key role in the economy of Morocco as a main source of income to the population, particularly in rural areas. Livestock are another major sector of Moroccan agriculture, contributing to the income of [more than 80 %](http://www.fao.org/ag/AGP/AGPC/doc/counprof/morocco/morocco.htm) of the rural population. Fish are also a significant industry, [representing 55% of food exports](http://www.fao.org/ag/AGP/AGPC/doc/counprof/morocco/morocco.htm). Modern practices, such as intensive cropping under irrigation and heavy tillage, is leading to loss of soil organic matter. Two models of agriculture can be distinguished, a modern industrial sector that primarily produces food for export, and smallholders that produce food mainly for local markets and their own subsistence. More than 70% of farmers work on less than five hectares, but this accounts for only a quarter of the total land under cultivation since the large farms dominate the fertile areas. Inevitably, the large farms have a more substantial income, earning approximately [nine times more](http://www.brookings.edu/research/papers/2015/02/agriculture-development-inclusive-growth-food-security-morocco-ghanem) than the average family farm. Challenges met by small farms include ambiguous land ownership, lack of infrastructure or access to credit, and poor technical and marketing support.  Organic food is a growing market in Morocco especially in big cities like Casablanca where people have been introduced to specialized shops and supermarkets, allowing Moroccans to buy organic vegetables and fruits, gluten-free pastry and 100% natural products. The total agricultural land in Morocco is 305,915 km2. |
| Institutional | The main ministries involved in natural resources management are:   * Ministry of Agriculture, Fisheries, Rural Development, Water and Forests; and * Ministry of Energy, Mines and Sustainable Development. |
| Natural resources | In the agricultural sector, modern practices, such as intensive cropping under irrigation and heavy tillage, is leading to loss of soil organic matter.  The overexploitation of groundwater has been exacerbated by the rapidly expanding network of drilling installation and drip irrigation within individual farms in the irrigated plains, reaching alarming levels. The possibility of having water throughout the year has encouraged farmers to grow more valuable crops such as irrigated vegetables or fruit trees instead of ancient rain fed cereals, legumes and orchards. For instance, the water table depth has fallen sharply by 90 m in 30 years in the Saïs plain (Meknès-Fes region). Similar observations have been reported from other intensively irrigated areas (Tadla, Souss-Massa) and from some oases regions (Boudnib). In parallel, the pollution of groundwater by pesticides has increased following the intensification of agricultural systems, mainly in the irrigated areas. Salinization of water has also become an issue in the oases, where the availability of fresh water fit for irrigation and human consumption is threatened.  A rising population is leading to increased pressure on resources and the removal of natural vegetation as more land is converted to cultivation. The erosion rate in the Rif Mountains, for example, is one of the most severe in the world. |
| Climate change | A major effect of climate change in Morocco is increased prevalence of drought. Temperatures are predicted to rise by 3°C by 2050 and rainfall to decline by 10%. In this same period, demand for water is projected to increase by six times. With most farmland located in areas that receive less than 400 mm/year of rainfall, this will have serious implications. Morocco has suffered a drought [every three years](http://www.researchgate.net/publication/261474223_A_review_of_Available_Knowledge_on_land_Degradation_in_Morocco._In_ICARDA_(eds)._Morocco._OASIS_Contry_Report_2) over the past few decades. Drought frequencies have risen from one event every 10 years at the beginning of the 20th century to 5 or 6 events every 10 years at the beginning of the 21st century. These prolonged droughts are increasing soil degradation, with desertification threatening [80% of land](http://www.ddc-as.org/index.php?option=com_content&view=article&id=104&Itemid=126), and soil erosion affecting [nearly half of it](http://www.researchgate.net/publication/261474223_A_review_of_Available_Knowledge_on_land_Degradation_in_Morocco._In_ICARDA_(eds)._Morocco._OASIS_Contry_Report_2). |
| **Senegal** |  |
| Physical/  Environmental/ Climatic | Senegal is a Sahelian country with a dry tropical climate. Its western side is bordered by the Atlantic ocean. Average rainfall range between 300 mm in the north and 1,200 mm in the south, with high spatial variability. Two permanent rivers run through the country: Senegal and Gambia rivers. There are three climate zones: Sahelian, north Sudanese and south Sudanese. The Sahelian zone is the most arid one. |
| Social | The population is 15,850,570 inhabitants[[20]](#footnote-21) which includes 46,7 % living under the poverty threshold. It is ranked as 162 out of 188 according to the Human Development Index 2016. |
| Economic | Senegal is one the main economic centres of the continent with a growth rate of 7% mainly from agricultural activities. Agriculture employs 70% of the population and represents 17,5% of the GDP. 40% of active rural population works in livestock husbandry. 30% of household are covered by security nets, it is one of the best of Africa. The surface of agricultural land is 196,710 km2 which corresponds to 46,1% of the territory[[21]](#footnote-22). |
| Institutional | Major institutions involved in the management of natural resources in Senegal are:   * Ministry of Agriculture and Rural Equipment, including the Direction in Charge of Supporting and Pooling Farmers Organisations * Ministry of Environment and Sustainable Development |
| Natural resources | Fauna has almost completely disappeared outside of national parks. Ecosystems are degrading and resources getting scarcer because of reduced rainfall and soil salinity as well as monoculture, use of chemical soil fertilisers, slash-and-burn agriculture and deforestation. |
| Climate change | The same regional predictions from IPCC as for Burkina Faso apply. Rainfall are expected to increase in the East of the country and to reduce in the West. |
| **South Africa** |  |
| Physical/  Environmental/  Climatic | The country has a Mediterranean climate in the south west and a warm dry desert environment in the central west and north west. The interior plateau is 1 200 m above sea level and extends from the Kalahari Desert in the west, to grasslands in the east and the semi-arid Karoo in the south. The country has therefore a large diversity of vegetation types, biodiversity, climates and soil types. South Africa has both subtropical and temperate climate conditions.  Average annual rainfall in South Africa is about 464 mm, with the Western Cape getting most of its rainfall in winter and the rest of the country receiving summer rainfall. Average temperatures in South Africa range from 15°C to 36°C in summer and -2°C to 26°C in winter. |
| Social | The population size is 56,717,156 inhabitants[[22]](#footnote-23). 55,5% of the population lives under the poverty threshold. It is ranked as 119 out of 188 according to the Human Development Index 2016. Median age of the population is 27,1 years. |
| Economic | 34% of the population lives in rural area but agriculture only employs 6% of the active population and represents 2,3% of the GDP. 79,8% of the country is agricultural land (~972,834 km2)[[23]](#footnote-24).  The main production systems and the main crops grown in arid zones is rooibos and wheat under conventional monocropping systems, and the irrigated deciduous fruit where water is available (i.e. limited to major river valleys). |
| Institutional | The main government institutions involved in natural resources management are:   * Ministry of Agriculture, Forestry and Fisheries, and Departments of Agriculture, Forestry and Fisheries is responsible for ensuring long-term food security, including through the application of the National Agricultural Policy; * Ministry and Department of Rural Development and Land Reform are in charge of Spatial Planning Policy and Land Use; * Ministry of Environmental Affairs, and Departments of Environmental Affairs is in charge of protection of the natural environment including through the application of the National Environmental Policy; * Agricultural Research Council’s main mandate is Agricultural Research, and dissemination of new technologies; and * The South African National Biodiversity Institute focuses on Biodiversity research and knowledge transfer. |
| Natural resources | South Africa represents just 1% of the Earth’s total land surface, while it is home to a rich biodiversity containing almost 10% of the world‘s total known bird, fish and plant species, as well as over 6% of the world‘s mammal and reptile species[[24]](#footnote-25). Vast regions of South Africa are drylands that are seriously threatened by soil degradation and desertification, in particular through water erosion. |
| Climate change | Significant temperature increase has been observed between 1931 and 2015[[25]](#footnote-26). Climate change is likely to result in a reduction of surface water availability, shifts in the seasonality of rainfall and runoff, growing irrigation demands and an increase in the magnitude and frequency of flood events. Climate change impacts, specifically declining rainfall coupled with an increase in the number of hot days will have negative impact on crops and livestock, including yield quantity and quality, and animal reproduction efficiency. |

### THE CURRENT SITUATION

### *Main environmental threats*

1. Past efforts of agricultural development have focused on boosting output to produce more food. This was achieved at high environmental and social costs and still does not match with an increasing demand for food. Agricultural systems requiring a high level of external inputs have caused *inter alia* major soil depletion, deforestation, biodiversity loss and high levels of greenhouse gas emissions[[26]](#footnote-27).

*Land-degradation and desertification*

1. Land degradation and desertification are mostly linked to poor farming practices[[27]](#footnote-28). Although this is not a dryland-specific issue, the agricultural production systems in drylands tend to face a major issue of decreasing soil fertility – particularly organic fertility – because of increasing pressure on natural resources and ecosystems induced by population growth. To respond to an increasing demand for food, the surface of cultivated areas continuously expends and fallow times are reduced while the maintenance of fertility over time in current agricultural systems was initially based on the existence of long fallows. Organic fertility reduction is aggravated by increasing temperatures under climate change which accelerate the mineralization of organic matter.
2. One of the characteristics of dry areas is that rainfall is rare but when it comes it is generally intense and concentrated over short periods of time. This phenomenon is expected to be increasingly pronounced because of climate change. The sudden arrival of large quantities of water on bare and fragile soils promotes runoff that carries away the most fertile soil elements, those in the top layer of the soil. Often the impact of the drops also causes chemical combinations that promote the formation of laterites. Congested soils can then turn into torrents of mud, causing an irreversible degradation, or even total disappearance, of the soil by erosion in layers. The soil becomes increasingly poor and dry. Water storage and infiltration because almost non-existent as well as vegetation cover.

*Deforestation*

1. Decreasing soil fertility in agricultural land and increasing demand for food has resulted in the continuous expansion of agricultural and pastoral lands. Agriculture is recognised as one of the largest single cause of deforestation and forest degradation[[28]](#footnote-29). In Africa, deforestation is caused mainly by small-scale farming and fuel wood collection, while in Latin America it is driven by large-scale agriculture, especially extensive cattle production. In Burkina Faso, for example, 65,000 ha of forest is lost per year based on monitoring activities from 1990 to 2010[[29]](#footnote-30). The two main direct factors of deforestation identified are agriculture and pastoral land expansion[[30]](#footnote-31). In Brazil, however, deforestation is induced by large-scale agriculture through the conversion of forests to cropland. It initially began with small-scale timber extraction and subsistence agriculture, but was then followed by the mechanisation of forest clearing which led to the expansion of the road networks deep into the forests[[31]](#footnote-32). As a result, since 1970, approximately 70% of forest clearing in Brazil has been due to medium- and large-scale ranches[[32]](#footnote-33). Overall, in the targeted countries, agriculture – either subsistence agriculture or large-scale agriculture – is a primary cause of deforestation and this is expected to worsen with increasing demand for food from a growing human population.

*Climate change and GHG emissions*

1. Agricultural activities have long been neglected from the international debates on the reduction of GHG emissions. The focus was on the sectors of industry, transportation and energy. However, the agriculture sector is now recognised as a large contributor to the global GHG emissions. In 2011 for example, agriculture emitted more than 5,335 billion tones CO2 eq. The largest emitters include enteric fermentation, manure left on pasture, synthetic fertilizers, paddy rice, manure management and burning of savannahs[[33]](#footnote-34). Furthermore, emissions from the agriculture sector are on the rise. For example, the modernization of agriculture in Brazil is an increasingly important source of GHG emissions in the country because in addition to deforestation, it involves burning of vegetable wastes and high usage of oil[[34]](#footnote-35).
2. In drylands, climate change – including decrease in rainfall, increase in temperatures and increase in the frequency of extreme climate events – is already having visible effects on the ground. For example, Moroccan oases are now facing a very critical situation. 75% of palm trees were lost during the last century because of drought and overexploitation of groundwater, while palm trees used to provide farmers with 60% of their income. Another example is that in Senegal, the impact of climate change – together with intensive deforestation for agricultural expansion – has led to the Lake Tamna being progressively dried out. As a result, water salinization has made much of the land unusable for crop farming. Climate change is also experienced in Burkina Faso in the form of droughts, sandstorms, and poor predictability of weather among others. Areas receiving sufficient rainfall for crop farming have moved further south from the north, rainy seasons have become shorter and rainfall increasingly violent, which leads to soil erosion and flooding. In the Sahel, despite the recent trends of recovery of total annual rainfall, the rainfall regime is characterised by less rainy days and more intense rainfall events. The negative effects of climate change are expected to be increasingly frequent and intense which is particularly concerning for communities in drylands who already live in precarious conditions relying on scarce resources.

*Biodiversity loss*

1. Agriculture is a major driver of biodiversity decline. Land-use change for the expansion of agricultural land has indeed led to a significant loss of global biodiversity. The highest negative impacts on biodiversity was observed for cropland in tropical regions, followed by temperate and then boreal regions. Wheat, rice and maize — which occupy around 40% of global cropland — contribute to 40% of global biodiversity impacts. Other crops such as sugarcane, rubber, palm oil and coffee are also responsible for high species loss, despite accounting for comparatively little global cropland[[35]](#footnote-36).

### *Baseline initiatives*

*Baseline situation and initiatives in the targeted countries*

**Brazil**

1. Despite an agricultural policy that still encourages intensive farming, there is an increasing interest for agroecology in Brazil. After the Brazilian Agroecology Congress in 2004, the Brazilian Agroecology Association was founded and the movement is growing. In addition, environmental preservation and restoration have been identified as strategic directions by the government. As a result, several programmes were initiated which include: i) the Programme for the Modernization of Agriculture and the Conservation of Natural Resources launched in July 2009 which provides subsidized credits to improve production systems and revitalize soil and pastures for rural farmers and cooperatives; and ii) the Low Carbon Agriculture Programme initiated in 2010 to fund rural projects aimed at reducing greenhouse gas emissions and preservation of natural resources from agricultural activities.
2. The Centre for Advice and Support for Workers and Non-Governmental Alternative Institutions (CAATINGA), the Brazilian partner, is one of the leaders of the agroecology movement. The work of CAATINGA focuses on promoting agroecology as a way to enable sustainable development in drylands, through actions for water security, food security, nutrition and access to markets. Although actions have increasingly involved farming families and partners living in drylands, big infrastructure and monoculture projects in the region of Araripe Pernambucano are still being implemented. These large-scale agricultural projects are expected to increase food insecurity in the region, degrade livelihoods and further contribute to rural exodus of youth. Current interventions of CAATINGA include: i) support 1,800 family farmers in the territory of the Sertão do Araripe in adopting sustainable technologies and social practices such as the development of agroecological production systems; ii) public policy design and advocacy through participation in municipal, state and national councils, and awareness-raising actions in civil society networks; and iii) contextualized education for the semi-arid region, in cooperation with rural schools.

**Burkina Faso**

1. The Burkina Faso government is in favour of agroecology and many actors are already working on its implementation. Burkina Faso government and local communities have started to react to the severe effects of climate change (See Section 1.2.1) by introducing national programmes for tree replanting and fighting against desertification and awareness-raising campaigns for the prevention of bushfires and for the reduction of firewood use. This is being done through the application of the National Adaptation Programme of Action (NAPA). Similarly to Senegal, Burkina Faso is also a member of the Great Green Wall Initiative (GGWI) and is a major actor of Terrafrica.
2. The project partner – Association for Research and Training in Agroecology (ARFA) – is one of the main actors in agroecology. It works mainly in the Eastern region. So far, ARFA has provided support to 700 households who are now implementing agroecological innovations. Harvests for the principal crops of these beneficiaries (i.e. millet, sorghum, maize) have increased by 40 to 60%, thus improving food security in this region.

**Ethiopia**

1. There is a strong tendency towards the development of agroecology in Ethiopia. With support from the government, the land dedicated to agroecological innovations is being increased to as much as 40 million hectares of cultivated land. Institute for Sustainable Development (ISD) – AVACLIM’s national partner organisation – has carried out advocacy at different government levels since its establishment 22 years ago. Major interventions of ISD include: i) the development and integration of the use of natural fertilizer (i.e. compost) by local communities in Tigray which is now being mainstreamed at the national level by the Ministry of Agriculture and Livestock; ii) the introduction and advocacy of agroecological innovations such as the System of Crop Intensification for Teff and Finger Millet, the “Genderized Push-Pull Technology” for the control of crop pests and weeds on maize and sorghum crops – where a particular focus is given to men and women participation; iii) Scaling-Up of Good Agro-ecological Practices across small-holder farmers; iv) Youth Cultural Biodiversity that promotes indigenous peoples’ knowledge and biodiversity conservation by working closely with local communities to enhance intergenerational learning with the new generation; and v) the preparation of several studies to fill in knowledge gaps on organic agriculture such as a preliminary assessment for the *State of Ethiopia’s Ecological Organic Agriculture Sector* and a *Roadmap for the Full and Effective Implementation of the Ecological Organic Agriculture Policy Instruments* in Ethiopia.

**India**

1. A network of Civil Society Organisations (CSOs) accredited by United Nations Convention to Combat Desertification (UNCCD) engaged in agroecology was recently created in India, particularly for the arid and semi-arid parts of the country. Multiple agroecology interventions are being implemented in India particularly in degraded land without vegetation cover nationally called “wastelands”. For example, Gran Bharati Samiti[[36]](#footnote-37) (GBS) – the project partner – implements interventions for the conservation of land, water and forest resources on waste arid lands in Rajasthan, Gujarat, Uttar Pradesh, Bihar and Jharkhand. On-going initiatives of GBS include: i) development at Gandhivan wasteland which focuses on undertaking reforestation interventions in the degraded infertile sandy lands, and include the plantation of 100,000 trees of indigenous species for fuel, fodder, fruits, timber and shade using organic fertilizers and herbal pesticides; and ii) an awareness-raising project entitled “Mobilizing community people to protect and strengthen biodiversity in Rajasthan” on protecting water, forests and land, and focused particularly on women and youth in the district of Jaipur, Ajmer and Tonk. Another initiative relevant to the AVACLIM project is the Zero Budget Natural Farming (ZBNF) programme under implementation in the State of Andhra Pradesh. This agroecological farming movement promotes methods to eliminate external inputs, restore ecosystem health and build climate resilience through diverse, multi-layered cropping systems. By March 2018, 160,000 farmers in 1,000 villages across all the 13 districts of Andhra Pradesh had started to practice ZBNF. The goal is to reach 500,000 farmers by March 2019. Recently, Andhra Pradesh adopted the overall vision to become a natural farming state. The Sikkim state – considered as the first organic state in the world – has recently won the Gold Future Policy Award 2018 co-organised by the Food and Agriculture Organisation of the United Nations (FAO), World Future Council and International Federation for organic agriculture initiatives (IFOAM) for the state policy on organic farming and for the Sikkim Organic mission. The transition to organic farming has benefitted more than 66,000 farming families in Sikkim[[37]](#footnote-38).

**Morocco**

1. Use of agroecology has increased in Morocco over the last 10 years. The Network of Agroecology Initiatives of Morocco (RIAM) was recently created in order to facilitate the exchange of experiences on agroecology. Regarding government support aligned with agroecology principles, the Agricultural Development Agency has carried out two studies: one focuses on understanding the impact of agriculture on the environment, and the other on the potential of carbon finance to fight against the impact of climate change. Ecological issues have now been included in Morocco’s Green Plan (i.e. Plan Maroc Vert) but agroecological projects remain scattered, despite the fact that 90% of the country is affected by aridity.
2. A project called “Agroecological transition in oases” was supported by CARI in partnership with the Provincial Association to Combat Desertification and Promote Environment at Jorf and included the establishment of a crop farm and demonstrations for disseminating information on agroecological innovations. Jorf is located in the Tafilalet region where oases are disappearing. Agroecological innovations were introduced in order to re-establish their potential for production, including specific skills in water management and improved agricultural practices.
3. The partner Non-Governmental Organisation (NGO) representing Morocco – Agrisud – is currently implementing several agroecology initiatives in the country. For example, the project to “Improve performances in the agriculture sector in Ghassate commune, Province of Ouarzazate” 2013-2020 focuses *inter alia* on supporting more than 300 family exploitation to develop and scale-up agroecological innovations. It is funded by the French Development Agency and the Moroccan Agency for Sustainable Energy. Other initiatives of Agrisud in Morocco focus on: i) the conservation and development of Marrakech’s palm grove through improved agricultural practices; ii) supporting the development of family exploitation and of agricultural value chains in Marrakech-Safi region; and iii) providing training on agroecology in the South of the country.

**Senegal**

1. In addition to multiple small-scale projects to reverse the negative impact of desertification, the country is one of the 20 countries involved in the GGWI coordinated by the African Union. GGWI focuses on the sustainable management of land and environment for food security, poverty reduction and sustainable development in Sahara and Sahel. Senegal is also one of the 30 members countries of the Terrafrica partnership which supports innovative solutions to sustain landscapes, address land and water degradation, and adapt to a changing climate. Several agroecology development initiatives are also being implemented (e.g TAFAE https://www.pfongue.org/-TaFae-.html). For example, AGRECOL – a national NGO focused on agroecology and on social and solidarity-based economy – is building expertise on the agroecology approach in Senegal. Another example is the creation of the Task Force to promote Agroecology in Senegal (TAFAE) which is a platform for the collaboration of local associations, NGO and research institutions that work on agroecology in Senegal[[38]](#footnote-39).
2. The Environment and Development Association acting for Nature Protection (ENDA Pronat) – project partner in Senegal – is working in several regions including the area around Lake Tamna. Thanks to a reforestation programme involved the selection of specific species by the community, the creation of a nursery, and various experiments around the lake, the lake’s environment has now been restored and water quality has increased. In addition, water table levels have risen and wind erosion and sand-silting have been reduced. The area can now be used again for agricultural purposes using an agroecology approach. The adoption of agroecological techniques by farmers has led to improved skills for the population individually and collectively – for groups of women in rural communities – and higher family incomes in this region.

**South Africa**

1. A number of initiatives are currently in place for combating desertification and developing sustainable agriculture production systems. For example, the National Action Programme Combatting Land Degradation to Alleviate Rural Poverty was established in 2004. Several ongoing government programmes are aligned with agroecology principles such as the ongoing programme of the Organised Agriculture Body for Grain Industry entitled “Conservation Agriculture Farmer Innovation Programme” initiated in 2013. This programme focuses on demonstrating and raising awareness on conservation agriculture. Research on conservation agriculture as well as on water harvesting and soil carbon sequestration is also being undertaken by the Agricultural Research Council. Other programmes supporting the principles of agroecology include *inter alia* the national “Land Care” programme, “Working For” programmes and the “Comprehensive Agricultural Support” programme. In addition, processes are also underway within Departments of Agriculture, Forestry and Fisheries (DAFF) to demarcate all high potential agricultural areas using an agroecosystem approach. The DAFF is therefore working with nine provincial agricultural departments to delineate – at the municipal level – the agroecosystems present within the area. A guiding manual on the approach is under development.
2. The Environmental Monitoring Group (EMG) – the national partner NGO – has been involved in the implementation of traditional and scientific approaches for rooibos tea farming. Rooibos tea farmers have been supported for: i) the cultivation of rooibos crops; ii) sustainable wild harvesting; iii) the establishment of farming cooperatives to facilitate access global value chains and markets; and iv) the creation of various organic agricultural labels. These actions have enabled a substantial improvement in farmers’ revenues.

*Baseline projects*

**French Global Environment Facility - FFEM**

1. Support from FFEM to the *Agroecology, ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions* (AVACLIM) project was secured in 2015. The AVACLIM project is in alignment within the framework of the FFEM's “strategy for the prevention of land degradation” and within the “sustainable agriculture” theme, which aims for large-scale geographical diffusion – through essentially scientific and professional networks – of agroecological innovations that can ensure sustainable rural development and lead public authorities to integrate this approach into development policies. The FFEM will provide USD 1,280,546[[39]](#footnote-40) cash contribution to the AVACLIM project which will promote the entirety of the project. The FFEM contribution cuts across the 4 components and Project Management Costs (PMCs) of the project, as can be seen in Section 2.1.2 of this document. However, most of this co-financing will be directed toward the activities under Component 2 of the project in particular, which is the scientific and field-based component. The FFEM contribution will complement the Global Environment Facility (GEF) contribution, allowing to deepen and scientifically validate hypotheses of field observations by the practitioners[[40]](#footnote-41) in Component 1, and to disseminate the results in Components 3 and 4.

**Research Institute for Development ­– IRD**

1. The IRD project named **“Beyond climate, soil carbon sequestration to sustain tropical family farming”** (SoCa) is funded by BNP Paribas Foundation for the period 2017-2020. The objectives of SoCa project are to: i) better understand how nitrogen and phosphorus availability in different soils under different climatic conditions and cropping systems affect soil carbon sequestration, and propose biological indicators to monitor these parameters; ii) support farmers in improving and innovating their management practices for food security, climate change mitigation and adaptation; and iii) inform various audiences about environmental co‐benefits of improved soil management practices. The project is being implemented in Cameroun, Benin, Ivory Coast and Madagascar. USD 907,791 is considered as co-financing for the AVACLIM project. The findings under SoCa interventions on carbon sequestration, nutrient dynamics, soil functional diversity and ecological processes will provide a robust scientific knowledge base to support the evaluations to be undertaken under Component 2 of the AVACLIM project on the effects of agroecology on soil structure and content.
2. The project **“Soil Ecological function Restoration to enhance agrosystem services in rainfed rice cropping systems in agroecological transition”** (SeCURE, 2017–2020) – funded by Agropolis Foundation – focuses on tropical smallholder agriculture, especially rainfed rice cropping systems in the Highlands of Madagascar. The total budget is USD 275,899 which is considered as co-financing for the AVACLIM project. The objective of this project is to develop and promote soil function restoration practices based on local and scientific knowledge, in order to increase both agronomic, socio-economic and ecological performances of agroecological agro-ecosystems. SeCURE interventions include the assessment of existing initiatives to measure the impact of soil function restoration practices at the agronomic, socio-economic and ecological levels. The results of these evaluations on soil function restoration practices will be incorporated with the results of the evaluations undertaken under Components 1 and 2 of the AVACLIM project in the discussions on the effects of agroecological innovations. In addition, the experience gained regarding capitalising on existing initiatives will be built on in order to maximise the efficiency of AVACLIM interventions.
3. The project “**Agricultural Intensification and Soil Carbon Sequestration in Tropical and Temperate Farming Systems Dynamic of Soil Carbon Sequestration in Agricultural Systems**” (DScaTT) focuses on carbon sequestration modalities in African rural territories in Senegal, Burkina Faso, Zimbabwe and France. This project is funded by Agropolis Foundation and has a budget of USD 1,164,133 for the period 2019-2021 which is considered as co-financing for the AVACLIM project. It will evaluate agroecology initiatives to measure carbon and GHG exchanges through above and belowground biomass and soil. The goal of this project is to identify means to maximise carbon sequestration in cultivated soils. Under DScaTT, the effects of farmers' agroecological innovations in achieving their objectives (e.g. income, food security) under the main constraints they face (e.g. cash, labour) will also be assessed. Similarly to SeCURE project, the findings of DScaTT in the four targeted countries will be integrated in the discussion on the effects of agroecology and success factors under Components 1 and 2 of the AVACLIM project.

**FAO**

1. **FAO’s Global Knowledge Product on Agroecology** launched in 2018 is one of seven cross-sectoral Global Knowledge Products (GKPs) designed to provide innovative global solutions in sustainable agriculture through interdisciplinary collaboration. The GKP will develop tools to support evidence-based decision-making including an analytical framework to assess the multi-dimensional impacts of agroecology and a supporting database. The overarching goal is to produce evidence on the multi-dimensional performance of agroecological systems and to use this evidence to influence policy-making. Build upon ongoing work by FAO and partners and adapt existing frameworks, a set of 5 to 10 universal indicators will be designed. AVACLIM is one of the partner projects of GKP, it is fully aligned with the objectives of the GKP and will feed into the GKP database. Mutual benefits will be generated from GKP and AVACLIM. The AVACLIM project will provide evidence base from seven countries that will be of value to achieve GKP goal. On the other hand, GKP will provide a set of core, universal indicators on which the multicriteria assessment tool to be developed under Component 2 of AVACLIM will build on. CARI and IRD where involved in the launch of the GKP and will be members of the Steering Committee which will enable to maximise cooperation and synergies between these projects which have similar objectives. The GKP will be implemented by FAO staff at global level (i.e. Head Quarters) and regional level (i.e. five regional offices of FAO) and of the investments, a total USD 550,000 is valued as project co-financing.
2. Since 2015, FAO and the McKnight Foundation have engaged in a partnership to **strengthen multistakeholder cooperation on agroecology** an important approach in transitioning towards more sustainable food systems and achieving the SDGs. The main objectives of this cooperation are:

* To provide and improve access to agroecological knowledge, tools/methods, principles, evidence and cases, especially for application under resource-constrained circumstances;
* To provide a platform for sharing and combining data and observations relevant to agroecological knowledge, information and research, between farmer organizations and researchers; and
* To establish strategic linkages and follow up with FAO’s Agroecology Regional Meetings.

1. The agreement between the McKnight Foundation and FAO was signed for a 5-year project (2016-2020) with a budget of USD 710,000. Major achievements include: engagement of diverse stakeholders on agroecology through the process of regional and international symposia on agroecology organized by FAO; the development of an Agroecology Knowledge Hub and a wide range of content in six UN languages, development of key studies and knowledge products to strengthen the evidence base on agroecology. The website, knowledge hub, database and other knowledge sharing platforms and events under this project will significantly facilitate the dissemination of the results generated under the AVACLIM project. The contribution of this partnership to the AVACLIM project can be estimated to USD 200,000.
2. FAO is currently implementing a Technical Cooperation Program (TCP) in India entitled: "Scaling-up Agroecology through policy support and Farmer Field Schools on Zero Budget Natural Farming with the Government of Andra Pradesh." The main objectives of this work are:

To scale-up and create evidence on agroecology through Zero Budget Natural Farming;

To support development of methodology and tools for design of agroecological ZBNF farms and implementation of FFS; and

To strengthen the capacities of farmers and trainers and the training approach of the ZBNF programme through Farmer Field Schools and experiential learning.

1. The agreement between the country of India and FAO was signed for a 2-year project (2019-2020) with a budget of USD 150,000. A major component of the TCP is the testing and usage of a global knowledge tool for the multi-dimensional assessment of agroecology and the sharing of subsequent evidence bases and lessons learned from the exercise. The evidence base on agroecology's performance, the usage of the knowledge tool, the lessons learned from piloting the assessment, and the verification of methodologies for scaling up agroecology will significantly facilitate the implementation of the knowledge tool and methodologies for scaling agroecology under the AVACLIM project. The contribution of this partnership to the AVACLIM project can be estimated to USD 150,000.
2. An additional 2 FAO-implemented agro-ecology projects in Senegal and Burkina Faso are being recognised as directly contributing to the achievement of the AVACLIM objective, and are therefore considered as in-country co-financing. The projects entitled ‘Strengthen climate change adaptation planning capacities for improved food security and nutrition’ in Senegal (and Haiti, though this is not accounted for in the co-financing), and the ‘Support for the Establishment of Pilot Eco-Villages in Burkina Faso’ help provide evidence that is built within the results of component 2, and to a lesser extent component 3, of the AVACLIM project. The contribution of these investments to the AVACLIM project as co-financing can be estimated to USD 500,000.

**Economic Community of West African States - ECOWAS[[41]](#footnote-42)**

1. The “**Agroecological intensification in Western Africa**” project is funded by the French Development Agency (AFD) with a budget of € 6,960,000. It was launched in April 2018 for a period of four years and is implemented by the ECOWAS commission through its Regional Agency for Agriculture and Food (ARAA). The objective of the project is to support agroecology in West Africa through the diffusion of agroecological innovations in family farming. The project is structured into two components: i) support to agroecological intensification in five West African countries namely Burkina Faso, Ivory Coast, Mali, Senegal and Togo; and ii) exchanges, capitalisation and contribution to the elaboration of public policies in the field of agroecology. Under Component 1 of ECOWAS project, on-the-ground projects will be implemented to support farmers’ groups interested in changing their practices and adopt agroecological innovations. The experience generated under this component will be compiled under Component 2 of ECOWAS project to improve the knowledge base on agroecology and integrate agroecology in the policy environment of the targeted countries. The interventions of ECOWAS in these six dryland countries – which include two of the countries selected under the AVACLIM project – will provide valuable practitioners’ experience on the implementation of agroecology that will be built on under the AVACLIM project. In addition, if they meet the selection criteria, ECOWAS field projects in Burkina Faso and Senegal will potentially be assessed under Component 1 or 2 of ECOWAS. Out of ECOWAS project budget $US 2,793,919 are thought as co-financing for AVACLIM project. Close collaboration between ECOWAS project and the AVACLIM project will be maintained throughout the implementation of AVACLIM project.

### *Remaining barriers to be addresses*

**1) Agroecology initiatives are piecemeal and implemented in isolation**

1. Agroecology is implemented worldwide by thousands of single farmers but it is rarely interlinked. It is mostly implemented in isolation rather than integrated into organized critical mass system in order to impact decision-making at multiple scales. This is the case in the targeted countries where multiple agroecology initiatives are being implemented by farmers. However, the existing community of practice on agroecology is not formally recognised and publicized, which prevents each actor to build on the experience gained outside of his site and to select and adopt the most efficient set of agroecological innovations. As a result, capacity strengthening and peer-to-peer support are pre-empted, and practitioners often work in isolation. Some partnerships exist at the national level (e.g. in Brazil, Morocco, India) but they must be strengthened to become more visible and accessible, and better oriented. At the regional level, some networking initiatives have been implemented such as Alliance for Agroecology in West Africa, Alliance for Food Sovereignty in Africa, Agroecology Learning alliance for Agroecology in South East Asia, Latin American Scientific Society of Agroecology, and European Agroecology Knowledge Exchange Network. However, these networks need strengthening including more exchange between English and French speaking countries and at inter-regional level, and increased knowledge availability and access on agroecology to enable the selection of the best set of innovations under different climate and environmental contexts.

**2) Limited availability of validated knowledge on the impacts and success factors of agroecology**

1. Despite the implementation of multiple agroecology initiatives worldwide and in drylands in particular, agroecology remains often a theoretical and ideological option for decision makers who have little scientific evidence available on its socio-economic and environmental benefits. The extent of existing practices, experiences and benefits of agroecology in various contexts is substantial, but fragmented and diffuse. In addition, specific enabling conditions are expected to be necessary for an agroecology approach to be successful in meeting the objectives of food security, climate change adaptation and mitigation, and land restoration[[42]](#footnote-43). However, the knowledge available on the success factors of agroecological innovations is scarce. It is insufficient to determine under which conditions and agroecology approach should be preferred. Currently, the arguments available to advocate the use of agroecology are insufficient to convince decision makers to prioritise it into national development strategies, despite the efforts of institutions and farmers who support a shift from a conventional agriculture system to an agroecological system. Unlike classic agronomic research where laboratories carry out experiments before testing them in the field, agroecology depends on experiments to prove its validity with the farmers in their own fields. This is one of the reasons why institutional recognition has come so slowly, since government policy requires scientific approvals before new ideas can be introduced. Positive results of agroecology from several agroecology projects in various developing countries in drylands were compiled in a report published in 2013[[43]](#footnote-44). However, one of the identified gaps is that in addition to the collection of field information more in-depth field surveys and statistically robust studies on the effects of agroecology and its success factors are needed. The debate remains limited to the pioneering phase that led to the emergence of agroecology because of insufficient scientific recognition of the comparative advantages it can offer, thereby preventing its integration into national development policies, strategies and investment plans.
2. Several tools based on a range of indicators are available to evaluate conventional and improved agricultural practices locally. These tools include Sustainability Indicator for Agricultural Exploitations (IDEA), Framework for the evaluation of management systems incorporating sustainability indicators (MESMIS), Methods for the Economic and Ecological Analysis of Agroecosystems (LUME) and Sustainability Assessment of Food and Agriculture systems (SAFA). Other relevant initiatives include: i) the 4P1000 initiative under which bio-physical and safeguard indicators are being designed for the assessment practices meant to deal with climate mitigation, and adaptation, food security and Human well-being; ii) the Land Degradation Neutrality conceptual framework adopted during the last Conference of Parties (CoP) 13 UNCCCD where 3 main indicators – namely soil carbon stock, primary productivity and land cover – have been proposed; and iii) the work conducted by the Inter-Agency and Expert Group on SDGs’ Indicators to define specific indicators for each SDG target. However, none of these tools and sets of indicators have been developed specifically for agroecological innovations, to accommodate for agroecology complexity and specificities. In addition, these tools and methods differ in their approach of evaluation of the durability, the definition of the criteria evaluated, the scale evaluated (e.g. plot, household, village, landscape) and the type of indicators (e.g. simple, aggregated, qualitative, quantitative). This prevents the comparison of the results in different contexts.

**3) Limited prioritisation of agroecology in policies, strategies and plans of agriculture, environment, land-use planning, rural development, trade and investments sectors**

1. Within international policy documents, sustainable agriculture is increasingly cited. For example, sustainable agricultural practices are promoted by the Sustainable Development Commission, the Rio+20 Declaration, FAO’s World Committee for Food Security reports, and the Human Rights Council Advisory Committee[[44]](#footnote-45). However, it is not clear which type of sustainable agriculture should be promoted and there is insufficient capitalisation of information and transformation into decision-making tools which is a major barrier to promote agroecology. Furthermore, because of the limited availability of evidence-based knowledge on the economic benefits of agroecology, current national and international investments in the agriculture sector often focus on large-scale, monoculture cash-crop production.
2. The level of integration of agroecology in policy documents varies slightly among the targeted countries but it remains generally low. Policy documents still mainly promote conventional agriculture, which prevent technical services to shift away from these practices. In Burkina Faso and Morocco, the integration of agroecology in the policy framework is low. Agroecological innovations are increasingly being implemented in the field but local initiatives are not supported by policy documents. In Senegal, agroecology is regularly mentioned during political events but no yet integrated into policy documents either. Some small-scale interventions supported by the Ministry of Agriculture include agroecological innovations. However, they remain limited to this sector instead of being supported at the intersectoral level, following an integrated approach. In Brazil, agricultural extension services do promote agroecology for the development of family agriculture. However, the level of understanding of the objectives and principles of agroecology is limited, and maintains outdated principles regarding the transfer of knowledge and technologies. In South Africa, agroecology is increasingly being recognised as having good potential to achieve both conservation and food security goals by the Ministry of Environment and Parliament. India is one of the most advanced out of the seven targeted countries regarding attention given to agroecology. Agroecology has been debated at various levels for a long time and the Government of India has been working on promoting agroecology in different parts of the country. Government institutions in the sectors of agriculture and water as well as several research institutions are currently working on topics linked to agroecology. In Ethiopia, agroecology is gaining increasing acceptance across sectors compared to other African countries. A study carried out by ISD, project partner represents a first step towards a nation-wide programme for the development of agroecology in Ethiopia. To conclude, among the targeted countries, some are not yet integrating agroecology in any aspect of agricultural development while others have made significant progress towards promoting agroecology nationally. In each case though the current inclusion of agroecology into the long-term vision of decision makers is low.

**4) Perpetuation of unsustainable agricultural practices where alternatives are available because of inadequate capitalisation**

1. Agroecology is currently not perceived as a viable solution to the multiple problems faced by developing countries in drylands including food insecurity, climate change and environmental degradation. Indeed, there is currently insufficient communication on the agroecological innovations and benefits. Current methods of capitalization in agroecology are limited to three main target groups and type of information: i) farmers to share technical information and guidelines; ii) children through environmental education; and iii) international organisations to share technical information on specific innovations for projects design and implementation. Until now, three target groups have been neglected: the general public, political decision makers and funding agencies. Decision makers and funding agencies – leaders who can influence the inclusion of agroecology into development planning – are not sufficiently informed to promote the most adequate practices. The general public has limited awareness on the set of improved agricultural opportunities available. Furthermore, across all groups, the dissemination of information from one country to another, and the adaptation and transformation of this information has been limited which prevents global awareness on agroecology.

### THE GEF ALTERNATIVE

### *Project Strategy*

1. To address land degradation, GHG emissions and food insecurity, a transition is needed to more sustainable and inclusive food systems that use resources more efficiently, and produce in a more equitable way. Agroecology is an integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimize the interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system. Agroecology manages the interactions between crops, livestock, forestry, aquaculture, people and the environment according to the locally-specific context, while addressing global challenges. FAO’s framework on agroecology identifies 10 elements shared by different agroecological approaches[[45]](#footnote-46). These elements cut across the environmental, social, economic, resilience and governance dimensions of sustainability, as outlined by FAO’s common vision for Sustainable Food and Agriculture[[46]](#footnote-47).
2. Recent scientific literature and research assessments increasingly support the hypothesis that agroecology is an appropriate production system in drylands as it would enable the sustainable management of water resources, and soil preservation against erosion or degradation. This is crucial in these regions that are particularly affected by climate change. Moreover, agroecology can contribute to mitigating climate change by increasing both below- and above-ground carbon sequestration.
3. Despite the mounting evidence on the benefits of agroecological innovations and technologies implemented by numerous farmers around the world, their implementation is fragmented and project-based. This is the case in the seven targeted countries where the implementation of agroecology is happening locally but with little visibility. There is therefore a lot of knowledge, experience and results accrued on the ground but it is not yet capitalised on. It therefore prevents the mainstreaming of agroecology despite the advocacy efforts of non-government stakeholders. The main barriers to the wide and systematic implementation of agroecology, particularly across the drylands, are: i) limited interactions between agroecology practitioners which hinders knowledge sharing; ii) limited availability of validated knowledge on the impacts and success factors of agroecology; iii) limited prioritisation of agroecology by policy-makers; and iv) insufficient awareness of the general public on agroecological innovations and their benefits. The benefits accrued remain mainly anecdotal rather than scientifically validated.
4. Under the AVACLIM project, specific interventions will be implemented that address the identified barriers. These interventions are divided into four components. Firstly, partnerships between agroecology practitioners will be built for experience sharing and capacity building at the national level in each targeted country and between countries. Secondly, a standard tool and methodology to assess the effects of agroecology and its success factors will be developed, tested and validated. Evidence base on the socio-economic and environmental benefits and success factors will be built and shared through didactic reports and workshops. Thirdly, an advocacy strategy including one national advocacy strategy per country and one international strategy will be developed and implemented for government stakeholders, international institutions and journalists to promote the integration of agroecology into policy-making processes. Lastly, a detailed Monitoring and Evaluation (M&E) strategy will be developed and implemented for the timely availability of information on the project progress and results. Awareness-raising interventions on the project and on agroecology per se will be implemented at all levels to promote the use of improved agricultural practices at the global scale (Figure 1). The implementation of these four project components will enable the prioritisation of agroecology in drylands as a means to sustain productivity of agro-ecosystems in support of food security, agricultural livelihoods, and to reduce environmental degradation and GHG emissions.



Figure 1: Theory of Change – The AVACLIM project

### *Project objectives, outcomes and outputs*

1. The **development objective** of the project is to contribute to the mainstreaming of agroecology in drylands, as a tool to address food insecurity, mitigate and adapt to climate change, and restore degraded land.
2. The **objective of the AVACLIM project** is that policy-makers, CSOs and farmers prioritise agroecological systems in drylands as a means to sustain productivity of agro-ecosystems in support of food security, agricultural livelihoods, and to reduce environmental degradation and GHG emissions.
3. This overall objective can be broken down into three specific objectives:

* Increase the capacity of agroecology actors – particularly those in the participating countries – by: i) organizing knowledge exchange events and developing corresponding tools; and ii) furthering joint reflection at the national as well as international levels.
* Learn and collect evidence from existing agricultural initiatives in the seven participating countries through: i) the identification and measurement of the environmental, economic and social outcomes and impacts of agroecological innovations; and ii) the identification and analysis of the decisive factors behind their development and success.
* Contribute to the promotion of agroecology in government policies through the implementation of an advocacy strategy that targets decision makers. The advocacy will be designed and implemented, based on the practical and scientific findings of the assessment and the results of experience-sharing learning events.

1. The indicators and targets at the objective level are:

**Indicators:**

i) Number of project proposals and draft policy documents (strategies, laws, financial plans) integrating agroecology and its principles

ii) Number of countries who have agroecology in their government agenda for discussions on agricultural development planning

**Target:**

i) at least three project proposals or draft updated policy documents (in three different countries);

ii) seven countries have agroecology in their agenda for discussions on agricultural development planning

Component 1: Building partnerships for experience sharing and capacity building of agroecology practitioners at the landscape and local levels with international connections among the project participants

1. Under Component 1, the availability of practical knowledge on agroecological innovations will be increased and a dynamic collaboration platform between all actors involved in agroecology will be build. Practical information on agroecology initiatives implemented in the targeted countries will be compiled and made accessible on a dedicated section of an existing database on desertification. Partnerships will then be built for experience sharing and capacity building of agroecology practitioners at the national level and between countries. The core methodologies that will be applied is peer-to-peer learning amongst agroecology actors. The community of practice will be strengthened, clearly defined and a facilitation strategy will be developed and implemented in each targeted country to enable continuous knowledge exchange beyond the project implementation phase.

***Outcome 1: Actionable knowledge on agroecology implementation is assumed and adopted by agroecology practitioners across the drylands***

**Indicators:**

i) Number of practitioners involved in the community of practice

ii) Number of agroecological innovations shared

**Targets:**

i) 2000 participants to events and users of the collaborative tools, including 40% of women

ii) at least 35 agroecology initiatives (each initiative can have one, several or a combination of innovations)

**Output 1.1: An agroecology global database with i) successful agroecological innovations in dryland areas, and ii) quantitative, qualitative and spatial data on projects**

1. Output 1.1 will be implemented at project launch. Five agroecology initiatives will be selected and analysed in each country to identify successful agroecological innovations. Fact sheet will then be created on each of these initiatives and stored on a database managed by CARI. The information generated under Output 1.1 will come directly from the actors and their observations in the field. The knowledge generated through this exercise will be discussed by the national communities of practice organised under Output 1.2.
2. It is expected that most of the initiatives to be evaluated under Output 2.3 will be part of the initiatives analysed under Output 1.1. The information collected based on the experience of the actors on the ground (Output 1.1) and the scientific information collected under Output 2.3 will be compared to identify similarities and discrepancies. This comparison will provide valuable information to finalise the multi-criteria assessment tool and method to be developed under Component 2 for it to be as simple and efficient as possible.

**Activity 1.1.1** Identify and document at least 5 initiatives per country, with common criteria which will include *inter alia* willingness to contribute to the AVACLIM project, gender integration and ethnic minority integration

1. Five agroecology initiatives will be selected in each country based on a set of criteria to ensure their alignment with the project objectives. These criteria will include *inter alia*: i) aligned the majority of the 10 elements of agroecology as defined by FAO[[47]](#footnote-48); ii) implementation of at least one agroecological innovation; iii) willingness of the actors to participate to the project; iv) gender-sensitivity of the initiative; v) adequate integration of indigenous peoples including ethnic minorities; and vi) clarity, equity and absence of conflicts over land ownership.
2. One fact sheet will be developed for each agroecological initiative. The agroecology innovations used under each initiative will be highlighted within each fact sheet. The information to be integrated in the fact sheets include: explanations on the selection of the innovation(s); type of environment where it was implemented; implementation method; social, economic and environmental benefits generated (e.g. observed reduction of soil erosion, increase of water availability, increase of productivity, increase in income, creation of decent rural employment, reduction of child labour, and more); and strength, weaknesses, limits of the technique and scope for improvement where appropriate. In addition to practical knowledge, the assessment of the benefits generated will also include the observed effects based on the traditional knowledge of local communities on their environment. A standardised data gathering template will be developed to guide data collection in each country. This will enable the comparison of information between initiatives and it will facilitate the storage of this data in the database. This information will be collected and compiled by each of the national NGO partners during field visits in their specific countries in collaboration with local communities, using a standardised data-gathering template.

**Activity 1.1.2** Store the compiled information on the existing database "Resources Centre on the Fight against Desertification" managed by CARI

1. The information collected under Activity 1.1.1 will be stored under an existing database that was created in 2016 as part of another project and will be amended to accommodate the data generated under the AVACLIM project. This database is hosted by CARI. It is currently divided into two sections: contacts and documentation. A new folder for AVACLIM will be created in the documentation section to store the fact sheets. The database may also include outstanding examples from non-project countries that are proposed by other Drynet partners or other institutions. The database will be accessible to all the actors of the community of practice of the targeted countries as well as other CARI’s partners. The amendments to CARI’s database will be done in such a way that complementarity with other databases such as FAO knowledge hub and database, and UNCCD’s World Overview of Conservation Approaches and Technologies (WOCAT) database is maximised. In addition, close partnership will be built between CARI and the management team of these databases, and the integration of AVACLIM results into these databases will be promoted under Component 4.

**Output 1.2: Capacity development through knowledge exchange events to disseminate agroecological innovations in participating countries**

1. A national workshop will be organised in the seven targeted countries to discuss the results of agroecology initiatives. This will enable national practitioners to meet with other organisations involved in agroecology, to learn about all the initiatives currently being implemented, and to access information on the strengths and weaknesses of multiple agroecological innovations to apply them in their sites. Knowledge-sharing will also be promoted across countries through the organisation of two exchange field visits. This will give the opportunity to agroecology practitioners to further and deepen the learning process.

**Activity 1.2.1** Organise one national workshop per country for exchange of experience on successful agroecological innovations with the participation of community organisations, NGOs, technical services and other government representatives, scientists and farmers practitioners (community members including women) to the workshops

1. A 3-day workshops that will be organised in each country. The focus of these workshops will be for the members of the community of practice on agroecology to exchange experience on successful agroecological innovations, and lessons learned. Each workshop will include approximately 10 participants which will include representatives of community organisations, NGOs, technical services and other government representatives, scientists and farmers practitioners (i.e. community members including women). Fact sheets will be presented and discussed to capitalise on successful innovations. The Fact Sheets will be improved where needed for dissemination under Component 4. During this workshop, the priority information gaps on agroecology (Activity 2.1.2) will also be identified.

**Activity 1.2.2** Organise two field trips – one in a French-speaking and one in an English-speaking country – for practitioners to share experiences

1. To enable knowledge sharing at the level of the international community of practice, two knowledge exchange visits will be organized: one in a French-speaking country and one in an English-speaking country. Workshops in both languages have been selected to facilitate communication, however, the participation of French-speaking practitioners to the English-speaking workshop will be encouraged and vice versa to promote knowledge sharing between the French-speaking and English-speaking countries. The project team will define the participating groups, the criteria to select individual participants, the focus of each visit, the criteria for selection of the host community or organisation. Project partners will be required to submit proposals describing how this methodology will be applied, a detailed itinerary and set of activities, a detailed budget and the framework for the report of the visit. Once the proposal has been reviewed the project team may offer technical support to assist the proposing organisation with planning and facilitating the exchange visit. A particular focus will be given to the integration of the hosting community group in the process.

**Output 1.3: A dynamic community of practice on agroecology**

1. The national workshops implemented under Output 1.2 will initiate a dynamic exchange of information among the practitioners. To make this communication regular and long term, a facilitation strategy for the community of practice will be elaborated and implemented under Output 1.3. It will include a diversity of tools for knowledge sharing and collaboration such as webpages, networking sites and apps, online document sharing platforms, virtual meetings and field visits.

**Activity 1.3.1** Develop and implement a facilitation strategy for the community of practice in each country including inter alia the organisation of virtual and in-person meetings, linking the actors of the CoP, means to share information and news

1. A strategy for regular and long-term exchange of information within each national community of practice will be developed. The frequency of the in-person and virtual meetings will be decided and the required collaborative tools will be defined. Financial planning will be undertaken to enable the maintenance of the tools and to hold meetings beyond the project implementation phase, and sources of funding will be identified where necessary. The facilitation strategy will aim to link the actors, facilitate interactions, and increase access to information. The knowledge sharing interventions to be prioritised under this strategy – and to be implemented during the project implementation phase – will likely include one field visit per country to a demonstration site on agroecological innovations or other site of particular interest to each national community of practice.

**Activity 1.3.2** Develop and share with the CoP members the collaborative tools needed to implement the CoP facilitation strategy related to the project with all project stakeholders

1. The collaborative tools identified under Activity 1.3.1 will be developed. This will likely include in each country a webpage on agroecology hosted by the most active institution, an online sharing platform (e.g. DropBox, Google Drive), and social media tools to facilitate communication (e.g. WhatsApp, Facebook page). These tools will be developed in alignment with the communication strategy to be implemented under Component 4. Gender equity among the users of the collaborative tools will be promoted.

Component 2: Assessment of existing initiatives for evidence-based decision-making at the national, local and landscape levels

1. The majority of the on-the-ground interventions of the AVACLIM project will be undertaken under Component 2 which focuses on determining whether agroecological systems are an efficient option to counter the degradation of natural resources and desertification, increase adaptive capacity, and mitigate climate change. To do so, the social, economic and environmental benefits of agroecology initiatives will be measured, as well as under which conditions these benefits were generated. A multicriteria assessment tool will be developed based on existing evaluation tools developed under the Working Group for Agroecological Transitions (GTAE) projects and other projects for the evaluation of the effects of agroecological innovations and their success factors. It will be tested through the evaluation of two initiatives in each selected country, adjusted where required, and validated. A user guide of the validated assessment tool will be developed and shared to facilitate the use of this tool beyond the project targeted sites and countries. This will guide the evaluation of agroecological innovations at the global scale with the objective of providing reliable information on agroecology for decision makers.

***Outcome 2: Knowledge and understanding of the impacts of agroecological systems and success factors of agroecological initiatives are consolidated through a scientifically harmonized protocol***

**Indicators:**

i) Number of functional and accessible tools for multidimensional assessment of agroecology initiatives developed

ii) Number of initiatives assessed

iii) Number of knowledge products developed

**Targets:**

i) one functional and accessible tool for multidimensional assessment of agroecology initiatives developed

ii) at least 14 initiatives assessed

iii) at least 8 knowledge products developed

**Output 2.1: A multicriteria assessment tool to measure the impacts and success factors of agroecological systems**

1. Under Output 2.1, a multicriteria assessment tool and data collection protocol will be designed to assess the multi-dimensional impacts of agroecological innovations, and identify the drivers of success. This will be based on a stock-take of existing M&E tools and systems such as those developed under GTAE and FAO projects, to build on their strengths and weaknesses. This tool will be developed in a participatory manner between scientists and practitioners. The selected set of indicators will be based on the fact sheets produced in Activity 1.1.1 and the information needs identified in the targeted countries in order to address systematically the knowledge gaps on agroecological innovations.

**Activity 2.1.1** Undertake a stock-take of existing M&E tools and systems for agroecology initiatives, quantitative and qualitative information available on agroecology initiatives, and existing gaps

1. The multicriteria assessment tool to be developed under the AVACLIM project will build on efforts already undertaken by partner projects for the evaluation of agroecology initiatives. A stock-take of current initiatives as well as scientific and non-scientific literature relating to the assessment of the impacts of agroecological innovations will therefore be undertaken as the first step towards building the multi-criteria assessment tool. Existing M&E tools will be identified, their strengths and weakness will be assessed, as well as existing gaps. This analysis will include FAO on-going initiatives (e.g. the set of core indicators to be developed under GKP), GTAE evaluation methods, as well as IDEA, MESMIS, LUME and SAFA evaluation tools. Indicators developed by other initiatives such as the 4P1000 initiative, Land Degradation Neutrality conceptual framework adopted during the last CoP 13 UNCCCD, and Inter-Agency and Expert Group on SDGs will also be reviewed. In addition, a stock-take of the knowledge gaps on agroecology innovations previously identified in the scientific literature will be undertaken. Examples of these knowledge gaps are the effects of different nutrient management practices on N2O emissions[[48]](#footnote-49) and the contribution of agroecology to human and social capital[[49]](#footnote-50).

**Activity 2.1.2** Identify priority needs for evaluation during one national workshop per country (combined with the workshops of Output 1.2) which will define the set of criteria of evaluation to be selected

1. Priority information gaps that hinder the application of agroecological innovations will be identified by the farmers, extension services and partner NGOs during the knowledge-sharing workshop organised under Activity 1.2.1. The priority needs identified during these workshops together with the knowledge gaps identified in the scientific literature will determine the information that should be captured under the multi-criteria assessment tool and the indicators thereto.

**Activity 2.1.3** Organise an international scientific workshop to produce the multicriteria assessment tool and a protocol with guidelines for data collection (including the definition of the criteria for the selection of the initiatives to be evaluated) to monitor the selected indicators to be implemented in the seven countries

1. An international scientific workshop will be organised to propose a common framework for the multicriteria assessment tool to be implemented in the seven countries. The organisation of this workshop will build on the experience of FAO is undertaking this kind of exercise. This tool will aim at measuring the socio-economic and environmental effects of agroecological innovations, based on the information needs identified under Activity 2.1.2. It will build on the experience gained through the application of existing evaluation tools (e.g. GTAE evaluation methods, FAO evaluation tools, IDEA, MESMIS, LUME and SAFA). A set of indicators and parameters will be developed to: i) describe the multi-dimensional effects of agroecology on interlinked domains of production, economy, social well-being, and environmental health; and ii) assess the drivers necessary to enable the shift to and maintenance of agroecological innovations. Socio-economic effects to be measured will include *inter alia* livelihoods diversification, increased income, job creation, resilience to climate change, reduced usage of chemical fertilisers and pesticides, and food security and nutrition. Specific social effects to be measured will include for example cultural effects and adequate integration of traditional knowledge in the design and implementation of the agroecological interventions. Environmental effects are for example effects on soil carbon sequestration, biodiversity of micro- and macro-organisms, biomass flux, soil and water pollution, and soil erosion. Because men and women have different roles in agricultural activities, the effects generated by the agroecology initiatives for men and women are expected to differ (see Section 3.6). To measure these differences, the selected set of indicators will be gender sensitive. This will enable to distinguish between the benefits raised for women and for men, and assess the efficiency of the initiatives evaluated in generating significant positive effects for men and/or women. In addition, the set of indicators and measurement methods will be inspired by other initiatives such as the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) framework. In addition to the effects of agroecology innovations, the conditions for projects’ success and drivers of success will be a crucial result of this assessment. The drivers to be assessed might include for example the level of government support and communities’ ownership of the project, type of land tenure systems, type and level of participation from the beneficiaries.
2. Since 2016, GTAE partners have undertaken important work for the evaluation of agroecological innovations (i.e. Project to build on actors' experiences for the development of resilient agroecological techniques in West Africa[[50]](#footnote-51) – CALAO project, memento on the evaluation of agroecological practices). Based on the lessons learned from these initiatives, the multicriteria assessment tool will be designed in order to enable the evaluation of: i) the effects of individual innovations and combinations of innovations; ii) the effects of interannual changes in yield according to the agroecological innovations used; iii) the effects on food availability as well as nutrition; iv) the socio-economic and environmental effects at the landscape level as well as at the local level; and v) agro-environmental and economic effects together rather than separately to account for their interconnections.
3. After defining the required set of indicators, a protocol for data collection will be developed. To make it accessible to all the actors of agriculture development projects, the multi-criteria assessment will remain simple. Experience gained in other initiatives with similar goals to the AVACLIM project (e.g. GTAE, FAO) will be included where appropriate in the discussion during this international workshop to strengthen as much as possible the evaluation framework.

**Output 2.2**: **Training sessions and user-guide to use and disseminate the multicriteria assessment tool**

1. The multi-criteria assessment tool will be adapted in each country to the local context to enable its application on the ground. Training will then be provided to partner NGOs and the interns appointed to assist in the assessment of agroecology initiatives to give them the capacity to use this tool efficiently and adequately. After testing the tool, it will be improved based on the strengths and weaknesses identifying during the piloting process, and finalised. A user guide will finally be developed to guide the use of this tool at the broader scale.

**Activity 2.2.1** Organise country meetings for discussion on and adaptation of the indicators of the assessment tool, definition of the data collection protocol in each country

1. Part of the indicators developed under Activity 2.1.3 will apply to all study sites. However, some of them will have to be adapted to the context of each sites. For example, some socio-economic and environmental indicators and data collection protocol will have to be adapted to the type of ecosystems, soil characteristics, social structure, agricultural production, and sources of environmental pressure specific to each country. Country meetings will therefore be organized to review the set of indicators and adapt those that are context specific. The corresponding adjustments will be made to the data collection protocol.

**Activity 2.2.2** Train local partners and interns on the use of the multicriteria assessment tool

1. After adapting the assessment tool and protocol for data collection to the context in each country, training will be provided to partner NGOs and interns on the use of the assessment tool. The set of indicators to be monitored will be distributed based on the strengths of each group of interns. For example, interns who have received training on global development issues will likely work on social and economic indicators. Interns with more technical training will work on environmental indicators such as carbon storage. Each team (i.e. one external and one national intern per country) will cover all the required indicators. The training sessions will then be adapted to the different groups accordingly.

**Activity 2.2.3** Develop a user-guide for the multicriteria assessment tool based on the improvements made through testing out the tool under Output 2.3 for broader dissemination

1. After the validation of the multi-criteria assessment tool and the protocol for data collection, a user guide for this assessment tool will be developed. The set of options available to adapt the tool to each context will be explained in this user guide to enable the application of this tool in all countries and context. The advocacy strategy under Component 3 and dissemination of the user guide under Component 4 will enable the application of the multi-criteria assessment tool at the global scale.

**Output 2.3: Country-based and global evidence-based references on impacts and success factors of agroecology**

**Activity 2.3.1** Select – in a participatory manner with local partners – at least two initiatives to be assessed

1. Based on the conditions that should be met to enable the application of the multi-criteria assessment tool, two initiatives will be selected in each country. For example, the availability of baseline information to enable the comparison of the situation before and after implementation of the agroecology interventions will be a major criterion for the selection of the initiatives to be assessed. The set of initiatives will also be selected in order to represent a diversity of implementation scales (e.g. local, landscape, territorial). Drawing on the lessons learned from CALAO project, farmer-based initiatives that did not benefit from projects support will also be considered. If some of the initiatives selected have not been analysed under Output 1.1, the practical information from the actors and a fact sheet will have to be developed for each new initiative to enable the comparison of this information with the scientific information.

**Activity 2.3.2** Collect and analyse data on the selected two initiatives in each country with trainees under the supervision of scientists – north and south scientific partners – in order to test and validate the assessment tool

1. The multi-criteria assessment tool will be tested on two agroecology initiatives per country. A detailed data collection plan – including the timeline for field missions of both external and national interns – will be developed by IRD in collaboration with the interns, the partner NGO, and a team of scientists from IRD and other relevant research institutions. The data collection campaign will be undertaken over a period of six months[[51]](#footnote-52). Despite the fact that the interns will be responsible for monitoring different parameters, they will work in close collaboration in order to collect all the required information to apply the multicriteria assessment tool, and to build each other capacity. As part of the implementation of the data collection plan, the teams of interns will collect information and data on the ground for each selected initiative through close collaboration with NGOs, Community-based Organisations (CBOs) and farmers under the supervision of scientists (see Section 1.4.3 and Appendix VIII) in each country.
2. The selection of the intern will be gender sensitive. In addition, particular attention will be given to the integration of women, youth and ethnic minorities in local communication events organised by NGOs in the sites where initiatives have been selected. Local community members will be involved as much as possible in the data collection processes.

**Activity 2.3.3** Produce national evaluation reports

1. National reports will be produced based on the results of the evaluations regarding the effects of agroecological innovations and success factors in each country. These reports will have a common structure to facilitate the discussions and comparisons of the results between countries. These reports will be comprehensive and include separate sections on: the evaluation tool, an analysis of the strengths and weaknesses of the tool, the results of the evaluations, and the analysis and interpretation of these results. Their content will be made accessible to a broad audience. These reports will be presented and discussed under Activity 2.3.4. They will also be promoted and disseminated under Components 3 and 4.

**Activity 2.3.4** Organise national workshops for sharing and discussing country assessment methods and results

1. The results from the countries’ assessments will be presented and discussed during national workshops. The difficulties encountered, strengths and weaknesses of the method, and relevance of the results will be examined to identify room for improvement of the multicriteria assessment tool. The actual results and success factors will then be interpreted together with their implications regarding the upscaling of agroecological innovations in each country.

**Activity 2.3.5** Produce the overall assessment report

1. The information collected in the seven targeted countries will be compiled and summarised into an overall assessment report. This report will be presented and discussed under Activity 2.3.6. This report will be a major tool for the advocacy strategy to be implemented under Component 3.

**Activity 2.3.6** Organise an international workshop for sharing and discussing country assessment methods and results with scientists and interns, NGOs, multilateral organisations and government technical services

1. An international workshop will be organised with scientists, external and national interns, NGOs, multilateral organisations (e.g. FAO) and government technical services from relevant sectors (e.g. agriculture, environment, water) from the targeted countries after the national workshops. The results from the national assessments as well as the highlights of the discussions from the national workshops will be presented. Final decisions will be made regarding required improvements to the multi-criteria assessment tools and protocol for data collection, and the participants will proceed with the validation of this tool. Based on the results of the assessments regarding the effects of agroecological innovations, success factors and the suggestions made during the national workshop, specific sessions will be organised during the international workshop to discuss if agroecology is an adequate approach to address land-degradation, food security and environment degradation issues, if so in which context and how to upscale it.

Component 3: Advocacy for informed decision-making

1. After building up the evidence base on agroecology under Components 1 and 2, the results will be used to advocate for the integration of agroecology into policy-making processes. The main objective of this component is to convince relevant national and international organisations to use agroecology to fight against desertification in drylands. To do so, advocacy strategies – well-argued and based on scientifically-validated evaluations – will be implemented to promote agroecology in public policies. Under Component 3, a national advocacy strategy will be implemented to promote the integration of agroecological innovations by policy makers into development planning in Brazil, South Africa, Ethiopia, Morocco, Burkina Faso, Senegal, and India. Agroecology will also be promoted at the international level through raising awareness of international organisations on the benefits of agroecology as a means to achieve healthy ecosystems, diverse food systems, sustainable agricultural livelihoods, and adaptation to and mitigation of climate change.

***Outcome 3: Evidence-based decision-making on agroecology is strengthened and systematized at international, national, local and landscape levels***

**Indicators:**

i) Number of advocacy opportunities created (including meetings, communication tools, radio emission)

ii) Number of international organisations (e.g. UNCCD, United Nations Framework Convention on Climate Change – UNFCCC, World Bank – WB, Asian Development Bank – ADB, FAO) within which the relevant department(s) endorse the advocacy messages generated under the project

**Targets:**

i) at least 9 events, and 10 advocacy documents and tools

ii) at least 3 international organisations

**Output 3.1: A common but differentiated advocacy strategy developed by CSOs**

1. To develop the national and the international advocacy strategies the targets for advocacy will first be defined. Five groups have been pre-identified by the implementation partner for Component 3, Both ENDS. These include national policy makers, other politicians, international organisations, CSOs and journalists. A joint advocacy strategy – that include tailor-made national strategies on the recognition of the multiple benefits of agroecological systems targeting national government and non-government stakeholders and an international advocacy strategy targeting international organisations — will be developed and implemented.

**Activity 3.1.1** Define the targets for advocacy within the following five groups: national policy makers, other politicians, international organisations, CSOs and journalists

1. Main target groups for advocacy have been pre-identified. National policy makers will include policy makers from the agricultural, environmental, water, planning and trade sectors from the seven targeted countries at the central and decentralised levels. International institutions and initiatives to be targeted will include for example the Permanent Inter-State Committee for Drought Control in the Sahel, Agrymet Regional Centre, Sahara and Sahel Observatory, “4 per 1000” initiative, GGWI, UNFCCC, UNCCD as well as donor organisations. CSOs will include relevant NGOs and CBOs working in agricultural development, both internationally or in the targeted countries. In addition, journalists from the seven targeted countries will be integrated in the advocacy strategy. However, the specific targets for advocacy within the identified groups will be more precisely defined during the first phase of the project as the first step towards the development of the advocacy strategy.

**Activity 3.1.2** Develop a joint advocacy strategy which includes an international advocacy strategy document and seven tailor-made national strategies’ documents with action plans – with defined targets and tools – on the recognition of the multiple benefits of agroecological systems

1. A joint advocacy strategy will be developed during a workshop between AVACLIM implementation team, additional experts from Both ENDS and other relevant partners. Additional strategic meetings will also be organised as necessary. It will include one joint international strategy and seven tailor-made strategies, with one clear and detailed action plan each. The advocacy strategy will address the information needs of the different target groups. It will focus on the integration of agroecology into: i) agricultural and environmental policies, strategies and plans; and ii) international trade and investment discussions. One of the aims of the advocacy strategy will be to direct investments in the agricultural sector towards agroecological innovations. As preparatory activities to the implementation of the advocacy events, inventory of relevant policies, actors mapping, institutional mapping and policy-making timelines will likely be undertaken, and the development of supporting documents.

**Output 3.2: Dynamic network to establish the dialogue amongst different stakeholders on agroecology through the implementation of the advocacy strategy**

1. The advocacy strategy will be implemented under Output 3.2. A tailor-made set of messages will be developed for each group of targeted audience. A national meeting will then be organised in each country to plan the implementation of the national strategies and clearly identify the responsibilities of each partner. The advocacy strategies will then be implemented in each country and at the national level through the organisation of advocacy events, meetings, material and dissemination of relevant advocacy material.

**Activity 3.2.1** Translate the results of the project (including from Components 1 and 2) into advocacy messages that will form the content of the various advocacy documents according to targets and objectives

1. The results of the interventions undertaken under Component 1 and 2 regarding the impact of agroecological innovations will be reformulated to transform them into advocacy messages. These messages will then be adjusted and packaged according to each group of targeted audience to align with their mandates, information needs and objectives. These messages will be translated into the main international language of each targeted country (i.e. French, English, Portuguese).

**Activity 3.2.2** Organise advocacy planning and implement meetings targeting national CSOs and their networks to implement and adapt the national advocacy strategies

1. National meetings will be organised in each country with at least 10 participants to plan the implementation of the advocacy strategy. This will include: i) selecting and prioritising the messages to be conveyed; and ii) clarifying the role of Both ENDS, partner NGOs and government partners in the development of the national advocacy documents and in the organisation of advocacy events and meetings.

**Activity 3.2.3** Implement the national advocacy strategies targeting policy makers, national CSOs, journalists and politicians

1. As previously mentioned, the required preparatory activities identified in the advocacy strategy will first be conducted. The following activities will then be undertaken based on the decisions made under Activity 3.2.2 in each country: i) the development of decision-support briefs for policy-makers on the results of Components 1 and 2; ii) the production of at least 8 position papers: one target-specific document per country and one for a selected type of international organisations (e.g. donor organisations); iii) the development of other advocacy materials such as flyers, open letters, posters and/or documentaries during Conferences of Parties; and iv) the organisation of seven national advocacy events as well as targeted meetings using position papers as advocacy tools for governments, donors and international institutions, CSOs and journalists.

**Activity 3.2.4** Implement the international advocacy strategy targeting policy makers, international organisations and journalists including at least two events on agroecology at international meetings

1. The advocacy interventions at the international level will include: i) the organisation of one international conference on agroecology with at least 40 participants; ii) the organisation of at least one session on agroecology with international institutions and government representatives during two international events such as UNCCD CoPs; and iii) the organisation of at least one session during an international event on trade and investments. A report and brief will be produced on the outcomes of the international conference on agroecology.

Component 4: Communication, learning, knowledge management and adaptive management

1. The main objective of Component 4 will be that the project activities and results are known beyond the targeted stakeholders. To achieve this objective, a M&E strategy will be developed and implemented for the timely availability of information on the progress and results of the project interventions. In alignment with the advocacy interventions under Component 3, awareness-raising interventions on agroecology will be implemented at all levels to promote the use of these improved practices at the global scale. Another role of the interventions under Component 4 will be to ensure appropriate synergy between all stakeholders, countries and components of the AVACLIM project through strengthening partnerships. A communication strategy with a detailed communication plan for the three and a half years of implementation of the AVACLIM project will be developed and implemented.

***Outcome 4: Knowledge on the impact and the success factors of agroecology made publicly available***

**Indicators:**

i) Number of M&E systems developed and implemented

ii) Number of evidence-based communication tools and events on the benefits of agroecology developed and disseminated

**Targets:**

i) one M&E system developed and implemented

ii) at least 4 printed tools, 4 digital tools, 8 documentaries, 8 press conferences; and participation to at least 4 scientific conferences

**Output 4.1: Project monitoring and evaluation for learning and adaptive management**

1. To ensure, timely availability of information on the progress of the project interventions towards reaching the project objectives, a M&E strategy will be developed. This strategy will be based on the set of indicators and targets defined in the AVACLIM project LogFrame, and define sub-indicators and targets where necessary to facilitate the monitoring of the main indicators. It will include: i) the methodology and planning for data collection, data analysis and reporting activities through the project implementation phase; and ii) the role of the project coordinator and each project partners in the implementation of the M&E strategy.

**Activity 4.1.1** Design and implement a M&E strategy for the project interlinked with the advocacy strategy

1. The M&E strategy will define the responsibilities of the members of the project implementation team in monitoring and evaluating the project interventions. The project coordinator will be responsible for coordinating data collection from partner NGOs and undertaking monitoring activities during field missions where necessary to collect data and information on progress. CARI supervisor will be in charge of overseeing the M&E activities. The Project Steering Committee (PSC) composed of representatives from CARI, IRD, Both ENDS and EMG will oversee the implementation of the M&E strategy, interpret the results and make decisions thereto following an adaptive management approach (see Section 2.1.1). The Plenary Assembly – that will meet at project inception, mid-term and end – will also play an important role in monitoring the project through checking the project progress at midterm, making decisions for amendment of the implementation strategy where needed, and drawing lessons learned. The specific activities to be developed under Components 3 and 4 to monitor the implementation of the advocacy strategy and communication strategy respectively will be aligned with the corresponding indicators and sub-indicators within the M&E strategy.

**Output 4.2: Knowledge management and dissemination of project's products and lessons learned in an adapted format for a wider audience**

1. A communication strategy with a large diversity of tools, material and events will be developed in order to reach various stakeholders’ groups from the international to the local levels. The content of the communication tools through the implementation period will depend on the progress made with the interventions. At inception, it will cover the project objectives, activities, timeline and targets. The progress of the project and results obtained under Component 1 and later on under Component 2 will be communicated throughout the implementation phase. The achievements of the advocacy strategy under Component 3 will be communicated as soon as they are available, which is expected towards the end of the project.

**Activity 4.2.1** Develop a communication strategy for producer organisations, community associations, NGOs, decentralized technical services, and agricultural schools in targeted countries in collaboration with Component leaders 1, 2 and 3

1. CARI will lead the design of the communication strategy which will be developed in collaboration with EMG, IRD, Both ENDS and other relevant project partners. The objectives of the communication strategy will first be refined to determine which groups will be targeted and how many people are expected to be reached. The set of communication tools, material and events will then be specifically developed to attain these targets. This will include for example social media and public events for the general public, peer-reviewed publications and scientific events for the scientific community. A detailed communication plan will be developed and will define – for each communication objective and selected actions – the required inputs, responsible parties and timeline. This strategy will be detailed but will remain flexible to follow an adaptive approach in order to address specific needs that would arise during the project implementation phase.
2. The development of the communication strategy will include the following sub-activities: i) stock-take of the existing communication tools by the project partners including FAO, their efficiency as well as their strengths and weaknesses will be undertaken; ii) define the primary and secondary objectives and targets of the strategy; iii) select the communication events to be organised and their timeline; iv) select the supporting tools, their content and broadcasting methods; and v) establish a detailed communication plan. The target groups will be defined and organised in order of priorities (i.e. primary, secondary and tertiary targets). The aspirations and expectations of the targeted groups will be identified. The communication strategy document will then be developed to address the identified priorities and gaps. It will include the communication tools to be developed and events to be organised. For example, a project brochure will be developed at the launch of the project for dissemination to NGOs, community representatives in the targeted countries, and other partners of the project.
3. The communication strategy will be divided into two sections: i) internal communication between the project partners to ensure adequate collaboration; ii) external communication with the actors involved in agriculture, natural resources management, and international agreements on environment such as producer organizations, community associations, government representatives including decentralized technical services, agricultural schools in the target countries, NGOs and scientific organisations.

**Activity 4.2.2** Implement the communication strategy including the development and mainstreaming of communication tools, and organisation of communication events

1. One of the first steps of the communication strategy will be to promote the integration of the results of the AVACLIM project under existing databases such as FAO knowledge hub and database, and WOCAT. In addition, a diversity of communication tools will be developed. These can be classified into five main categories:

* Printed tools: This will include the design of the project visual identity including its logo and documents templates (e.g. PowerPoint presentations, reports, posters). Project brochure, posters, leaflet will be developed as well as required tools to support the advocacy events of Component 3 where needed. In addition, non-scientific journal articles, press releases, at least one scientific paper in a journal of rank A, and an article in another international journal of lower rank will be published.
* Web tools: The online visibility of the project will be maximised. This will be based as much as possible on existing websites and platforms. Firstly, a project website will be developed where all project documentation and news on the progress will be easily accessible. It will be managed by CARI. Secondly, a project digital newsletter will be prepared and disseminated on a regularly basis, every semester. A strategy for the timely transfer of information on the project will be developed to support the compilation of the newsletter. It will be produced in several languages to enable its dissemination within the networks of the project partners in addition to CARI’s network. Thirdly, social networks such as Facebook, WhatsApp and Twitter will be used to facilitate internal and external communication based on the stock-take of existing communication tools. Additional web-based interventions building up on the web-based platforms developed by FAO will be identified.
* Audio-visual tools: One short documentary per country will be developed towards the end of the project implementation phase. These 8-to-12-minutes documentaries will include testimonial from agroecology practitioners on the ground. A teaser will also be developed on overall project interventions and results including images from each targeted countries. These documentaries will be broadcasted on national TV channels and YouTube.
* Conferences with press: Conferences with press will be organised at national level and during international events to share major results of the project in a timely manner. News on the results of the project will be broadcasted on TV, in newspapers or on the radio. CARI, EMG, IRD and Both ENDS will have shared responsibilities for maximising the interactions with the press on the project interventions and results.
* Scientific events: The AVACLIM project representatives will participate to national scientific conferences and at least three international scientific conferences for dissemination of results and lessons learned on the project to scientists and students.

1. Additional interventions to support the organisation of the national and international seminars under Components 1, 2 and 3 will also be implemented.

### *Project assumptions*

1. The definition of agroecology varies from one source to another. For example, the acceptable level of use of chemical fertilisers or pesticides during the transition phase and the duration of this transition phase varies among different organisations within the sector. Therefore, the first assumption that must be satisfied for the AVACLIM project to be successful is that a consensual definition of agroecology can be found between all the actors involved in the project.
2. The project is built on the assumption that the positive qualitative – and few quantitative – results obtained so far with agroecology initiatives in different places worldwide and the scientific hypothesis around agroecological innovations will be verified under the project interventions. In other words, the assumption is that significant results regarding the positive socio-economic and environmental effects of agroecology are obtained through the practical assessments undertaken under Component 1 and the scientific assessments undertaken under Component 2.
3. Following upon the previous assumption, it is assumed that the results obtained on the socio-economic and environmental benefits of agroecology will be sufficient to prove to policy makers that agroecology is an efficient means to address food insecurity issues, improve livelihoods, land degradation and vulnerability to climate change, and should therefore be promoted in their country. The results obtained from the evaluations under Component 1 and 2 are expected to show *inter alia* that agroecology is cost-effective and enables increased income of farmers in the short or medium term.
4. Agroecology practitioners are expected to be willing to share their experiences with the community of practice. This includes dedicating the time necessary to capitalise on and share their knowledge with the project implementation team.
5. The last project assumption is that despite the complexity of the agroecology concept and the diversity of agroecological innovations, a common set of indicators and methodology can be developed. A standardised assessment tool and user-guide can therefore be agreed upon by all project actors and validated to be mainstreamed thereafter.

### *The global environmental benefits*

1. The global environment benefits of this project are mainly indirect because no on-the-ground interventions implementing agroecological innovations will be directly funded by the project. The AVACLIM project promotes the use of improved agricultural practices – agroecological innovations – which will have multiple environmental benefits. The expected overall results of the project interventions are **behavioural changes** of different stakeholder groups – including primarily producers and decision makers at different levels – regarding agricultural development. These behavioural changes at scale are needed to achieve the desired system shift in the agricultural sector (i.e. agricultural transition) away from production systems that deplete natural resources and contribute to GHG emissions. These behavioural changes will be induced by increased availability and access to knowledge and information on the benefits of agroecology and are expected to lead to a more systematic and prominent integration of agroecology into national and sectoral policies, strategies, plans and investments at the local, national, regional and international levels. In the medium term, this will result in the **sustainable management of natural resources and agroecosystems’ restoration** across degraded drylands at the global scale.
2. Agroecology in drylands is expected to contribute significantly to **combatting desertification, and mitigating climate change**. Agroecological innovations enable the conservation of organic matter in soil, restore soil physical structure and reduce erosion. It also increases vegetation cover. This will enable the regeneration of degraded ecosystems and increase of carbon storage[[52]](#footnote-53). Agroecosystems using green manures and zero-tillage can accumulate up to 1000 C kg/ha/year[[53]](#footnote-54). In addition, agroecological innovations are expected to facilitate water retention thereby reducing water usage, and maintaining nutrient balance and soil fertility. Last, because agroecological systems support biological processes that enable the recycling of nutrients, biomass and water, it will reduce dependency on chemical fertilizers thereby reducing pollution.
3. In addition to the aforementioned benefits on land restoration and climate change mitigation, agroecology is beneficial for **biodiversity conservation**. Diversity is the first out of the 10 elements of agroecology as defined by FAO[[54]](#footnote-55). Agroecological systems optimise the diversity of species and genetic resources. For example, agroforestry uses different species of crops, shrubs and trees to achieve vertical diversity and intercropping uses complementary species to achieve spatial diversity. Similarly, crop-rotation and crop-livestock systems are based on the same principles of maximising biodiversity. Increased biodiversity will generate multiple environmental benefits. Among those benefits, diversified agroecological systems have a greater capacity to resist to and recover from climate-induced disturbances such as drought and floods, and to resist pest and disease attacks. In addition, agroecological systems will provide habitat for a diversity of fauna and flora species.
4. The estimates of the potential indirect/longer term global environmental benefits (through the outscaling from baseline projects and through upscaling thanks to agroecology integration into policies, plans and strategies) have been refined. The table below summarises the estimations made.

|  |  |  |  |
| --- | --- | --- | --- |
| GEB generated | Direct Benefits from the AVACLIM project (GEF + Baseline) | OUT-SCALING (Consequential Indirect Benefits) | UP-SCALING (Indirect long-term benefits through policy changes) over 20-year period  N.B. No reporting done for these estimates |
| Land under SLM (Number of hectares) | 10,000 hectares\* | 50,000 hectares\* | 35,000,000 hectares\*\* |
| Carbon benefits (metric tons of CO2e) | 277,579\*\*\* | 1,387,897\*\*\* | 971,527,911\*\*\* |

\* From the approximately 10,000 producers targeted by the baseline, it is expected that each producer will have a multiplier effect, and engage another five producers into agroecological innovations. Furthermore, it is estimated that each farmer cultivates on average 1 ha of land.

\*\* In the seven participating countries, 901,806,600 ha of land are under production. To date, only about 2,840,155 ha of land are dedicated to organic farming (this is a proxy for agroecological practices overall, as more accurate data is not available), which represents only about 0.3% of the total agricultural land in the seven countries. Up-scaling through policy changes are hoped to positively affect roughly 4% of the cultivated land by 2025 (which is about 35,000,000 ha). This is a very conservative estimation as it is a fraction of already announced plans and policies in three of the seven countries, i.e. Ethiopia has made a pledge to convert 40,000,000 ha into agroecological production land by 2025, Morocco aims for 36,000 ha by 2020, and in India, a minimum of 50,000,000 ha of agricultural land are targeted to be converted through Government funding supporting smallholders by 2025.

\*\*\*The potential contribution to avoided and stored GHG emissions from out-scaling and up-scaling has been estimated using EX-ACT. Estimations represent CO2 stored in soils thanks to the application of improved agricultural practices, nutrient management, no till and manure application on dominantly LAC soils (in dry tropical climates). For the estimation, Tier-1 coefficients set as default in EX-ACT have been used with a 3-year implementation phase and 17-year capitalization phase. The figures have been refined during PPG.

### *The socio-economic benefits*

1. The AVACLIM project interventions under Components 3 and 4 will contribute to **empowering local communities** through increasing access to knowledge on improved agricultural practices. This will enhance their autonomy and adaptive capacity, and give them the opportunity to become agents of change. Furthermore, the agroecology approach – which is gender sensitive – will contribute to addressing gender inequalities by creating opportunities for women which are often marginalised in rural communities and particularly vulnerable to climate change. Gender balance will be promoted under the AVACLIM project through ensuring that an equivalent number of women and men benefits from the awareness-raising, knowledge-sharing and training interventions.
2. Building on the second element of agroecology as defined by FAO, named “co-creation and sharing of knowledge”, the AVACLIM project will contribute to **conserving and capitalising on traditional knowledge**. Under Component 1, traditional and indigenous peoples’ knowledge as well as practical knowledge from the partner NGO on the ground will be compiled. Under Component 2, scientific information will be gathered. These three complementary sources of knowledge will be combined and built on to provide the best knowledge base possible on agroecology for decision makers, international organisations and practitioners.
3. The diversification of agricultural products in agroecological systems will enable **better nutrition and health**. Consuming a diverse range of cereals, pulses, fruits, vegetables, and animal-source products contributes to improved nutritional outcomes. Moreover, the genetic diversity of different varieties, breeds and species is important in contributing macronutrients, micronutrients and other bioactive compounds to human diets. Furthermore, the biological diversity of agroecological systems will reduce health risks from parasitism[[55]](#footnote-56).
4. Agroecological systems are designed in such a way that they improve the use of natural resources, especially those that are abundant and free, such as solar radiation, atmospheric carbon and nitrogen. In addition, in such system, the recycling of nutrients, biomass and water is increased as well as resource use efficient, and wastes are reduced. As a result, **agricultural production can be sustainably increased** to address food insecurity as well as poverty. The evaluation undertaken by the University of Essex in 2001 over 208 sustainable agriculture initiatives within 52 countries showed that improved practices that maximise the use of nature’s goods and services as functional inputs lead to a significant increase in agricultural production[[56]](#footnote-57). For example, rain-fed cultivation of cereals (e.g. sorghum, millet) in West Africa increased by 50% on average because of a combination of agroecological innovations[[57]](#footnote-58). Furthermore, the first results of CALAO project have shown that the use of natural inputs such as organic manure – a major agroecological innovation – can increase productivity and farmers income. Another example from this same study is that integrated crop-livestock systems in Senegal, agroecology has enabled some farmers to increase their income twofold to fourfold compared to families who did not adopt improved practices on a similar surface.
5. A variety of income sources from differentiated and new markets can be generated from agroecological systems. The **diversification of income sources** from diverse products and local food processing contributes to stabilising household incomes. In addition, through diversification and integration, producers reduce their vulnerability to climate and environmental risks should the production from a single crop, livestock species or other agricultural commodity. Agroecology is therefore a major contributor to increased economic resilience.
6. By enhancing biological processes and recycling biomass, nutrients and water, producers are able to use fewer external resources, thereby **reducing costs**. As an example, biological nitrogen fixation by pulses in intercropping and rotation systems can enable a major reduction in the need for synthetic fertilizers. For example, lentils can fix nitrogen in the range of 35-100 kg/ha[[58]](#footnote-59). Moreover, reducing dependency on external resources empowers producers by increasing their autonomy and resilience to natural or economic shocks.
7. Agroecology depends on knowledge intensive, environmentally-friendly, socially-responsible, innovative interventions and therefore requires skilled labour. As a result, its development will generate **job creation**. This is particularly true for youth which can acquire new skills according to emerging needs in the agricultural sector.

### STAKEHOLDER CONSULTATION AND ENGAGEMENT

### *Project Stakeholder*

*Implementing partners and partner NGOs*

1. The project will be primarily implemented by 10 partners that work in different contexts and have an extended experience of agroecology, including in piloting agroecological innovations, providing training, advocating and participating to relevant networks. These partners were selected based on consultations undertaken in 2012-2013 to identify the institutions that are the most active and that obtained tangible results on the ground. The majority of the project partners are members of Drynet network. Out of these 10 partners, four will be responsible for the implementation of one component of the project (see Table 1).

Table 1: Implementing partners for the coordination and implementation of the AVACLIM project's components

|  |  |
| --- | --- |
| **Component** | **Implementing partner** |
| Component 1 | EMG is based in South Africa. EMG has 20 years of experience in promoting sustainable agricultural approaches with small-scale farmers and in establishing and maintaining networks of practitioners in the fields of organic agriculture, sustainable land management, adaptation to climate change and water. Strong collaboration with partner NGOs will be established by EMG with the partner NGOs for the implementation of Component 1. |
| Component 2 | Research Institute for Development (IRD) is based in France. The Mixed Research Unit (UMR) “Eco&Sols” focuses on functional ecology, and soils and agroecosystems’ biochemistry. It groups Montpellier SupAgro, International Cooperation Centre in Agricultural Research for Development (Cirad), French National Institute for Agricultural Research (INRA) and IRD. Eco&Sols-IRD Unit will be responsible for establishing a consortium for the implementation of Component 2 with: i) the Mixed Research Unit “Agriculture and Food sectors Innovation and Development” which brings together Montpellier SupAgro, INRA and Cirad; and ii) Cirad Research Unit “Aïda” focusing on agroecology and sustainable intensification of annual crops. This combination of institutions will enable to have all the required expertise to undertake the evaluation activities planned under this component. A board of four experts – two agronomists, one soil scientist and one ecologist – will indeed be formed under this consortium to support the interns, Post-doctoral student and the partner NGO in the data collection and data analysis processes under Component 2. The definition of indicators and evaluation methods will be a participatory process between the consortium, NGOs and relevant CBOs in the targeted countries. The board of scientists will ensure that reliable data is collected and that the methodology implemented is replicable. This board will also be in charge of coordinating the involvement of all scientific partners from various countries (see Appendix VIII). |
| Component 3 | Both ENDS is based in the Netherlands. This NGO has extended experience in the development and implementation of national and international advocacy strategies. Both ENDS' expertise includes cooperation with CSOs on natural resources governance and undertaking policy analysis as well as stakeholder and power relations mapping, linking local context with policy dialogues, and mutually developing capacities with partner CSOs for sustainable development and management of natural resources. In addition, Both ENDS has knowledge of and experience in the international trade and investment policy arena, which will be of value for the implementation of the advocacy strategy and its success. |
| Component 4 | CARI is based in France. CARI is a pioneer institution in agroecology since more than 20 years and coordinates three networks linked to land degradation in Sahel and Maghreb, namely Desertification Working Group (GTD), Sahel Desertification Network (ReSaD) and Association Network for the Sustainable Development of Oases (RADDO). As part of its coordination roles, CARI manages the communication aspect of each of these networks. It is also an active member of the following networks: Drynet, GTAE, OSS, South Coordination, and Network of Farmer and Producers Associations in West Africa (ROPPA). In total, CARI has more than 4,000 contacts. This will enable efficient sharing of project documentation and news. |

1. EMG, IRD, Both ENDS and CARI will be responsible for the coordination of each component. They will work closely together to implement the component there are responsible for and be fully involved in the three other components. A strong collaboration will also be established with the seven national partner NGOs for the implementation of every component. These NGOs will be responsible for the implementation of the project interventions in their country across the four components. This collaboration will enable direct knowledge sharing between all these institutions that are involved in different aspects of agroecology. Indeed, the implementation partners work on research and development aspects, while the NGOs work primarily on the ground with local communities. Each have an extended experience in different countries and context. Furthermore, this process will contribute to address the language barriers that currently exist between English-speaking and French-speaking practitioners.
2. The seven national partner NGOs are presented in the table below. They all have in common to implement agroecology initiatives at the local level. Their involvement in the AVACLIM project will enable them to give more visibility to their on-the-ground initiatives. They will also have more weight in their advocacy interventions because of the evaluation, advocacy and communication interventions of the project. In addition, they will have the opportunity to improve their methodology of interventions, and to identify new partners at the national, regional and international scales.

Table 2: Partner NGOs for the implementation of AVACLIM interventions in the targeted countries

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| --- | --- | --- | --- |
| **Partner NGO** | **Experience** | **Networks joined linked to the AVACLIM project** | **Examples of national research partners** |
| Agrisud  (representing Morocco) | Agrisud is a French NGO that implements development projects in 15 countries – including in Morocco – in partnership with local authorities and CBOs. These projects focus on establishing small family enterprises and agriculture exploitations while promoting agricultural transition towards agroecology. | GTAE, GTD, RIAM, Madagascar Direct Seeding Group (GSDM), Agroecology Learning Alliance in South East Asia (Cambodia, Laos, Vietnam) (ALiSEA), South Coordination, RADDO | University of Rabat, National Forest School of Engineers[[59]](#footnote-60) (ENFI) |
| ARFA (representing Burkina Faso) | ARFA works in East, North and Centre East of the country to promote sustainable development through the adoption of an agroecology approach and the preservation of the environment. This NGO implements research-action plans and experiments, awareness-raising, training and advocacy interventions on agroecological innovations. Its fields of expertise include agroforestry, water management, small livestock husbandry and environment education among others. | National Centre for Organic Agriculture (CNABIO), NGO coalition (SPONG-ReSaD), PAN-Africa network for alternatives to the use of chemical pesticides, IFOAM, Regional Coalition for Genetic Resources Protection (COPAGEN) | National Institute for Environment and Agricultural Research[[60]](#footnote-61) (INERA), University of Ouagadougou |
| CAATINGA (representing Brasil) | CAATINGA works in the territory of the Sertão do Aripe, in the state of Pernambuco, Caatinga ecoregion. Its objective is to disseminate agroecological innovations to improve livelihoods in semi-arid lands. It specialises in providing training on agroecology, the marketing of products, water management, water recycling, gender integration, advocacy for public policies, and social and political organization and mobilization. | Brazilian Semi-arid Platform (ASA-Articulaçao Semiarido Brasileiro), Brazilian Agroecology Platform (ANA- Articulaçao National da Agroecologia), Drynet | Brazilian Agricultural Research Corporation (EMBRAPA), Federal University of Pernambuco, University of São Paulo |
| EMG (representing South Africa) | See Table 1 | South African Civil Society Water Caucus, Drynet | University of Stellenbosch, University of Cape Town |
| ENDA Pronat (representing Senegal) | This NGO promotes sustainable rural development through supporting local communities for local governance and natural resources management. Its interventions include technical and institutional capacity building on agroecology, renewable energy, development of value chain for organic and fair-trade products, advocacy against GMOs, land tenure rights, access to natural resources, and access to decision-making positions particularly for women. | National Federation for Organic Agriculture Producers (FENAB), International Platform CSO-GCARD, Regional Coalition for Genetic Resources Protection (COPAGEN), Agroecology Taskforce (TaFAé), Drynet | Senegalese Institute of Agricultural Research[[61]](#footnote-62) (ISRA), University of Dakar, National Research Laboratory on Plant Production[[62]](#footnote-63), Gaston Berger University |
| GBS (representing India) | GBS works for the protection and improvement of environment by conserving land, water, soil and forest resources. Focus of GBS work has mainly been on restoring waste, infertile, sandy and degraded lands in the arid zone of India in consultation and collaboration with local village communities, particularly the women and youth. | World Life Sciences Forum (Biovision), Intersect Worldwide, Drynet | IRD Indo-French Cell of Water Science, Indian Institute of Sciences, Birla Institute for Scientific Research |
| ISD (representing Ethiopia) | ISD is an NGO that provides training, tools and support to small-scale farmers including youth to adopt sustainable sources of income based on agroecology principles for the sustainable management of natural resources. It also has a strong focus on advocating for agroecology in Ethiopia to maintain the uptake and upscaling of this approach across the country. | Ecological Organic Agriculture Initiative for Africa | Addis Ababa University, Mekelle University, Askum University |

1. All the members of the networks mentioned in Table 2 will directly benefit from the project awareness-raising and access to evidence-based knowledge on the benefits of agroecology, success factors, methods of implementations, and all the required tools to selected and design best agroecological innovations in a specific context through knowledge sharing by the partner NGO.

*Scientists*

1. The scientific community both from the southern and the northern hemisphere will have the opportunity to test their hypothesis on the ground to address knowledge gaps on agroecological innovations which are at the core of the debate regarding the evolution of agriculture at the global scale in collaboration with experienced practitioners. To date, on-the-ground agroecological innovations have not been properly investigated by the scientific community and offer a great transdisciplinary research opportunity regarding their effects on climate change mitigation, adaptation, ecosystem services and resilience. They will work in collaboration with actors that come from outside of the scientific community – for the development, testing and validation of the multi-criteria assessment tool and methodology. They will also have the opportunity to compare scientific results with experience-based results. This will help bridge the gap between scientific findings and methods versus practical experimentations and observed results towards the scientific validation of on-the-ground observations. In addition, the collaboration between scientists from the southern and the northern hemisphere will be a good opportunity for exchange of experiences and capacity building on both sites. It will also strengthen partnership between northern and southern research groups and individuals including, for example, through joint publications.

*Other NGOs and CBOs*

1. In the seven targeted countries, multiple NGOs, CBOs (e.g. producers’ associations) as well as central and decentralised government technical services involved in agroecology (e.g. from the agriculture, environment, development planning sectors), will benefit from the project through the strengthening of the community of practice and increased access to reliable information. Furthermore, they will benefit from the advocacy and communication interventions that will increase willingness to support agroecology at the national and international scales. Support for and recognition of their interventions will therefore be raised. Furthermore, they will be able to use the advocacy and communication documents generated under the project in their sites and countries beyond the project lifespan. Last, they will have the opportunity to improve their methods of intervention thanks to the evidence-based information on the effects of agroecology and main drivers of success that will become available.

*Sectoral government institutions, decision makers and international organisations*

1. Agricultural transition, drylands and climate change are at the core of the discussion on the international scene. The advocacy messages tailor-made for different audience groups that will be developed under the project will be a powerful tool for government institutions in the relevant sectors (e.g. agriculture, environment) and international organisations (e.g. FAO, UN-Environment, UNDP, IUCN, WB) to convince decision-makers and practitioners to implement agroecological innovations. On the hand, decision makers and funding agencies will significantly benefit from the evidence-based knowledge generated that will enable them to make well-informed decisions regarding their funding strategy and objectives.

*Farmer communities in drylands*

1. The benefits raised through the project for local farmers will be indirect as no on-the-ground agroforestry initiatives will be funded by the project which focused on capitalising on the experience gained to date. However, in drylands, communities will benefit from improved support from local, national and international institutions working on the sustainable development of agricultural activities. The positive impacts generated by on-the-ground agroecology farmer practitioners will gain increased recognition and better support from peers, CBOs and NGOs. Last, the interventions for policy strengthening will enable the formal recognition of the benefits of agroecology therefore leading to greater support from central and decentralised governments for farmer practitioners adopting these improved practices.
2. Gender equity will be promoted under each component of the project. This will be done through making gender-sensitivity a primary criterion for the selection of the interventions to be analysed and evaluated under Components 1 and 2. In addition, equal participation of men and women to training sessions and workshops will be ensured. The set of communication tools will be specifically selected to reach men and women – as well as youth – equally.

### *Stakeholder Engagement Process and Mechanism*

### Stakeholder Engagement

1. The 10 main partners of the project were closely engaged in the development of the project from the first steps of its conceptualisation. They were first engaged in the development of the FFEM project proposal which was initiated in 2012. They participated thereafter to the design of the PIF to refine and update the information. For the development of the AVACLIM project proposal, a workshop was organised from 17 to 18 July 2018 with representatives from FAO, FFEM, IRD, Both ENDS, EMG and CARI. During this workshop, the adjustments required to the PIF proposal based on the latest progress made in the field were identified, and the Theory of Change (see Figure 1) was fine-tuned. The initial outputs, indicators and activities were reviewed and adjusted. The list of ongoing initiatives was updated. The roles and responsibilities of each partner in the data collection process for the development of the proposal and in the project implementation were clarified. Last, the implementation arrangements including the structure of the project management team and partnerships were discussed during this workshop.
2. Following up on the workshop, targeted questionnaires were sent off to partner NGOs and to implementing partners to address information gaps for the development of the full project proposal. Each of the 10 partner institutions sent back their inputs which were thereafter integrated in the project proposal. For example, partner NGOs were required to describe *inter alia* the country context, the extent of use of agroecology in the country, and their speciality and ongoing interventions. Implementing partners were asked to describe the baseline situation for their component, to propose a detailed set of activities for the component they are responsible for, and to describe their experience and ongoing interventions. Some complementary information on the main government institutions and political context was also demanded to FAO country offices. As a first validation step for the GEF-funded project proposal, the ToC, the logical framework, the budget per activity and the expected involvement of each partner were shared between the four implementing partners for review and after undertaking the necessary amendment, they were endorsed by each of these institutions. The full project proposal was thereafter validated by all partner institutions in November 2018.

### Grievance Mechanism

1. FAO is committed to ensuring that its programs are implemented in accordance with the Organization’s environmental and social obligations. In order to better achieve these goals, and to ensure that beneficiaries of FAO programs have access to an effective and timely mechanism to address their concerns about non-compliance with these obligations, the Organization has entrusted the Office of the Inspector-General with the mandate to independently review the complaints that cannot be resolved at that level.
2. FAO will facilitate the resolution of concerns of beneficiaries of FAO programs regarding alleged or potential violations of FAO’s social and environmental commitments. For this purpose, concerns may be communicated in accordance with the eligibility criteria of the Guidelines for Compliance Reviews Following Complaints Related to the Organization’s Environmental and Social Standards[[63]](#footnote-64), which applies to all FAO programs and projects.
3. Concerns must be addressed at the closest appropriate level, i.e. at the project management/technical level, and if necessary at the Regional Office level. If a concern or grievance cannot be resolved through consultations and measures at the project management level, a complaint requesting a Compliance Review may be filed with the Office of the Inspector-General (OIG) in accordance with the Guidelines. Program and project managers will have the responsibility to address concerns brought to the attention of the focal point.
4. The principles to be followed during the complaint resolution process include: impartiality, respect for human rights, including those pertaining to indigenous peoples, compliance of national norms, and coherence with the norms, equality, transparency, honesty, and mutual respect.

**Project-level grievance mechanism**

1. The likelihood that complaints will be triggered by the project interventions is very low considering that no on-the-ground development interventions will be funded by the project. The project will nonetheless establish a grievance mechanism at national and local level to file complaints during project inception phase. Contact information and information on the process to file a complaint will be disclosed in all meetings, workshops and other related events throughout the life of the project. In addition, it is expected that all awareness raising material to be distributed will include the necessary information regarding the contacts and the process for filing grievances.
2. The project will also be responsible for documenting and reporting as part of the safeguards performance monitoring on any grievances received and how they were addressed.
3. The mechanism includes the following stages:

* In the instance in which the claimant has the means to directly file the claim, he/she has the right to do so, presenting it directly to the Project Management Unit (PMU). The process of filing a complaint will duly consider anonymity as well as any existing traditional or indigenous peoples dispute resolution mechanisms and it will not interfere with the community’s self-governance system.
* The complainant files a complaint through one of the channels of the grievance mechanism. This will be sent to the Project General Coordinator (PGC) to assess whether the complaint is eligible. The confidentiality of the complaint must be preserved during the process.
* Eligible complaints will be addressed by the Project Advisory Committee (PAC). The PGC will be responsible for recording the grievance and how it has been addressed if a resolution was agreed.
* If the situation is too complex, or the complainer does not accept the resolution, the complaint must be sent to a higher level, until a solution or acceptance is reached.
* For every complaint received, a written proof will be sent within ten (10) working days; afterwards, a resolution proposal will be made within thirty (30) working days.
* In compliance with the resolution, the person in charge of dealing with the complaint, may interact with the complainant, or may call for interviews and meetings, to better understand the reasons.
* All complaint received, its response and resolutions, must be duly registered.

**Internal process**

1. PMU. The complaint could come in writing or orally to the PMU directly. At this level, received complaints will be registered, investigated and solved by the PMU.
2. If the complaint has not been solved and could not be solve in level 1, then the Project General Coordinator (PGC) elevates it to the FAO Representative.
3. PSC. The assistance of the PSC is requested if a resolution was not agreed in levels 1 and 2.
4. FAO Regional Office. FAO Representative will request if necessary the advice of the Regional Office to resolve a grievance, or will transfer the resolution of the grievance entirely to the regional office, if the problem is highly complex.
5. The FAO Regional Representative will request only on very specific situations or complex problems the assistance on the FAO Inspector General who pursuits its own procedures to solve the problem.

**Resolution**

1. Upon acceptance a solution by the complainer, a document with the agreement should be signed with the agreement.

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| --- | --- |
| PMU | Must respond within 5 working days. |
| FAO Representation | Anyone in the FAO Representation may receive a complaint and must request proof of receipt. If the case is accepted, the FAO Representative must respond within 5 working days in consultation with FAO's Representation and Project Team.  Seven Representations are involved and can therefore receive complaints. |
| PSC | If the case cannot be dealt by the FAO Representative, he/she must send the information to all PSC members and call for a meeting to find a solution. The response must be sent within 5 working days after the meeting of the PSC. |
| FAO Regional Office | Must respond within five working days in consultation with FAO's Representation. |
| Office of the Inspector General (OIG) | To report possible fraud and bad behavior by fax, confidential:  (+39) 06 570 55550  By e-mail: Investigations-hotline@fao.org  By confidential hotline: (+ 39) 06 570 52333 |

### Disclosure

1. This project is a low risk project.

### *Partnerships*

1. A partnership between CARI and each implementing partner will first be developed. It will define the role of each institution in the implementation of its respective component and in the implementation of every other components of the project. It will also describe institutional, financial and reporting responsibilities of each of the four partners.
2. An agreement between CARI and each national partner NGO will be developed and signed. It will include the description of the responsibilities of the NGO regarding each component and implementing partners. The implementing partners will produce Terms of Reference to define the role of the partner NGOs in the implementation of the component they are responsible for. Based on these Terms of Reference, the tasks of the NGOs will be detailed in their agreements with CARI. For example, the agreements will define *inter alia* the role of each institution in the selection and evaluation processes for the agroecology initiatives.

### ALIGNMENT AND STRATEGIC FIT

*Alignment of the project within the national policy context in each country*

1. Brazil has a National Policy on Agroecology and Organic Production (PNAPO, 2012) which is coordinated by the Special Secretariat for Family Agriculture and Agrarian Development. Its objective is to support agricultural transition towards organic and agroecological production for the sustainable management of natural resources, improved livelihoods and health. To achieve this objective, the Inter-ministerial Chamber for Agroecology and Organic Production (CIAPO) created the National Plan of Agroecology and Organic Production (PANAPO 1 – 2013-2015 and PANAPO 2 – 2016-2019). A National Commission for Agroecology and Organic Production (CNAPO) was also created. The AVACLIM project is fully aligned with this movement towards agroecology and organic production. However, it is important to note that the government change that occurred in 2016 has resulted in a significant reduction of the resources allocated to this movement.
2. In Burkina Faso, the National Food Security Strategy (2003), Rural Development Strategy (2010) and the National Adaptation Plan (2015) promote the sustainable management of natural resources and the sustainable increase of agricultural productivity. National policy documents rarely promote agroecology per se. However, the Orientation Law for Agro-Sylvo-Pastoralism, Marine Resources and Fauna 2015 promotes the “use of agroecology including organic agricultural which has a positive impact of the environment…” (Article 82). In addition, the National Strategy for the Integrated Management of Soil Fertility 1999 and its action plan promotes some of the principles of agroecology such as the use of local organic fertilisers as well as Soil and Water Conservation (SWC) techniques, agroforestry and soil restoration techniques.
3. In Ethiopia, as previously mentioned, agroecology is well integrated in the agricultural development framework. Some examples of policy and strategy documents that promote agroecology are: Ethiopian Environmental Policy 1997, Organic Agriculture System Proclamation 2006, Directive for Use and Disposal of non-Compliant Seeds 2010, Growth and Transformation Plan II (2015/16-2019/20), Rural and Agricultural Development Policy, National Nutrition Programme II (NNP II), Nutrition Sensitive Agriculture (NSA) strategy, and Law for Access to genetic Resources and Community Knowledge, and Community Rights 2006. In addition, some elements of agroecology such as the use of biogas and natural fertilisers are currently integrated in the agriculture extension system.
4. In India, the Government is executing major programs to promote agroecology through various ministries especially for small holders and with the intent to increase farmers’ income. The most recent initiative is a multi-stakeholder research initiative on Doubling Farmers Income by 2020 which promotes agroecology to leverage benefits for smallholders towards sustainable food systems[[64]](#footnote-65). The overall goal is to two-fold: i) to reduce input costs – towards ZBNF – and increase savings; and ii) to provide better, transparent market access for those farmers. To reach this goal, the Ministry of Agriculture is implementing the Traditional Farming Improvement programme[[65]](#footnote-66) as part of the National Mission on Sustainable Agriculture. Similarly, the Ministry of Rural Development is implementing the Women Farmer Empowerment Programme[[66]](#footnote-67) under its National Rural Livelihood Mission. Other Ministries such as Environment, Ayush and Tribal Affairs are also implementing similar programmes. It is estimated that 3 to 6 million farmers and smallholder across India are currently impacted by these policies. By 2025, the objective is to reach hundreds of millions of farmers. In addition, a new national land-use plan is under preparation. Studies are being undertaken to understand soil, climate and moisture availability periods (i.e. duration of growing season) in the 60 agro-eco sub regions of India. The objective of this plan is crop diversification, knowledge sharing on agro-technologies and research results, and agricultural development planning based on crop suitability and yield potentialities in each agroecological regions. The government is also supporting universities and research institutions in the implementation of a six-month Certificate Course on Agroecology.
5. In Morocco, the Law for Organic Production for agricultural and fish products 2013 encourages in Article 1 to: i) improve the income of farmers adoption organic agricultural practices; ii) conserve environment and biodiversity; and iii) address consumers demand regarding the quality of agricultural and marine products through organic agriculture. In addition, the Green Morocco Plan (GMP) initiated in 2008 focuses on transforming agriculture in order for it to use the agriculture sector to leverage socio-economic development in Morocco. The GMP also promotes sustainable development under climate change through resilient agricultural practices, with a specific focus on biodiversity conservation and fighting desertification. The African Agriculture Adaptation (AAA) initiative launched by Morocco in 2016 aims to reduce vulnerability to climate change in Africa through agricultural development. It promotes the implementation of initiatives – to be funded for example by climate funds – to improve soil, water and climate risk management, and increase financial capacity. Last, Morocco is a signatory country of the Global Dryland Alliance with 18 other states which focuses on addressing food security in arid land.
6. In Senegal, the Plan named Return to Agriculture – which supports the application of the Strategy for Accelerated Growth and Poverty Alleviation – focuses on increasing agricultural productivity to enable communities to settle down thereby preventing rural exodus. This plan is the guiding document for all initiatives in the agricultural sector. The sub-objectives of this plan that are aligned with the AVACLIM project include: i) job creation in the agriculture sector; and ii) natural resources and environment protection[[67]](#footnote-68). Importantly, the partner NGO, ENDA Pronat, has participated to the elaboration of the National Programme for Agricultural investment and Food Security 2018-2022 that is currently being finalized, in which agroecology is expected to be integrated.
7. In South Africa, the Strategic Objective 4.1 “ensure the conservation, protection, rehabilitation and recovery of depleted and degraded natural resources” of the Strategic Plan for the Agriculture Sector 2015/16 to 2019/20 promotes: i) the implementation of an agroforestry strategy; and ii) the restoration of 80,000 ha or agricultural land and 1,500 ha of state indigenous forests and woodlands through *inter alia* fencing, invasive species management, tree planting, soil conservation work, and natural regeneration. Another objective of this strategic plan that supports agroecology principles is Strategic Objective 4.2 “ensure adaptation to climate change through implementation of effective prescribed frameworks” which focuses on improving adaptability and productivity of livestock and plant species – as well as mitigating climate change – through biogas production within an integrated crop-livestock system. The Ministry of Environmental Affairs through his Strategic Framework and Overarching Implementation Plan for Ecosystem-based Adaptation in South Africa, supports the implementation of an ecosystem-based adaptation approach under which agroecology is well suited.

*Alignment of the project within the international policy context*

1. The AVACLIM project is aligned with GEF-6 focal area *Climate Change Mitigation* (CCM), particularly objective 2 “Demonstrate Systemic Impacts of Mitigation Options” and Program 4 “Promote conservation and enhancement of carbon stocks in forest, and other land use, and support climate smart agriculture”. In addition, the project will contribute to GEF focal area *Land Degradation* (LD) particularly with Objective 4 “SLM mainstreaming” and Programme 5 “Mainstreaming of SLM in development”. Through promoting the mainstreaming of agroecological innovations that has biodiversity as one of its core principles (see Section 1.3.4), the project also contribute to Biodiversity Focal Area Objective 3 “Sustainable use of biodiversity” particularly Programme 7 “Securing Agriculture’s Future: Sustainable Use of Plant and Animal Genetic Resources” and Objective 4 “Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and sectors” Programme 10 “Integration of Biodiversity and Ecosystem Services into Development & Finance Planning”. Last, by diversifying sources of income and implementing resilient agroecological systems, the AVACLIM project interventions will contribute to climate change adaptation which is captured under the aforementioned GEF Focal Areas (CCM 2 and LD1).
2. At COP23, UNFCCC parties agreed to address agriculture in the negotiation process. FAO’s global assessment of the Nationally Determined Contributions (NDCs) shows that countries expect that the agricultural sectors and agroecology will play a significant role in responding to climate change. The agricultural sector is prominent in the NDCs, with 94% of all countries including them in their mitigation and/or adaptation contributions. There is a clear willingness of countries to respond to climate change by transforming and investing in agricultural sectors. The NDCs are a first step in a much broader process of rethinking agricultural and rural development under climate change. The countries involved in the projects have not specified agroecology in their NDCs so far but most of them have referred to ecosystem conservation and improved agricultural practices under a changing climate. The National Adaptation Plans (NAPs), established by UNFCCC, underpin concerted actions to address climate change with detailed action plans to achieve climate targets. Out of the six developing countries targeted, Brazil, Burkina-Faso and Ethiopia have endorsed their NAPs while the process is still ongoing in India, Morocco, Senegal and South Africa. The project will contribute to the implementation of current NAPs plan and can contribute to provide input to the ongoing process. The contribution of the project will be to share knowledge and lessons learned on agroecology in the countries to facilitate the development of diversified and resilient agroecosystem increasing resource-use efficiency, reducing dependence on external inputs, and increasing productivity and stability of production, especially in resource constrained and smallholder contexts.
3. The agroecology approach that is at the core of the AVACLIM project can help achieve multiple and considerable global environment benefits, therefore contributing to the implementation of commitments made in the context of the three Rio Conventions – namely UNFCCC, the Convention on Biological Diversity CBD, and UNCCD – that most countries with drylands have signed. Agroecology is indeed expected to have a positive impact on the adaptive capacity of local communities, climate change mitigation, biodiversity protection, and soil conservation and restoration (see Section 1.3.4). In particular, the agroecology approach will contribute to achieving multiple Aichi targets such as Target 7 “areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity” and Target 8 “pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity” as well as Targets 4, 5 and 15. Last, the project focused on drylands which are prioritised under the UNCCD.
4. The AVACLIM project will contribute to achieving the objectives of “4per1000” initiative[[68]](#footnote-69) which aims to demonstrate that agriculture – and in particular agricultural soils – can play a crucial role in addressing food insecurity and climate change issues. This initiative invites all partners to state or implement some practical actions on soil carbon storage and the type of technologies to achieve this (e.g. agroecology, agroforestry, conservation agriculture, landscape management).
5. There is mounting evidence that agroecology can help address a number of the Sustainable Development Goals (SDGs). By increasing resource-use efficiency, reducing dependence on external inputs, and increasing productivity and stability of production, especially in resource constrained and small-holder contexts. Agroecology can contribute to SDGs 1 “End poverty in all its forms everywhere” and 2 “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”. A greater diversity of production in agroecological systems can also contribute to improved nutritional outcomes. At the same time, with a particular focus on local value chains, agroecological systems can reduce the threat of Transboundary Animal Diseases – some transmissible to humans. Both aspects support the achievement of SDG 3 “Good Health and Well-being”. Agroecology’s emphasis on social principles and equity supports SDGs 5 “Gender Equality” and 10 “Reduced Inequalities”. Agroecological innovations have the potential to create new rural employment opportunities for youth, while reducing the use of agro-chemicals, thereby promoting a safer working environment. Moreover, the increased resilience of agroecological production systems helps to better maintain existing jobs which contributes to the development of sustainable livelihoods and rural communities under SDG 8 “Decent Work and Economic Growth”. Finally, by reducing the negative environmental impacts of agriculture, restoring degraded agro-ecosystems, conserving biodiversity, and helping mitigate and adapt to climate change, agroecology can contribute to SDGs 6 “Clean Water and Sanitation”, 12 “Responsible Consumption and Production”, 13 “Climate Action” and 15 “Life on Land” and to achieving the corresponding target 15.3 of land degradation neutrality.

*Alignment with FAO Strategic Framework*

1. FAO’s approach to agroecology has been developed within the Save and Grow[[69]](#footnote-70) and Sustainable Food and Agriculture[[70]](#footnote-71) frameworks. At the regional level, FAO’s work on agroecology has taken place in the context of Regional Initiatives on Family farming and inclusive food systems for sustainable rural development in Latin America and the Caribbean, Sustainable production intensification and value chain development in Africa, and Asia and the Pacific’s Regional Rice Initiative, including through Farmer Field School interventions. Through a series of international[[71]](#footnote-72) and regional[[72]](#footnote-73) symposia, FAO has been the lead facilitator in the global discussion on the potential of agroecology to sustainably increase productivity while addressing climate change and environmental degradation, as well as improving rural livelihoods, equity and social well-being. In these multi-actor and multi-sectoral processes, FAO has acted as a neutral broker, convening representatives of governments, research and academia, civil society, producer organizations, the private sector and other UN agencies.
2. According to the 26th Session of the Committee on Agriculture[[73]](#footnote-74), FAO now has the scaling up of agroecology as part of its official mandate. Under this mandate, FAO has three main missions. The AVACLIM project is particularly well aligned with two of them: i) strengthening normative, science and evidence-based work on agroecology, developing metrics, tools and protocols to evaluate the contribution of agroecology and other approaches to the transformation of sustainable agriculture and food systems; and ii) catalysing scientific evidence and co-creation of knowledge and innovation to facilitate its dissemination.

### COMPARATIVE ADVANTAGES

1. FAO is present in each targeted country, and provides assistance on a wide range of projects relating to agricultural development, policy development, strategic planning and capacity building. FAO is at the forefront in promoting the agroecology approach as a means to transition towards sustainable and inclusive food systems. FAO hosted the 1st International Symposium on Agroecology for Food Security and Nutrition, which involved representatives of FAO Member Countries, researchers, civil society, the private sector and other UN organisations in September 2014. The second one was held in April 2018[[74]](#footnote-75). FAO also convened a series of regional meetings to better understand the different contexts and specific local needs of agroecology. From 2015 to 2017, multi-actor regional seminars were organised by FAO in five regions (i.e. sub-Saharan Africa, Latin America and the Caribbean, Asia and the Pacific, Europe and Central Asia, and the Near East and North Africa) with 1,400 participants from 170 FAO Member Countries. In addition, FAO country offices are supporting multiple on-the-ground agroecology projects. As a result, FAO has extended experience on agroecology, a dedicated multidisciplinary workforce and can provide adequate support to ensure technical quality of the highest standards for the implementation of the AVACLIM project.
2. CARI has a long experience in international cooperation and in the management of agricultural development projects. It is specialised in addressing land degradation in drylands, particularly through the development of small-scale household-level adoption of improved agricultural practices that combine ecological, social and economic needs. To do so, CARI builds on local knowledge and promote community dialogue. Since 1998, CARI is officially recognised by UNCCD civil society panel an NGO acting against desertification. It has the mandate to coordinate several international networks (i.e. GTD, ReSaD, RADDO). It has the capacity to bring together international organisations, NGOs, CBOs, research institutions and farmers practitioners around the theme of agroecology. CARI is one of the first organisations that recognised agroecology as an opportunity for sustainable agricultural development. Its on-the-ground expertise in the implementation of agroecological innovations stands on 20-year experience in providing training and technical support to multiple associations working on agroecology in drylands. Building up on Drynet network and other cooperation experiences, CARI will be a valuable facilitator to support close collaboration between English- and French-speaking countries, and between scientists and practitioners.

### KNOWLEDGE MANAGEMENT AND COMMUNICATION

### Knowledge Sharing

1. The project focuses on generating knowledge from existing, on-the-ground agroecology initiatives that have not been adequately monitored and documented so far. Three sources of knowledge will be documented under the project interventions: i) practitioners’ knowledge on the effects of agroecological innovations at the socio-economic and environmental levels, and opportunities for improvements; ii) traditional knowledge on ecological systems to understand the effects of agroecological innovations on natural resources and environmental health, and opportunities for improvement; and iii) scientific knowledge to quantify, explain and verify the significance of the effects observed.
2. Sharing the results of the project interventions regarding the effects of agroecology at a broad scale is a crucial element to achieve the project objective which is to mainstream the agroecology approach into development planning across drylands. This is the reason why Component 4 focuses fully on communication. A diversity of communication tools will be used to maximise the outreach of the awareness-raising and the advocacy campaigns. The knowledge-sharing tools to be developed or strengthened include a data-sharing platform, international and national websites on the project which will give access to the project’s outputs, brochures and posters on the project, reports on the results of the interventions, social network pages on the project, scientific and non-scientific publications, press articles and press conference, newsletters, documentaries, and radio series. Each knowledge product will be developed in English, French and Portuguese. Other knowledge-sharing products such as the national assessment reports will also be translated into one or two main languages of the corresponding country.
3. Knowledge-sharing interventions will be undertaken at two levels: at the national level in each targeted country and at the international level. At the national level, the results of the project – and outputs thereto – will be shared during national knowledge-sharing workshops, field visits, awareness-raising events including broadcasting the documentaries on national and regional TV and radio channels, training events on the multi-criteria assessment tool and methodology, and using the collaborative tools (e.g. social networks, web pages) of the community of practice (Output 1.3). At the international level, the knowledge-sharing products generated under the AVACLIM project will be disseminated across relevant international networks including Drynet, GTD, GTAE, ALiSEA and other networks of the project implementation partners and partner NGOs (see Section 1.4.1). They will also be made available on the project website. Furthermore, at international advocacy events organised by the project, and CoP meetings and scientific conferences to which the AVACLIM project representatives will participate, the participants will be made aware of the existence of the project results, outputs and how to access the documentation thereto. The project outputs will also be available with open access on the FAO website, and shared within its regional and global networks.

### Lessons Learned

1. The project proposal builds on lessons learned from previous and ongoing projects. CARI participated to several regional projects and programmes that involved NGOs, universities, research institutions and government partners. These include the Programme to Support Food Security in West Africa (PASANAO) initiated in 2011 and CALAO project initiated in 2017, whose executing agency is ECOWAS. From the implementation of PASANAO and CALAO, valuable experience was gained on the coordination of multiple partners as well as on administrative management and processes. Simplified processes have been tested under PASANAO to address delays in the project implementation (e.g. in procurement processes). The lessons learned through the implementation of ECOWAS projects have been built on for the design of the implementation arrangements of the AVACLIM project.
2. AFD has 15-year experience in the implementation of agroecology initiatives, particularly focusing on one technique: direct seeding mulch-based cropping systems[[75]](#footnote-76). Some of the conclusions of their projects that have been considered for the design of the AVACLIM project are: i) to integrate all agroecological innovations within one project instead of focusing on one practice; ii) to adopt a diversity of knowledge-sharing means to enable the mainstream of agroecology approach; iii) to capitalise on a diversity of small scale projects implemented by NGOs or CBOs; and iv) to improve the agricultural policy framework and implement advocacy interventions in order to enable a transformative effect[[76]](#footnote-77). Other recommendations based on the experience gained through the implementation of AFD projects include the necessity to: allocate sufficient human and financial capacity to monitor and evaluate as well as communicate on the project interventions; have a clear distribution of roles among project partners; establish a multi-disciplinary research team in support of the project; and to synthesise and simplify scientific publications to make them accessible to all.
3. The implementation of the CALAO project has provided insight on the methodology that has been adopted for the AVACLIM project. These lessons learned include the need to: i) integrate multiple countries and initiatives to be able to compare the effects of agroecology in a diversity of contexts; ii) select samples specifically based on the information gaps to be filled; and iii) to develop a user guide for evaluations that works as a tool box and include explanations on the approach, surveys templates, criteria to define agroecology initiatives, and protocols to monitor the effects of the initiatives (e.g. protocols for economic modelling, protocols for soil analysis)[[77]](#footnote-78). At the technical level, lessons learned have also been generated from the first years of implementation of the CALAO project which will be very valuable for the development of the multi-criteria assessment tool and methodology under Component 2 (see Section 1.3.2).
4. During the AVACLIM project implementation phase, a M&E strategy will be implemented to monitor closely the progress of the project (see Section 1.3.2). Based on the results, the PSC will identify strengths and weaknesses and draw lessons learned to continuously improve the management system. This adaptive approach will enable to maximise the efficiency of the project towards achieving the objective. In addition, as part of the interventions under Component 4, the lessons learned will be made available in a timely manner to all partners to enable other projects to build on the experience gained through the implementation of the AVACLIM project.

### Communication

1. Component 4 focuses on communication with a budget of USD 431,394. A detailed communication strategy and plan will be developed at the onset of the project. It will support the three other components of the AVACLIM project. During the first trimester of the project, a project brochure will be developed and disseminated to NGOs, community representatives in the targeted countries, and other partners of the project. During this inception phase, the design of the project visual identity including its logo and documents templates (e.g. PowerPoint presentations, reports, posters) will also be undertaken. Last, project brochure, posters and leaflets will be developed for display and dissemination at the premises of the national partner NGOs, on the websites of the national communities of practice, the project partners and FAO, and within the project partner networks. A project website will also be developed and managed by CARI. Last, a project digital newsletter will be prepared and disseminated every semester (see Section 1.3.2 for more information).

# ****SECTION 2 – FEASIBILITY****

### IMPLEMENTATION ARRANGEMENTS

### *Institutional and management arrangements*

1. CARI will be the main executing partner of the AVACLIM project, with FAO providing technical oversight as GEF Agency. CARI will coordinate all efforts to implement the project’s components, aligning with other initiatives and assuring that all deadlines are achieved and that the project’s results are discussed with the involvement of all national and local institutions.
2. The FAO will be the GEF Implementing Agency for the Project, providing project cycle management services as established in the GEF Policy. FAO, as GEF Implementing Agency, holds overall accountability and responsibility to the GEF for delivery of the results. FAO will provide oversight of project implementation and technical support to ensure that the project is being carried out in accordance with agreed standards and requirements. Technical support will be provided by FAO in coordination with project partners participating in the Project Steering Committee. More specifically, FAO will:

* Administrate funds from GEF in accordance with the rules and procedures of FAO;
* Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
* Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
* Conduct at least one supervision mission per year; and
* Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide financial reports to the GEF Trustee.

1. CARI will be the main executing partner for the project based on Letters of Agreement to be signed between FAO and CARI. CARI will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the LOAs that will be signed between the OP and FAO and other FAO and GEF relevant requirements.
2. CARI is responsible and accountable to FAO for the timely and quality implementation of the agreed project results. CARI, will coordinate all efforts to implement the project’s components, aligning with other initiatives and assuring that all deadlines are achieved and that the project’s results are discussed involving all relevant international, national and local institutions.
3. Other main institutions involved in the project are EMG, IRD and Both ENDS as well as Agrisud, ARFA, CAATINGA, ENDA Pronat, GBS and ISD.
4. FAO and the project partners will collaborate with the implementing agencies of other programs and projects to identify opportunities and facilitate synergies with other relevant GEF projects, as well as projects supported by other donors. This collaboration will include: (i) informal communications between GEF agencies and other partners in implementing programs and projects; and (ii) exchange of information and outreach materials between projects.
5. Multiple GEF initiatives that are relevant to the AVACLIM project interventions are being implemented in the targeted countries. These projects comprise on-the-ground interventions to improve the sustainability and productivity of agricultural systems including in dry areas. The AVACLIM project will build on the knowledge generated under these other GEF-funded initiatives by developing mechanisms for collaboration in order to receive information on the progress and results of the relevant interventions in a timely manner. One project per targeted country considered as the most relevant for AVACLIM was selected and is listed below:

* GEF-funded project « Reversing Desertification Process in Susceptible Areas of Brazil: Sustainable Agroforestry Practices and Biodiversity Conservation » (2016-2020) implemented by FAO in Brazil particularly in the Caatinga biome with a budget of USD 3,930,155. Its objective is to increase and improve provision of goods and services from sustainable management and restoration of dryland forest and agroforestry production landscapes, contributing to poverty reduction.
* GEF-funded project « Participatory Natural Resource Management and Rural Development Project in the North, Centre-North and East Regions» (2016-2020) implemented by the International Fund for Agricultural Development in Burkina Faso with a budget of USD 7,269,448. The objective is to ensure sustainable food security and strengthen smallholder farming resilience.
* GEF-funded project « Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience » (2017-2021) implemented by UNDP in Ethiopia with a budget of USD 10,239,450. The objective is to enhance long-term sustainability and resilience of the food production systems by addressing the environmental drivers of food insecurity. One of the targets of this project is that 120,000 ha of land area and agro-ecosystems are under improved soil and water management and support significant biodiversity and ecosystem goods and services by the end of the project.
* GEF-funded project « Transforming Indian Agriculture for Global Environmental Benefits and the Conservation of Critical Biodiversity and Forest Landscapes » (2018-2022) implemented by FAO in India with a budget of USD 33,558,716. The objective is to catalyse transformative change for India’s agricultural sector to support achievement of national and global environmental benefits and conserve critical biodiversity and forest landscapes. The interventions will be implemented in five states: Madhya Pradesh, Mizoram, Odisha, Rajasthan, and Uttarakhand. One of the targets of this project is that Green Landscape management plans promoting agroecological approaches are developed for a total area of 1,800,000 ha and at least 104,070 hectares of farms will be under sustainable land and water management (including organic farming and agrobiodiversity conservation) by the end of the project.
* GEF-funded project « Revitalising Oasis Agro-ecosystems through a Sustainable, Integrated and Landscape Approach in the Draâ-Tafilalet Region » (2016-2020) implemented by FAO in Morocco with a budget of USD 8,631,050. Its objective is to revitalise oasis agro-ecosystems in the Drâa-Tafilalet Region to be productive, attractive, and healthy and to sustain and make more resilient the livelihoods of the local communities.
* GEF-funded project « Mainstreaming Ecosystem-based Approaches to Climate-resilient Rural Livelihoods in Vulnerable Rural Areas through the Farmer Field School Methodology » (2015-2019) implemented by FAO in Senegal with a budget of USD 6,228,995. The objective is to enhance the capacity of Senegal’s agro-pastoral sector to develop more climate-resilient production systems and mainstream integrated climate change adaptation strategies into on-going agro-pastoral and agricultural development policies and programmes.
* GEF-funded project « Securing multiple ecosystems benefit through SLM in the productive but degraded » (2015-2019) implemented by UNDP in South Africa particularly in Karoo, Eastern Cape and Olifants landscapes with a budget of USD 4,237,900. Its objective is to strengthen the enabling environment for the adoption of knowledge-based SLM models for land management and land/ecosystem rehabilitation in support of the green economy and resilient livelihoods through capacity building, improved governance and financial incentives demonstrated.

1. These projects will focus on sustainably improving agricultural productivity and promote an agroecology approach. The lessons learned and results generated by these projects in the countries targeted by AVACLIM will be a valuable source of information to be integrated in the discussions and in the advocacy and communication tools where relevant.
2. The project organization structure is as follows:



1. A **PSC** will be established and co-chaired by FAO and CARI. It will be comprised of representatives from EMG, IRD, Both ENDS, STAP and FFEM. The members of the PSC will each assure the role of a Focal Point for the project in their respective organisations. As Focal Points in their organisation, the concerned PSC members will be responsible for: i) data analysis and interpretation of the results of monitoring activities; ii) decision-making for improvement of the M&E activities where required following an adaptive approach; iii) planning the upcoming quarter based on the progress; iv) facilitating coordination with project partners for timely implementation of the M&E strategy; and v) facilitate the provision of co-financing to the project.
2. The Project Coordinator (see below) will be the Secretary to the PSC. The PSC will meet every quarter – once per year physically and three times virtually – to ensure:

* Oversight and assurance of technical quality of outputs;
* Close linkages between the project and other ongoing projects and programmes relevant to the project;
* Timely availability and effectiveness of co-financing support;
* Sustainability of key project outcomes, including up-scaling and replication;
* Effective coordination of government partner work under this project;
* Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget;
* Making by consensus, management decisions when guidance is required by the Project Coordinator of the PMU

1. A **Project Director** based in CARI offices will have the responsibility of supervising and guiding the Project Coordinator (see below) on the priorities of the project’s partners. He/she will also be responsible for coordinating the activities with all the international and national partners related to the different project components. He/she will be responsible for requesting FAO the timely disbursement of GEF resources that will allow the execution of project activities, in strict accordance with the Project Results-Based Budget and the approved AWP/B for the current project year.
2. A **PMU** will be funded by the GEF and established within CARI’s premises. The main functions of the PMU, following the guidelines of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of a Project Coordinator who will work full-time for the project lifetime. In addition, the PMU will include an **Administrative and Finance Manager** and CARI’s Project Director.
3. The **Project Coordinator** will be in charge of daily implementation, management, administration and technical supervision of the project, on behalf of CARI and within the framework delineated by the PSC. S/he will be responsible, among others, for[[78]](#footnote-79): i) coordination with relevant initiatives; ii) ensuring a high level of collaboration among participating institutions and organisations at the international, national and local levels; iii) ensuring compliance with all LOA provisions during the implementation, including on timely reporting and financial management; iv) coordination and close monitoring of the implementation of project activities; v) tracking the project’s progress and ensuring timely delivery of inputs and outputs; vi) monitoring, providing technical support and assessing the outputs of the project partners and service providers, who will be hired with GEF funds, as well as the products generated in the implementation of the project, including products and activities carried out; vii) manage requests for provision of financial resources by FAO; viii) monitoring financial resources and accounting to ensure accuracy and reliability of financial reports; ix) ensuring timely preparation and submission of requests for funds as per agreed timelines in LOAs; xi) implementing and managing the project’s monitoring and communications plans; xii) organizing annual project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan; xiii) submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC and FAO; xiv) preparing the first draft of the Project Implementation Review (PIR); xv) supporting the organization of the final evaluation in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED); xvii) Inform the PSC and FAO of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support. FAO will support the Project Coordinator, as needed, including through annual supervision missions.
4. FAO assurance role will be provided by: i) FAO Funding Liaison Officer (FLO) from the Climate and Environment Division of GEF-TE Unit; and ii) FAO Liaison Technical Officer (LTO) from Crop production and protection division of the Agricultural Unit.
5. A part-time Operations Officer (OO) based at FAO HQ Offices will be responsible for the management and monitoring of project results achieved through the Letters of Agreement with executing partners CARI (executing components 2 and 4 and assuring coordination and project management), EMG (executing component 1) and BothEnds (executing component 3). The OO will act on behalf of the Project Steering Committee, and will work in close consultation with the Project Coordinator, the BH, LTO and the executing partners of the project, in particular CARI.
6. The draft Terms of Reference (TOR) for the Project Coordinator and other members of the project team are listed in Appendix VI.

### *Financial planning and management*

Table 3: Budget per project component

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Co-financier** | **Type of Co-financing** | **Amount (US$)** | **C1 (US$)** | **C2 (US$)** | **C3 (US$)** | **C4 (US$)** | **PMC**  **(US$)** |
| **GEF TF** | **Grant** | **1,137,215** | **268,038** | **107,025** | **262,227** | **413,105** | **86,820** |
| FFEM | Grant | **1,280,546** | 244,468 | 422,580 | 193,246 | 242,140 | 178,112 |
| FAO | Grant | **1,400,000** |  | 700,000 | 700,000 |  |  |
| IRD | In Kind | **325,958** |  | 325,958 |  |  |  |
| IRD | Grant | **2,347,823** | 438,715 | 1,555,654 |  | 165,628 | 187,826 |
| AFD | Grant | **2,793,918** | 1,396,959 | 1,396,959 |  |  |  |
| **TOTALS** | | **9,285,460** | **2,348,180** | **4,508,176** | **1,155,473** | **820,873** | **452,758** |

1. Financial management of GEF resources will be carried out according to FAO rules and procedures. A detailed description of financial management provisions is included In Appendix IX.
2. Details on co-financing per component can be found in Section 1.2.2 and Table 3. Furthermore, a comprehensive budget for the GEF inputs is attached in Annex IV.

### RISK MANAGEMENT

### *Potential risks to the project*

1. Project risks were identified and analysed during its preparation and mitigation measures have been incorporated into the design of the project (see Risk Matrix in Appendix V). With the support and supervision of FAO, the PSC will be responsible for managing these risks as well as the effective implementation of mitigation measures. The M&E system will be used to monitor indicators of outcomes and outputs, project risks and mitigation measures. The PSC shall also be responsible for monitoring the effectiveness of mitigation measures and adjust mitigation strategies as needed, and to identify and manage any new risk that was not been identified during the preparation of the Project, in collaboration with the project partners.
2. The six-monthly Project Progress Report (PPR) (see Section 2.3.2) is the main monitoring and risk management instrument. The PPR includes a section of systematic risks monitoring and mitigation actions that were identified in the previous PPR. The PPR also includes a section to identify any new risks or risks that have not been addressed yet, rating and mitigation actions, as well as the staff responsible for monitoring such actions and estimated duration of the same. FAO will monitor the project risk management and the follow up as needed, providing support for adjusting and implementing mitigation strategies. The preparation of reports on risks monitoring and rating will also be part of the PIRs prepared by FAO and submitted to the GEF Secretariat (see Section 2.3.1 and Appendix V).
3. A summary of the analysis of risks identified during project preparation, their likelihood of occurrence and proposed mitigation measures are set out in Appendix V.

### *Environmental and social risks from the project*

1. The project has been classified as low risk.

### *Analysis of fiduciary risk and mitigation measures*

1. Please see Appendix XII.

### MONITORING, PERFORMANCE ASSESSMENT AND REPORTING

### *Monitoring Arrangements*

1. Project oversight will be carried out by the PSC, the FAO GEF Coordination Unit and relevant Technical Units in Headquarters (HQ). Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits/adaptation benefits are being delivered.
2. The FAO GEF Unit and HQ Technical Units will provide oversight of GEF financed activities, outputs and outcomes largely through the PIRs, periodic backstopping and supervision missions.
3. Project monitoring will be carried out by the PMU and the FAO BH. Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At inception the results matrix will be reviewed to finalize identification of: i) outputs ii) indicators; and iii) missing baseline information and targets. A detailed M&E plan, which builds on the results matrix and defines specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc.) will also be developed during project inception by the M&E specialist.

| Type of M&E Activity | Responsible Parties | Time-frame | Budget  (excluding project staff time) |
| --- | --- | --- | --- |
| Inception Workshop | FAO PTF | Within two months of project document signature | USD 29,160 |
| Project Inception Report | Project Manager | Within two weeks of inception workshop | N/A |
| Supervision visits | FAO PTF | Annually | N/A |
| Project Progress Reports (PPR) | Project manager and M&E officer | Annually | N/A |
| Project Implementation Review report (PIR) | Project manager | Annually (July) | N/A |
| Co-financing Reports | FAO PTF | Annually | N/A |
| Final evaluation | OED with support from FAO PTF | At least three months before operational closure | USD 50,000 |
| Terminal Report | Project Manager | Within two months of project closure | USD 6,900 |
| **Total GEF Budget** |  |  | USD 86,060 |

### *Reporting*

1. Specific reports that will be prepared under the M&E program are: (i) Project inception report; (ii) AWP/B; (iii) PPRs; (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing reports; and (vii) Terminal Report. In addition, assessment of the GEF Monitoring Evaluation Tracking Tools against the baseline (completed during project preparation) will be required at midterm and final project evaluation.
2. **Project Inception Report**. It is recommended that the PMU prepare a draft project inception report in consultation with the LTO, BH and other project partners. Elements of this report should be discussed during the Project Inception Workshop and the report subsequently finalized. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan. The draft inception report will be circulated to the PSC for review and comments before its finalization, no later than one month after project start-up. The report should be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit and uploaded in Field Programme Management Information System (FPMIS) by the BH.
3. **Results-based AWP/B**: The draft of the first AWP/B will be prepared by the PMU in consultation with the FAO Project Task Force and reviewed at the project Inception Workshop. The Inception Workshop inputs will be incorporated and the PMU will submit a final draft AWP/B within two weeks of the Inception Workshop to the BH. For subsequent AWP/B, the PMU will organize a project progress review and planning meeting for its review. Once comments have been incorporated, the BH will circulate the AWP/B to the LTO and the FAO GEF Coordination Unit for comments/clearance prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project’s Results Framework indicators so that the project’s work is contributing to the achievement of the indicators. The AWP/B should include detailed activities to be implemented to achieve the project outputs and output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The AWP/B should be approved by the Project Steering Committee and uploaded on the FPMIS by the BH.
4. **PPRs**: PPRs will be prepared by the PMU based on the systematic monitoring of output and outcome indicators identified in the project’s Results Framework (Appendix 1). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. They will also report on projects risks and implementation of the risk mitigation plan. The Budget Holder has the responsibility to coordinate the preparation and finalization of the PPR, in consultation with the PMU, LTO and the FLO. After LTO, BH and FLO clearance, the FLO will ensure that project progress reports are uploaded in FPMIS in a timely manner.
5. **PIRs**: The BH (in collaboration with the PMU and the LTO) will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the FAO GEF Coordination Unit FLO for review and approval no later than (check each year with GEF Unit but roughly end June/early July each year). The FAO GEF Coordination Unit will submit the PIR to the GEF Secretariat and GEF Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. PIRs will be uploaded on the FPMIS by the FAO GEF Coordination Unit.
6. Key milestones for the PIR process:

* Early July: the LTOs submit the draft PIRs (after consultations with BHs, project teams) to the GEF Coordination Unit ([faogef@fao.org](mailto:faogef@fao.org) , copying respective GEF Unit officer) for initial review;
* Mid July: FAO GEF Coordination Unit responsible officers review main elements of PIR and discuss with LTO as required;
* Early/mid-August: the FAO GEF Coordination Unit prepares and finalizes the FAO Summary Tables and sends to the GEF Secretariat by (date is communicated each year by the GEF Secretariat through the FAO GEF Coordination Unit;
* September/October: PIRs are finalized. PIRs carefully and thoroughly reviewed by the FAO GEF Coordination Unit and discussed with the LTOs for final review and clearance;
* Mid November: (date to be confirmed by the GEF): the FAO GEF Coordination Unit submits the final PIR reports - cleared by the Lead Technical Unit and approved by the FAO GEF Coordination Unit - to the GEF Secretariat and the GEF Independent Evaluation Office.

1. **Technical Reports**: Technical reports will be prepared by national, international consultants (partner organizations under Letters of Agreement - LoAs) as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the PMU to the BH who will share it with the LTO. The LTO will be responsible for ensuring appropriate technical review and clearance of said report. The BH will upload the final cleared reports onto the FPMIS. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.
2. **Co-financing Reports**: The BH, with support from the PMU, will be responsible for collecting the required information and reporting on co-financing as indicated in the Project Document/CEO Request. The PMU will compile the information received from the executing partners and transmit it in a timely manner to the LTO and BH. The report, which covers the period 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The format and tables to report on co-financing can be found in the PIR.
3. **Terminal Report**: Within two months before the end date of the project, and one month before the Final Evaluation, the PMU will submit to the BH and LTO a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

### EVALUATION PROVISIONS

1. An independent Final Evaluation be carried out three months prior to the terminal review meeting of the project partners. The Final Evaluation, as per normal procedures, will be managed by OED and will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best practices within the country and to neighbouring countries.

### INFORMATION TECHNOLOGY

N/A

# ****SECTION 3 - SUSTAINABILITY****

### 3.1 CAPACITY DEVELOPMENT [[79]](#footnote-80)

1. The partnerships and collaborations established for the implementation of AVACLIM will support extensive sharing of knowledge and skills. Under Components 1 and 2, strong collaboration will be built between different groups of actors who have different approaches and experiences regarding agroecological innovations: implementing partners, partner NGOs, scientists and farmers practitioners. The participatory development of the multi-criteria assessment tool will promote knowledge and experience sharing between these actors who will have the opportunity to learn from each other. Thereafter, direct training will be provided by the implementing partners and researchers to 14 students and seven partner NGOs on evaluation methods, data collection and data analysis. The evaluation interventions will be supported within and outside of the targeted countries by the dissemination of the user guide for the multi-criteria assessment tool. This will both contribute to maintaining the knowledge acquired and to build capacity beyond the targeted countries.
2. At the national level in the seven targeted countries, capacity building under Component 3 will focus on increasing understanding of the agroecology approach and benefits of each innovation, and selecting adapted agroecology interventions in each context. Indeed, the capacity of policy makers and other government staff to understand the benefits of agroecology and success factors will be strengthened thereby enabling the informed selection of best agricultural development options for the sustainable management of natural resources. Across the four components, capacity building on agroecological innovations will include technical capacity, M&E capacity to enable adaptive management, and institutional capacity. In addition, the AVACLIM project will also contribute to building financial capacity through sharing information produced under Component 2 on the costs and cost-benefit ratio of agroecological innovations in support of financial planning. The targeted countries will therefore have all the required tools to mainstream agroecology as an efficient approach for sustainable development at the national level beyond the project lifespan.
3. At the local level in the selected sites, the project interventions will support the adoption of agroecological innovations to improve livelihoods. Farmers practitioners will have access to knowledge and documentation to select and adopt best agroecological innovations for their own livelihoods. Press publications, fact sheets, progress reports and media products on the results of the project will indeed be disseminated within and beyond the selected sites through open-access database, project websites and webpages, as well as existing information sharing networks and forums of the project partners, FAO and government institutions. Practitioners within and outside of the targeted countries will be made aware of the existence of this documentation on agroecology through the implementation of the communication strategy under Component 4 including through a diversity of media. The knowledge and understanding of journalists, government staff, donors and international agencies on the agroecology approach and its effects will be increased. This will support the mainstreaming of this approach as a means to address development and environmental issues in drylands. The communication and advocacy tools produced by the project will also be shared broadly to support additional advocacy interventions by project partners and other organisations beyond the end of the project. Last, scientific publications will enable the dissemination of the results of the project across the international scientific community.

### FINANCIAL AND ECONOMIC SUSTAINABILITY

1. The financial and economic sustainability of the project is high because it will capitalise on existing initiatives already funded on the ground. No hard or soft infrastructure requiring maintenance will be funded by the project. Limited costs are therefore expected for the sustainability of the AVACLIM project interventions. Financial opportunities to enable the organisation of annual meetings of the community of practice in each targeted country under Component 1 will be identified under Activity 1.3.1. Regarding the other outputs of the project, the knowledge-sharing platform to be strengthened under Component 1 will not induce additional maintenance costs as it will build on an existing platform maintained by CARI. The evaluation interventions will be fully funded under Component 2. The broader use of the multi-criteria assessment tool will be promoted under the project and all the tools will be provided to support its application to other interventions within and outside of the targeted countries but this will depend on the project stakeholders. Similarly, communication and advocacy tools will be made broadly available and additional advocacy interventions will be encouraged but this will also depend on the project stakeholders. Financial means will be needed for the mainstreaming of agroecology but this does not impact on the sustainability of the project outputs which will mainly be capitalised as reports and tools spread out using multiple communication tools during the project implementation phase. It is however expected that the results generated by the project will lead to the prioritisation of agroecology interventions at the international, national and local levels and the allocation of financial means thereto.

### ENVIRONMENTAL SUSTAINABILITY

1. The goal of the project is to mainstream the agroecology approach across drylands. Agroecology is an integrated approach that takes into consideration the local environmental and social context to develop a sustainable and fair food system. Environmental, social, economic, resilience and governance dimensions of sustainability are at the core of the 10 elements of agroecology as defined by FAO. Regarding environmental benefits, agroecological innovations are specifically designed to enable the sustainable management of water and soil resources, and promote biodiversity. In addition, by optimizing the interactions between plants, animals, humans and the environment the need for chemical inputs decreases, thereby reducing environmental pollution. Despite an increasing number of studies showing these benefits of agroecology, the evidence base available remains insufficient to enable the mainstreaming of this approach by decision makers for more sustainable and environmentally-friendly agricultural practices in drylands. The project focuses on capitalising on agroecology initiatives in seven countries in drylands to generate scientifically-proven information on the positive effects of agroecology at the environmental and socio-economic levels, and – based on these results – advocate for the integration of the agroecology approach in development planning for improved management of land, soil, water and forest resources across drylands.

### INNOVATION AND SCALE UP

1. Compared to the mainstream conventional agricultural production systems, agroecology remains an innovative approach as it is practiced by a small and fragmented group of producers. As part of the project interventions, multiple innovative practices and combination of practices will be brought to the attention of agriculture practitioners at a large scale. Other innovations in the project’s approach and management include: i) a strong engagement to merge the historically parallel French- and English-research communities on agroecology, as well as NGOs and farmers practitioners in both groups of countries; and (ii) a commitment to create a solid and constructive collaboration between civil society organisations and the scientific community. These two points are fundamental for the success of the project and recognised as barriers to be overcome in order to mainstream agroecology across drylands.
2. As aforementioned, the partnership between research teams and NGOs is unusual. Without being a research project, AVACLIM nevertheless benefits from researchers’ analytical rigor in the identification and evaluation of objective and scientifically verifiable indicators that characterize the multiple benefits from agroecological innovations. On the other hand, the engagement, empowerment and mobilization of NGOs secures sustainability of project results, as the involvement of these NGOs will ensure continued advocacy and communication efforts beyond the life of the project.
3. The approach of the project which consist in capitalising on existing agroecology initiatives across countries is innovative per se. A weakness of most development projects is their short timeline and the absence of continuity in the M&E of the interventions beyond the project lifespan. This prevents the adequate measurement of the effects of the interventions implemented. Under the AVACLIM project interventions, the medium- to long-term effects of initiatives already implemented will be investigated to fill in the knowledge gaps on the effects of agroecological innovations. This will enable to significantly push the boundaries of the knowledge currently available on agroecological innovations. Furthermore, development projects often focus on a limited set of practices and technologies, in one geographic area, or target a couple of stakeholder groups. The AVACLIM project functions in a different way. It focuses on all the practices under the agroecology approach, it works across drylands, and it focuses on the international community of practice on agroecology. In addition, the innovations to be analysed and specific sites are purposely not fully defined yet to enable a fully bottom-up approach based on what is happening in the field.
4. The project will develop all the required tools to enable the upscaling of the evaluation exercise undertaken in the seven targeted countries. These include a multi-criteria assessment tool and a user guide to continue growing the knowledge base and improving the tools available for the selection, design and implementation of agroecological innovations based on new results. In addition, communication and advocacy material will be made widely available to promote the implementation of advocacy interventions in other countries through the networks of project partners.
5. A major component of the upscaling of agroecological innovations as a result of the project interventions lies in the engagement with policy makers and other government staff. The policy revisions to be drafted and advocacy interventions to be implemented at the national scale are expected to lead to the integration of agroecology interventions within the development plans in the seven targeted countries. In addition, the reach of the project is expected to extend throughout drylands thanks to the implementation of advocacy events at international conferences, scientific and non-scientific publications, and the dissemination of advocacy documents across networks on natural resource management and desertification among others. The final goal of the project is the adoption of agroecological systems in the process of agricultural transition across drylands.

### DECENT RURAL EMPLOYMENT

1. Rural employment for the implementation of the project interventions will be limited because no on-the-ground development interventions will be implemented. Employment required for the implementation of the project is: i) contracts with the members of the PMU; ii) contracts with the auditing firms and evaluation consultants; iii) subcontracts with implementing partners, and partner NGOs for the implementation of the four components of the project; and iv) contracts with one post-doctorate student, interns and scientists for the implementation of Component 2. Rural community members at the local level – where the agroecology initiatives to be evaluated are being implemented — will likely be employed temporarily to support the data collection process under Components 1 and 2, and to host field visits.
2. Nevertheless, decent rural employment is one of the 10 elements of the agroecology agenda. It is therefore that this dimension is being embedded in some of the ‘soft’ and normative project activities, such as the ones under output 1.1. Therefore, the indicators considered to identify best practices, to assess practices and approaches, to feed global data bases and help support the development of a multicriteria tool (component 2) will reflect the employment dimension duly, and ensure decent rural employment (including occupational safety and health, elimination of child labour, unionisation of agricultural workers, and what have you) is accounted for and contributed to directly and in an indirect way. In particular the following dimensions will be considered:

* Employment creation: agroecological systems are expected to lead to job creation in the agricultural sector;
* Social protection: promote safer technology for small-scale agriculture;
* Standards and rights at work: support socially responsible agricultural production, support the prevention and elimination of child labour in agricultural land; and
* Governance and social dialogue: support the participation of rural poor in local decision-making empowering women and youth in particular.

### [GENDER EQUALITY](http://www.fao.org/docrep/017/i3205e/i3205e.pdf)

*Gender issues in the targeted countries*

1. Gender inequality is particularly high in Burkina Faso, Ethiopia, India, Morocco and Senegal. Gender issues in these countries include early marriage for women below 18 years old, physical or psychological violence towards women, unequal access to natural resources, lower level of literacy and access to education, and lower access to social services. In addition, some policy documents are still discriminatory (i.e. the Family Codes in Senegal, in India).
2. Three gender issues that are connected to the agricultural sector are common to the seven countries targeted by the project. These are: i) land ownership for women including access to property or leasing opportunities and inheritance; ii) participation in decision making at the household and community levels because of customary laws; and iii) access to financial opportunities such as loans. This applies to each country except that in Brazil, according to a study made in 2011 ~57% of the microfinance beneficiaries out of 22 microfinance institutions were women[[80]](#footnote-81). Within the agricultural sector in developing countries, women are responsible for 60 to 80% of the production of agricultural products for family consumption. The gender situation and tasks distribution within the agricultural sector specific to each targeted country is described below.
3. Brazil ranks as 94 out of 189 countries on the Gender Inequality Index 2017. In poor rural areas, women are dependent on their husbands and domestic partners who are generally the bread-makers while they take care of the household. Specific tasks undertaken by women in the management of natural resources are the selection and storage of seeds, the cultivation of medicinal plants in the backyards and the management of water resources.
4. Burkina Faso is ranked 145 out of 189 on the Gender Inequality Index 2017. Inequalities are the highest in the Sahelian region[[81]](#footnote-82). Regarding agricultural activities, access to land is difficult for women. 55% of agricultural labour are women while only 40% of agricultural land owners are women. Regarding the differences in the role of men and women in agricultural activities, men tend to be involved in soil preparation and planting activities, and women are generally involved in processing and selling the products locally.
5. Ethiopia 121 out of 189 on the Gender Inequality Index 2017. Women play a leading role in seed selection, storage and seed marketing, and to some extent in livestock keeping. Women directly engage in the production process including land preparation, sowing, weeding and harvesting. They also have a role in processing the harvest. However, when it comes to marketing and income management their involvement becomes limited. Men on the other hand play a leading role in production, processing and marketing.
6. India ranks 127 out of 189 on the Gender Inequality Index 2017. Production of major grains and millets, land preparation, seed selection and seedling production, sowing, applying manure as well as fertilizers and pesticides, weeding, transplanting, threshing, winnowing and harvesting activities are generally done by women in rural households. Women’s subsistence farming on rain-fed marginal lands produces half of the food grains and three-quarters of the pulses in rural India. In livestock husbandry, women have multiple roles, ranging from animal care, grazing, fodder collection and cleaning of animal sheds, to processing and preserving milk and livestock products.
7. Morocco is ranked 119 out of 189 on the Gender Inequality Index 2017. As previously mentioned, access to land ownership rights for women is very low with women owning only 7% of the Moroccan land. As a result, women are mainly working in livestock husbandry. Selling activities are undertaken by man. Crops, legumes and trees are generally cultivated by men, women participate at the harvesting stage[[82]](#footnote-83).
8. Senegal is ranked 124 out of 189 on the Gender Inequality Index 2017. Women are increasingly included in the decision-making meetings in Senegal but socio-cultural barriers often prevent them from participating. Similarly to Burkina Faso, women in agriculture are involved in processing and selling the products locally. They can also be involved in production but on smaller plots than men.
9. South Africa is ranked 90 out of 189 on the Gender Inequality Index 2017. Gender inequality is less severe than in other targeted African countries but women still have lower access to land and to financial opportunities than men. A limited number of women are landowners or farmers in their own rights. Women are mainly involved in livestock husbandry and work as labour in crops production. Involvement of women is decision making remains limited but it is improving.

*Gender integration in the project*

1. Women make up almost half of the agricultural workforce and play a vital role in household food security, dietary diversity and health, as well as in the conservation and sustainable use of biological diversity. However, women often remain economically marginalized, vulnerable to violations of their rights, and their contributions often remain unrecognized. Gender equity will be promoted across the AVACLIM project interventions. In fact, gender equity is one of the principles of agroecology as stated under Element 7 “Human and Social Values” of the FAO agroecology principles[[83]](#footnote-84).
2. Women are the backbone of the farming system and are often the ones who suffer most from the adverse effects of pollution and environmental degradation. Deforestation, monoculture practices in agriculture, loss of groundwater and destruction of biomass tend to increase their workload. They are a major target for improved agricultural practices in the context of the agricultural transition. The set of indicators to be selected under the multi-criteria assessment tool on the effects of agroecology initiatives will be gender sensitive in such a way that it will enable to distinguish social, economic and environmental benefits raised for women and for men.
3. Several of AVACLIM partners are already engaged in creating opportunities for women. For example, 80% of the beneficiaries of the interventions of ARFA on crop cultivation using an agroecology approach are women. Similarly, EMG works with Heiveld farmers’ cooperative of which 60% of the board members are women and two of the three farmer-advisors for agroecological innovations are women. Women are often interested in piloting new agricultural practices such as agroecology. Among their motivation is crop diversification for improved nutrition and reduction of the need for chemical inputs. Gender sensitivity will be one of the selection criteria for the initiatives to be evaluated under Components 2 and 3. Consequently, only successful initiatives that are gender sensitive will be promoted under the advocacy and awareness-raising interventions. This will put gender equality at the forefront of all agroecological innovations to be promoted by the project. In addition, based on the experience of the project partners, women involvement is a driver to the successful adoption and maintenance of improved agricultural practices[[84]](#footnote-85). Assuming that the evaluation results are aligned with practitioners’ experience, strong women participation will therefore be promoted in all the documentation produced under the AVACLIM project interventions as a key factor of success for agroecological systems.
4. It is increasingly being recognized that women can play a major role in improving the management of natural resources as they gained extensive knowledge and experience from working closely with their environment, and their analytical skills can play a vital role in developing water and forest resources in a sustainable manner. Under Components 1 and 2 of the AVACLIM project, traditional knowledge on the effects of agroecology on natural resources will be gathered with a particular focus on women. An adequate number of men and women participants will also be a condition for all the workshops and training sessions supported by the project. The target is to have at least 40% female participants. To this effect, gender-sensitive indicators have been included in the Logical Framework (see Appendix 1).

### [INDIGENOUS PEOPLES](http://www.fao.org/docrep/013/i1857e/i1857e00.pdf)

1. Indigenous peoples **in the targeted agricultural drylands within the seven targeted countries are mainly present in Brazil, Burkina Faso, Ethiopia and India. They are generally reliant on agricultural and/or livestock husbandry activities for their subsistence and sources of income. Conflicts over access to natural resources and land ownership are frequent in the drylands of these four countries.**
2. As no on-the-ground development interventions are bound to take place in the context of the AVACLIM project (it builds upon existing initiatives) there will be no direct involvement of indigenous peoples during project implementation. However, engagement with indigenous peoples within the agroecological initiatives to be selected will be investigated. Traditional knowledge of local communities including indigenous peoples on the effects of agroecological innovations at the social and environment levels will be gathered.
3. Adequate integration of traditional knowledge of farmers across local ethnic groups will be measured as part of the multi-criteria assessment tool. Indeed, indigenous peoples who are mainly agro-pastoral communities have extensive experience on the management of natural resources. For example, ethnic minorities in Ethiopia detain valuable knowledge on inter alia the management of open communal grazing land, soil fertility enhancement and traditional pest management. Similarly, in the semi-arid region of Brazil, there is valuable indigenous peoples’ knowledge on herbal treatments, production and conservation of traditional seeds (i.e. Creole seeds), and first-line experience in adaptation to changing climate conditions. Another example is in India where indigenous peoples have valuable traditional knowledge on rainwater harvesting systems, organic fertilizers production and herbal pesticides.
4. The information collected feeds the design of the multi-criteria assessment tool, and therefore complements evidence and information gathered from other sources such as academia, extension services, and more, making it a more comprehensive tool. Furthermore, the social benefits to be measured as part of the multi-criteria assessment tool will include the conservation of community groups’ cultures and traditions as an important factor of success and sustainability.
5. Therefore, the traditional knowledge on natural resources management from indigenous peoples and local communities that will be gathered under Component 1 of the AVACLIM project not to be published, but to feed the research work under other AVACLIM technical components. In the unlikely event that during the life of the project, the Project Steering Committee requests the Project Management Unit to publish findings from these consultations with indigenous peoples, the Project Management Unit will secure Free, Prior and Informed Consent from concerned Indigenous Peoples on the use and publication of information on traditional knowledge.

### ****Appendix I Logical Framework Matrix**[[85]](#footnote-86)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Results Chain | | Indicators | | Baseline | | Mid-term milestone | | Target | | Means of Verification (MOV) | | Assumptions |
| Project Objective[[86]](#footnote-87):  Policy-makers and stakeholders are able to prioritise and implement agroecological systems in drylands as a means to sustain productivity of agro-ecosystems in support of food security, agricultural livelihoods, and reduce environmental degradation and GHG emissions. | | i) Number of project proposals and draft policy documents (strategies, laws, financial plans) integrating agroecology and its principles  ii) Number of countries who have agroecology in their government agenda for discussions on agricultural development planning | | Increasing attention is given to agroecology as a potential means to achieve both conservation and food security goals. However, its integration in policies, strategies and plans remains very low. | | None, the implementation of the advocacy strategy is required to achieve this target. | | i) At least three countries out of seven have developed a project proposal or a draft updated policy document promoting agroecology  ii) Seven countries have agroecology in their agenda for discussions on agricultural development planning | | Project proposals; draft updated policy documents; agenda of political meetings | | Positive results regarding the positive socio-economic impacts of agroecology are obtained under the Components 1 and 2  The positive results obtained are sufficient to convince decision-makers to promote agroecology in their country |
| **Component 1[[87]](#footnote-88): Building partnerships for experience sharing and capacity building of agroecology practitioners at the landscape and local levels with international connections among the project participants** | | | | | | | | | | | | |
| Outcome 1: *Actionable knowledge on agroecology implementation is assumed and adopted by agroecology practitioners across the drylands* | | i) Number of practitioners involved in the Community of Practice  ii) Number of agroecological initiatives shared | | Agroecology initiatives are implemented in isolation in the targeted countries because of limited opportunities for knowledge sharing. | | i) 2000 participants to events and users of the collaborative tools, including 40% of women  ii) At least 35 agroecology initiatives are shared (each initiative can have one, several or a combination of innovations) | | i) 2000 participants to events and users of the collaborative tools, including 40% of women  ii) At least 35 agroecology initiatives are shared (each initiative can have one, several or a combination of innovations) | | List of participants to workshops; fact sheets; mention of innovations and fact sheets on collaborative tools | | Agroecology practitioners are willing to share their experiences with the community of practice |
| Output 1.1 An agroecology global database with i) successful agroecological innovations in dryland areas, and ii) quantitative, qualitative and spatial data on projects  Output 1.2 Capacity development through knowledge exchange events to disseminate agroecological innovations in participating countries  Output 1.3 A dynamic community of practice on agroecology | | | | | | | | | | | | |
| **Component 2: Assessment of existing initiatives for evidence-based decision-making at the national, local and landscape levels** | | | | | | | | | | | | |
| Outcome 2: *Knowledge and understanding of the impacts of agroecological systems and success factors of agroecological initiatives are consolidated through a scientifically harmonized protocol* | | i) Number of functional and accessible tools for multidimensional assessment of agroecology initiatives developed  ii) Number of initiatives assessed  iii) Number of knowledge products developed | | Because of limited availability of validated knowledge on the impacts and success factors of agroecology, agroecology remains often a theoretical and ideological option. | | i) one functional and accessible tool for multidimensional assessment of agroecology initiatives drafted  ii) at least 7 initiatives assessed  iii) at least one knowledge product developed | | i) one functional and accessible tool for multidimensional assessment of agroecology initiatives developed and validated  ii) at least 14 initiatives assessed  iii) at least 8 knowledge products developed | | Assessment tool; protocol for data collection; guidelines to test the tool; user-guide for the use of the tool; evaluation reports | | A consensus can be found to develop a standard methodology to measure the effects of agroecology |
| Output 2.1 A multi-criteria assessment tool to measure the impacts of agroecological systems and success factors of agroecological initiatives developed and validated using a participative approach  Output 2.2 Training sessions and user-guide to use and disseminate the multi-criteria assessment tool  Output 2.3 Country-based and global evidence-based references on impacts and success factors of agroecology | | | | | | | | | | | | |
| **Component 3: Advocacy for informed decision-making** | | | | | | | | | | | | |
| Outcome 3: *Evidence-based decision-making on agroecology is strengthened and systematized at international, national, local and landscape levels* | i) Number of advocacy opportunities created (including meetings, communication tools, radio emission)  ii) Number of international organisation (e.g. UNCCD, UNFCCC, WB, ADB, FAO) within which the relevant department(s) endorse the advocacy messages generated under the project | | There is no transformation of knowledge on the effects of the quantitative effects of agroecology into messages for decision-makers at the national or at the local levels in the targeted country. | | i) the advocacy strategy is being drafted  ii) none | | i) at least 9 events, and 10 advocacy documents and tools  ii) at least 3 international organisations have endorsed advocacy messages | | National and international advocacy strategy documents; reports from advocacy events; advocacy documents with tailor-made messages; decision-support briefs; programmes and reports from international workshops; websites, strategy documents and reports from international organisations | | Positive results regarding the positive socio-economic impacts of agroecology are obtained under the Components 1 and 2 | |
| Output 3.1 A common but differentiated advocacy strategy developed by CSOs  Output 3.2 Dynamic network to establish the dialogue amongst different stakeholders on agroecology through the implementation of the advocacy strategy | | | | | | | | | | | | |
| **Component 4: Communication, learning, knowledge management and adaptive management** | | | | | | | | | | | | |
| Outcome 4: *Knowledge on the impact and the success factors of agroecology made publicly available* | i) Number of M&E systems developed and implemented  ii) Number of evidence-based communication tools and events on the benefits of agroecology developed and disseminated | | The availability of communication tools on evidence-based information on the benefits of agroecology is very low. | | i) one M&E system developed and under implementation  ii) at least 1 printed tool (one article in addition to all project presentation tools), 2 digital tool (project website and first digital newsletter) | | i) one M&E system developed and implemented  ii) at least 4 printed tools, 4 digital tools, 8 documentaries, 8 press conferences; and participation to at least 4 scientific conferences | | M&E strategy document; journal and newspaper articles; project website with project reports; project digital newsletters; documentaries; press release on TV and radio; programme of scientific conferences | | Positive results regarding the positive socio-economic impacts of agroecology are obtained under the Components 1 and 2 | |
| Output 4.1 Project monitoring and evaluation for learning and adaptive management  Output 4.2 Knowledge management and dissemination of project's products and lessons learned in an adapted format for a wider audience | | | | | | | | | | | | |

### ****Appendix II Stakeholder Engagement Matrix****

1. **Stakeholder Consultation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Stakeholder Name | Stakeholder Type | Stakeholder profile | Consultation Methodology | Consultation  Findings | Expected timing  **(for Stakeholder Engagement Plans Only)** | Comments |
| **CARI** | Partner | Non-Gonvernmental Organization | Workshops, consultations and questionnaires | The project is carried by CARI. | Continuously during the project implementation phase through the Project Coordinator, and as the implementation partner for Component 4 | CARI will also be a beneficiary of increased knowledge of the effects of agroecology |
| **EMG** | Partner | Non-Gonvernmental Organization | Workshops, consultations and questionnaires | EMG is one of the implementation partners of the project, and participated to its design. EMG also agreed to support the implementation of the project interventions in South Africa. | During three years of project implementation for the implementation of all components particularly Component 1, and support all interventions in South Africa | EMG will also benefit from increased knowledge on the effects of agroecology |
| **IRD** | Partner | Other | Workshops, consultations and questionnaires | IRD is one of the implementation partners of the project, and participated to its design. | During three years of project implementation for the implementation of all components particularly Component 2, including through the coordination of the scientific consortium | IRD will also benefit from increased knowledge on the effects of agroecology |
| **Both ENDS** | Partner | Non-Gonvernmental Organization | Workshops, consultations and questionnaires | Both ENDS is one of the implementation partners of the project, and participated to its design. | During three years of project implementation for the implementation of all components particularly Component 3 | Both ENDS will also benefit from increased knowledge on the effects of agroecology |
| **Agrisud** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | Agrisud agreed to support the implementation of the project interventions in Morocco. | During three years of project implementation, to support all interventions at the national scale | Agrisud will also benefit from increased knowledge on the effects of agroecology |
| **ARFA** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | ARFA agreed to support the implementation of the project interventions in Burkina Faso. | During three years of project implementation, to support all interventions at the national scale | ARFA will also be a beneficiary of increased knowledge of the effects of agroecology |
| **CAATINGA** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | CAATINGA agreed to support the implementation of the project interventions in Brazil. | During three years of project implementation, to support all interventions at the national scale | CAATINGA will also be a beneficiary of increased knowledge of the effects of agroecology |
| **ENDA Pronat** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | ENDA Pronat agreed to support the implementation of the project interventions in Senegal. | During three years of project implementation, to support all interventions at the national scale | ENDA Pronat will also be a beneficiary of increased knowledge of the effects of agroecology |
| **GBS** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | GBS agreed to support the implementation of the project interventions in India. | During three years of project implementation, to support all interventions at the national scale | GBS will also be a beneficiary of increased knowledge of the effects of agroecology |
| **ISD** | Partner | Non-Gonvernmental Organization | Consultations and questionnaires | ISD agreed to support the implementation of the project interventions in Ethiopia. | During three years of project implementation, to support all interventions at the national scale | ISD will also be a beneficiary of increased knowledge of the effects of agroecology |
| **Members of the scientific consortium** | Partner | Other | Consultations and questionnaires | Montpellier SupAgro, Cirad and INRA have agreed to participate to the scientific consortium with IRD for the implementation of Component 2 | During the first and second year of the project for the development, testing and validation of the multi-criteria assessment tool, and during the third year to discuss the results |  |
| **CBOs** | Partner | Civil Society Organization | Not yet consulted as the selection of the initiatives to be evaluated will be done during the first year of the project, but the CBOs to be selected already work with partner NGOs | N/A | During the data collection phase for Component 1 and 2 which corresponds to the first and second years of the project | CBOs will also be a beneficiary of increased knowledge of the effects of agroecology |
| **National governments including decision makers** | Partner | National Government Institution body | Not yet consulted, they will be the target of Component 3 | N/A | From the second year, until the end of the project, as they will participate to the advocacy interventions and are expected to integrate agroecology into decision making  And throughout the implementation phase to facilitate the implementation of the interventions at the national and local scales | Government partners from the seven targeted countries are also beneficiaries of the project because the project results will enable them to make informed decisions for agricultural development planning in their country |
| **Relevant sectoral ministries at the decentralised level such as Ministry of Agriculture** | Partner | Local Government Institution/body | Not yet consulted as the selection of the initiatives to be evaluated will be done during the first year of the project, but the partner NGOs are already working with local government | N/A | Throughout the project implementation phase to ensure their support of the interventions on the ground, and as a recipient of awareness-raising interventions | Decentralised government institutions will also benefit from increased knowledge on agroecological innovations as it will enable them to guide local communities in adopting improved agricultural practices |
| **International institutions and donor organisations** | Partner | Resource Partner/Donor | Not yet consulted, they will be the target of Component 3 | N/A | From the second year, until the end of the project, as they will participate to the advocacy interventions and are expected to integrate agroecology into decision making | International organizations will benefit from the project as they will gain knowledge on best approaches to guide the agricultural transition |
| **Farmers communities** | Direct beneficiary | Local community | Not yet consulted as the selection of the initiatives will be done during the first year of the project, but the communities to be selected already work with partner NGOs | N/A | During three years of project implementation as they will be the recipients of awareness-raising interventions in agroecology  Selected communities will also be involved in data collection and knowledge-sharing activities under Components 1 and 2 | Farmers will also be a partner of the project, particularly for the implementation of Components 1 and 2 |

1. **Grievance Mechanism**

|  |  |
| --- | --- |
| Focal Point Information | Abram Bicksler |
| Contact Details | Abram.bicksler@fao.org |
| Explain how the grievance mechanism has been communicated to stakeholders | Main project stakeholders have had the chance to view and comment upon the draft project document during the PPG phase. This document contains the information on the grievance mechanism. During the project implementation launching workshop, the grievance mechanism will be explained to ensure that a wider partnership has understood what complaints and concerns can be raised, how and with whom. |

1. **Disclosure** (For moderate and high risk projects only)

|  |  |  |
| --- | --- | --- |
| Disclosure Means | Though this is a low risk project, the project document has been widely shared in order to collect inputs and receive validation. | |
| Disclosure information/document shared |  | |
| Disclosure dates | From: Click here to enter a date. | To: Click here to enter a date. |
| Location |  | |
| Language(s) |  | |
| Other Info |  | |

**(+)** Add disclosure as necessary

## Appendix ****III Workplan****

| **Output** | **Activities** | **Responsible** | **Year 1** | | | | | | | **Year 2** | | | | | | | **Year 3** | | | | **Year 4** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q1** | | **Q2** | | **Q3** | | **Q4** | **Q1** | | **Q2** | **Q3** | | **Q4** | | **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** |
| **Component 1: Building partnerships for experience sharing and capacity building of agroecology practitioners at the landscape and local levels with international connections among the project participants** | | | | | | | | | | | | | | | | | | | | | | |
| Recruitment of the PMU staff and launch of the project |  |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Output 1.1:** An agroecology global database with i) successful agro-ecological innovations in dryland areas, and ii) quantitative, qualitative and spatial data on projects | **Activity 1.1.1** Identify and document at least 5 initiatives per country, with common criteria which will include inter alia willingness to contribute to the AVACLIM project, gender integration and ethnic minority integration | EMG in collaboration with other project partners and partner NGOs |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 1.1.2** Store the compiled information on the existing database "Resource Centre on the Fight against Desertification" managed by CARI |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Output 1.2:** Capacity development through knowledge exchange events to disseminate agroecological innovations in participating countries | **Activity 1.2.1** Organise one national workshop per country for exchange of experience on successful innovations with the participation of community organisations, NGOs, technical services and other government representatives, scientists and farmers practitioners (community members including women) to the workshops |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 1.2.2** Organise two field trips – one in a French-speaking and one in an English-speaking country – for practitioners to share experiences |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Output 1.3:** A dynamic community of practice on agroecology | **Activity 1.3.1** Develop and implement a facilitation strategy for the community of practice in each country including inter alia the organisation of virtual and in-person meetings, linking the actors of the CoP, means to share information and news |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 1.3.2** Develop and share with the CoP members the collaborative tools needed to implement the CoP facilitation strategy related to the project with all project stakeholders |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Component 2: Assessment of existing initiatives for evidence-based decision-making at the national, local and landscape levels** | | | | | | | | | | | | | | | | | | | | | | |
| **Output 2.1:** A multicriteria assessment tool to measure the impacts of agroecological systems and success factors of agroecological initiatives developed and validated using a participative approach | **Activity 2.1.1** Undertake a stock-take of existing M&E tools and systems for agroecology initiatives, quantitative and qualitative information available on agroecology initiatives, and existing gap | IRD in collaboration with other project partners and partner NGOs |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.1.2** Identify priority needs for evaluation during one national workshop per country (combined with the workshops of Output 1.2) which will define the set of criteria of evaluation to be selected |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.1.3** Organise an international scientific workshop to produce the multicriteria assessment tool and a protocol with guidelines for data collection (including the definition of the criteria for the selection of the initiatives to be evaluated) to monitor the selected indicators to be implemented in the 7 countries |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Output 2.2:** Training sessions and user-guide to use and disseminate the multicriteria assessment tool | **Activity 2.2.1** Organise country meetings for discussion on and adaptation of the indicators of the assessment tool, definition of the data collection protocol in each country |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.2.2** Train local partners and interns on the use of the multicriteria assessment tool |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.2.3** Develop a user-guide of the multicriteria assessment tool based on the improvements made through testing out the tool under Output 2.3 for broader dissemination |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Output 2.3:** Country-based and global evidence-based references on impacts and success factors of agroecology | **Activity 2.3.1** Select – in a participatory manner with local partners – at least two initiatives to be assessed |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.3.2** Collect and analyse data on the selected two initiatives in each country with trainees under the supervision of scientists – north and south scientific partners – in order to test and validate the assessment tool |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.3.3** Produce national evaluation reports |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.3.4** Organise national workshops for sharing and discussing country assessment methods and results |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.3.5** Produce the overall assessment report |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Activity 2.3.6** Organise an international workshop for sharing and discussing country assessment methods and results with scientists and interns, NGOs, multilateral organisations and government technical services |  |  | |  | |  | |  | |  |  |  | |  | |  |  |  |  |  |  |
| **Component 3: Advocacy for informed decision-making** | | | | | | | | | | | | | | | | | | | | | | |
| **Output 3.1:** A common but differentiated advocacy strategy developed by CSOs | **Activity 3.1.1** Define the targets for advocacy within the following five groups: national policy makers, other politicians, international organisations, CSOs and journalists | Both ENDS in collaboration with other project partners and partner NGOs |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 3.1.2** Develop a joint advocacy strategy which includes an international advocacy strategy document and 7 tailor-made national strategies' documents with action plans – with defined targets and tools – on the recognition of the multiple benefits of agroecological systems |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Output 3.2:** Dynamic network to establish the dialogue amongst different stakeholders on agroecology through the implementation of the advocacy strategy | **Activity 3.2.1** Translate the results of the project (including from Components 1 and 2) into advocacy messages that will form the content of the various advocacy documents according to targets and objectives |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 3.2.2** Organise advocacy planning and implement meetings targeting national CSOs and their networks to implement and adapt the national advocacy strategies |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 3.2.3** Implement the national advocacy strategies targeting policy makers, national CSOs, journalists and politicians |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 3.2.4** Implement the international advocacy strategy targeting policy makers, international organisations and journalists including at least two events on agroecology at international meetings |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Component 4: Assessment of existing initiatives for evidence-based decision-making at the national, local and landscape levels** | | | | | | | | | | | | | | | | | | | | | | |
| **Output 4.1:** Project monitoring and evaluation for learning and adaptive management | **Activity 4.1.1** Design and implement a M&E strategy for the project interlinked with the advocacy strategy | CARI in collaboration with other project partners and partner NGOs |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Output** **4.2:** Knowledge management and dissemination of project's products and lessons learned in an adapted format for a wider audience | **Activity 4.2.1** Develop a communication strategy for producer organizations, community associations, NGOs, decentralized technical services, and agricultural schools in targeted countries in collaboration with Component leaders 1, 2 and 3 |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |
| **Activity 4.2.2** Implement the communication strategy including the development and mainstreaming of communication tools, and organisation of communication events |  |  |  | |  | |  | | |  |  | |  | |  |  |  |  |  |  |  |

## ****Appendix IV**** ****Budget****

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  | **Expenditures by year** | | | |
| **Oracle code and description** | **Unit** | **No. of units** | **Unit cost** | **Total** | **Outcome 1** | **Outcome 2** | **Outcome 3** | **Outcome 4** | **PM** | **TOTAL** | **Year 1** | **Year 2** | **Year 3** | **Year 4** |
|  | **Total** | **Total** | **Total** | **Total** |  | **GEF** |  |  |  |  |
| **5300 Salaries professionals** | | |  |  |  |  |  |  |  |  |  |  |  |  |
| Operations Officer | Lumpsum | 1 | 43,868 | 43,868 |  |  |  |  | 43,868 | 43,868 | 12,208 | 12,140 | 12,140 | 7,380 |
| **5300 Sub-total salaries professionals** | | | | **43,868** | **0** | **0** | **0** | **0** | **43,868** | 43,868 | **12,208** | **12,140** | **12,140** | **7,380** |
| **5570 International Consultants** | | | |  |  |  |  |  |  |  |  |  |  |  |
| Final Evaluation (managed by OED) | Lumpsum | 1 | 50,000 | 50,000 | 50,000 |  |  |  |  | 50,000 |  |  |  | 50,000 |
|  | | | | **50,000** | **50,000** | **0** | **0** | **0** | **0** | 50,000 | **0** | **0** | **0** | **50000** |
| **5650 Contracts** | | | |  |  |  |  |  |  |  |  |  |  |  |
| With BothEnds - Advocacy | Lumpsum | 1 | 172,410 | 172,410 | - | - | 172,410 | - | - | 172,410 | 5,000 | 20,750 | 136,160 | 10,500 |
| With CARI - Communication and coordination | Lumpsum | 1 | 545,481 | 545,481 | 41,426 | 36,053 | 42,501 | 389,449 | 36,052 | 545,481 | 132,494 | 153,822 | 218,870 | 40,295 |
| With EMG - Capacity building | umpsum | 1 | 104,930 | 104,930 | 91,160 | 6,885 | 4,590 | 2,295 | - | 104,930 | 19,400 | 62,580 | 15,300 | 7,650 |
| With CARI for India | Lumpsum | 1 | 34,024 | 34,024 | 13,610 | 10,207 | 6,805 | 3,402 | - | 34,024 | 5,671 | 11,341 | 11,341 | 5,671 |
| With CARI for Senegal | Lumpsum | 1 | 34,024 | 34,024 | 13,610 | 10,207 | 6,805 | 3,402 | - | 34,024 | 5,671 | 11,341 | 11,341 | 5,671 |
| With CARI for Burkina Faso | Lumpsum | 1 | 34,024 | 34,024 | 13,610 | 10,207 | 6,805 | 3,402 | - | 34,024 | 5,671 | 11,341 | 11,341 | 5,671 |
| With CARI for Brazil | Lumpsum | 1 | 34,024 | 34,024 | 13,610 | 10,207 | 6,805 | 3,402 | - | 34,024 | 5,671 | 11,341 | 11,341 | 5,671 |
| With CARI for Ethiopia | Lumpsum | 1 | 34,024 | 34,024 | 13,610 | 10,207 | 6,805 | 3,402 | - | 34,024 | 5,671 | 11,341 | 11,341 | 5,671 |
| With CARI for Morocco | Lumpsum | 1 | 43,506 | 43,506 | 17,402 | 13,052 | 8,701 | 4,351 | - | 43,506 | 7,251 | 14,502 | 14,502 | 7,251 |
| **5650 Sub-total Contracts** | | | | **1,036,447** | **218,038** | **107,025** | **262,227** | **413,105** | **36,052** | 1,036,447 | **192,500** | **308,359** | **441,537** | **94,051** |
| **6300 GOE budget** | | | |  |  |  |  |  |  | 0 |  |  |  |  |
| Final report | Lumpsum | 1 | 6,900 | 6,900 |  |  |  |  | 6,900 | 6,900 |  |  |  | 6,900 |
| **6300 Sub-total GOE budget** | | | | **6,900** | **0** | **0** | **0** | **0** | **6,900** | 6,900 | **0** | **0** | **0** | **6900** |
| **TOTAL** |  |  |  | **1,137,215** | **268,038** | **107,025** | **262,227** | **413,105** | **86,820** | **1,137,215** | **204,708** | **320,499** | **453,677** | **158,331** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SUBTOTAL Comp 1** | **268,038** | 23.60% |  |  |  |  |  |  |  |  |  |  |  |  |
| **SUBTOTAL Comp 2** | **107,025** | 9.40% |  |  |  |  |  |  |  |  |  |  |  |  |
| **SUBTOTAL Comp 3** | **262,227** | 23.10% |  |  |  |  |  |  |  |  |  |  |  |  |
| **SUBTOTAL Comp 4** | **413,105** | 36.30% |  |  |  |  |  |  |  |  |  |  |  |  |
| **SUBTOTAL Project Management** | **86,820** | 7.60% |  |  |  |  |  |  |  |  |  |  |  |  |
| **TOTAL GEF** | **1,137,215** | 100.00% |  |  |  |  |  |  |  |  |  |  |  |  |

## ****Appendix V**** ****Risk Management****

Risk management is a coordinated set of activities to direct and control an organization with regard to risks. It comprises a structured, methodical approach to identifying and managing risks for the achievement of objectives.

The risk management plan will allow to manage risks by monitoring mitigation actions throughout implementation. Part A focuses on external risks to the project and Part B on the identified environmental and social risks from the project.

### ****Section A: Risks to the project****

This section will identify external risks to the project[[88]](#footnote-89). In order to identify risks, the following information will be necessary:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Risk description** | **Worst case consequence for the project** | **Risk Score** | | **Mitigating action** | **Action owner** |
| Impact | Likelihood |
| Project partners do not agree on roles and responsibilities, and distribution of the grants | Some delays in the project implementation are caused by negotiation process and potential changes in agreements with project partners. | High | Low | The project partners have been involved in every step of the project design. Their role and the budget distribution are clearly detailed in the project proposal that they have individually validated before its submission to the different co-financiers. However, during the inception phase of the project, the project team will discuss in-depth the roles and responsibilities, including timelines and delivery mechanisms, of each of the involved partners to ensure that these are fully comprehended. | CARI to manage the partnership with EMG, BothENDS and IRD.  CARI, EMG, Both ENDS and IRD to manage the partnership with national partner NGOs. |
| Project partners (e.g. FFEM, IRD) do not cash the estimated co-financing | The entire set of complementary interventions of the AVACLIM project cannot be integrally implemented. | High | Low | In addition to the co-financing letters, required by GEF, partners will also sign partnership contracts, detailing their obligations as co-financing partners. Also these partners have been involved in all project steps undertaken to date, and are fully aligned to and supportive of the project intervention logic and delivery mechanisms. | FAO and CARI |
| Some of the partner NGOs at the national level are not able to initiate a country-wide, dynamic experience-sharing process on agroecology | The interventions under Output 1.3 are not successful in improving knowledge sharing between agroecology practitioners in the seven targeted countries. | Medium | Low | National partnering NGOs are members of existing agroecology networks, and have been selected based on their proven capacity to mobilise farmers and local associations. CARI and EMG will strengthen the capacities of national NGOs in order to ensure they can play their role efficiently. Areas that will be covered through capacity development activities targeting the NGOs include:  - identification of partners;  - communication and outreach activities;  - preparation and implementation of national workshops, field visits and collaborative tools. | CARI and EMG |
| The political situation in one or more partnering countries does not allow the smooth and constructive roll-out of activities | Some of the targeted countries are in an unstable political situation which would have a negative impact on the availability and involvement of the national government stakeholders into the project interventions. | Low | Medium | Periods of political transitions will be accounted for in the planning of the interventions particularly seminars and workshops to maximise participation and efficient follow-up. Advocacy interventions for example will be scrupulously planned. Importantly, most of the activities are carried out by partner NGOs, which are expected to be less impacted by political instability. | CARI and Both ENDS |
| Despite positive and significant results obtained at all levels on the effects of agroecology, stakeholder groups targeted by the awareness raising and advocacy campaigns do not show interest in this approach and/or do not take them into account | The objective of the project regarding the integration of agroecology into development planning is not achieved. | High | Low | The advocacy strategy design for the project will build on successes, failures and lessons learned from other advocacy interventions by CARI and his partners. As a result, the success of the outreach campaign will be maximised. | CARI and Both ENDS |
| Prolonged droughts, heat waves or other extreme events occur and prevent the timely implementation of the data collection campaign | The monitoring of some of the indicators do not provide reliable results because of data gaps or changes in external parameters. | Medium | Low | The sensitivity of each preselected indicators to the climate context and climate risks will be assess during the international workshops and taken into consideration when selecting the set of indicators to be integrated in the multi-criteria assessment tool to maximise the likelihood of obtaining robust results for each indicator. Sensitivity of indicators and measurement methods to the local climate risks will be verified a second time during the national workshop aiming to adapt the tool and methodology to the national context. | CARI, IRD, partner NGOs, scientific partners |
| Collaboration between the very diverse panel of project partners is unproductive because of barriers in languages, opinions or approaches | Scientists and practitioners have different views, approaches and objectives which prevent good collaboration for the development and implementation of the multi-criteria assessment tool.  Language – and potentially cultural – barriers between French- and English-speaking countries cannot be overcome, thereby preventing efficient knowledge sharing and collaborative work across countries to support the drylands approach. | Medium | Medium | Implementing partners who mainly work at the interface between sciences and on-the-ground work and partner NGOs will play a role of facilitator between scientists and practitioners where necessary to ensure smooth and productive collaboration. The objective of the project regarding the identification of adequate agricultural solutions to address concomitantly food insecurity, climate change and environmental degradation issues will be reminded to the partners as often as required to make sure that everybody works in the same direction.  Translators will be appointed as often as necessary and collaboration between French- and English-speaking countries will be maximised throughout the project implementation phase (i.e. during workshops, meetings, field visits, and through the communication tools) to build relationships between project partners which will help overcome language and cultural barriers between countries and institutions. | CARI, EMG, Both ENDS and IRD |

### ****Section B: Environmental and Social risks from the project****

N/A, this is a low-risk project that has not triggered any of the social and environmental safeguards of the FAO.

## ****Appendix VI Draft Terms of Reference of the PMU staff****

**The PMU will consist of a Project Coordinator and an Operations Officer (OO) under the supervision of a Project Director. The main roles of the Project Coordinator and OO are described below.**

**Project Coordinator (national)**

Reports to: Project Steering Committee through the Project Director

Duration: This is a full-time position for the 42 months of the project.

The Project Coordinator will be a national expert. Supported by the OO for the purely management tasks, this technical expert will:

For about 20% of her/his time

* Assume operational management of the project in consistency with the project document and GEF and FAO policies and procedures;
* Oversee preparation and updates of the project work plan as required; and formally submits updates to FAO and reports on work plan progress to the Project Director and FAO as requested but at least quarterly;
* Participate and represent the project in collaborative meetings with project partners and the PSC, as required;
* Undertake missions to monitor the outputs-based budget, and to resolve outstanding operational problems, as appropriate;
* Be responsible for results achieved within her/his area of work and ensure issues affecting project delivery and success are brought to the attention of higher-level authorities through the Budget Holder in a timely manner;
* In consultation with the FAO Evaluation Office, the LTO, and the FAO-GEF Coordination Unit, support the organization of the mid-term and final evaluations, and provide inputs regarding project budgetary matters;
* Oversee the mobilization of project inputs under the responsibility of CARI; and
* Oversee the procurement of all project partners and consultants.

For about 80% of her/his time

* Ensure all technical reports are prepared in a timely manner and meet quality standards;
* Supervise the project staff and partners assigned to project;
* Throughout the project, when necessary, provide advice and guidance to the national and international experts and to project partners;
* Assist in the dissemination of project findings, notably to relevant governmental departments, CBOs, NGOs and internationally;
* Contribute to communication activities;
* Build working relationships with national and international partners; and
* Ensure the coordination of project activities work with related work of partners.

**Operations Officer**

Reports to: Project Coordinator

Duration: **80% for the OO for the 42 months of project implementation**

The officer will be a national expert. Tasks include but are not limited to:

* Ensure smooth and timely implementation of project activities in support of the results-based workplan, through operational and administrative procedures according to FAO rules and standards;
* Coordinate the project operational arrangements through contractual agreements with key project partners;
* Arrange the operations needed for signing and executing Letters of Agreement (LoA) and Government Cooperation Programme (GCP) agreement with relevant project partners;
* Consult with technical team, Budget Holder and project management on specific HR and procurement requests, issues, and problems, and provides advice, policy interpretations, and options on how to proceed;
* Supervise the procurement of goods and contracting of services in close collaboration with the Budget Holder and the Project Coordinator and in accordance with the technical supervision of LTO, FAO rules and procedures and the AWP/B approved by the PSC;
* Oversee timely planning and implementation of procurement plans providing advice as needed on most appropriate procurement actions;
* Review project service and staffing delivery and procedures, develop proposals, and coordinate updates/revisions;
* Day-to-day record the project budget, including the monitoring of cash availability, budget preparation and budget revisions to be reviewed by the Project Coordinator;
* Ensure the accurate recording of all data relevant for operational, financial and results-based monitoring;
* Ensure that relevant reports on expenditures, forecasts, progress against workplans, project closure, are prepared and submitted in accordance with FAO and GEF defined procedures and reporting formats, schedules and communications channels, as required;
* Execute accurate and timely actions on all operational requirements for personnel-related matters, equipment and material procurement, and field disbursements; and
* Provide inputs and maintain the FPMIS systems up-to-date;
* Monitors requests for human resources actions and determines/approves, within delegated authority, salary, entitlements, travel, social security and other benefits.
* Maintain inter-departmental linkages with FAO units for donor liaison, Finance, Human Resources, and other units as required;
* Liaises with HR Officer/s in Shared Services Centre (SSC), Budapest, RNE and HQ to provide and obtain guidance on technical aspects and keep abreast of the different HR initiatives and policies and maintains leading edge knowledge on human resources issues.

## ****Appendix VII Draft Terms of Reference of IRD Post-Doc****

**Research theme:** ***To develop and test a multi criteria and dimensional (socio, economic, environment) tool for the assessment of agroecological innovations in Drylands***

**Context**

Agroecology, as a productive agriculture with more efficient inputs, less harmful to the environment and social principles and equity supports, seems to be a solution to address a number of the Sustainable Development Goals (SDGs), the Paris Agreement on Climate Change, the Convention on Biological Diversity (CBD) and UNCCD. Agroecology management is not seen at the scale of the plot only, but it also concerns all areas which are characterized by ecological interactions (farms, watersheds…). Based on the multifunctional role of agriculture, agroecology is thus much more complex than the management of conventional agriculture.

Between conventional farming and a more sustainable agriculture, the road is wide open for the development of intermediate modes of production with the same objective but with different production techniques. In addition, in many areas of the world, traditional farmers have developed complex farming systems adapted to the local conditions in order to meet their subsistence needs, without depending on mechanization, chemical fertilizers, pesticides, or other technologies of modern agricultural science. The most common image of agroecology is the substitution of chemical inputs by natural processes, association of crops, cultivation under plant cover, the use of organic inputs.

All these agroecological innovations need to be identified and evaluated for their multi-dimensional impacts but also for theirappropriation and redefinition adapted to each context (process of agroecological transition). Are agroecological systems sufficiently successful in economic, social, environmental, and health terms? What are the essential **criteria** needed to achieve all these economic, social, environmental, and health goals? Which **indicators** or at **what scale the evaluation** is meaningful? Which conditions foster or impede the appropriation of agroecological innovations? Research is needed to answer all these questions and finally develop a multi-criteria and dimensional tool for the assessment of agroecological innovations. The post-doctoral position is included in a project (AVACLIM) financed by the GEF (Global Environment Facility) and coordinated by a NGO (CARI, [www.cariassociation.org](http://www.cariassociation.org)) and will have in charge to develop a multi-criteria tool based on 5 domains: production, economy, social, human and environment. The tool will be tested on agroecology initiatives conducted in 7 countries (Morocco, Burkina-Faso, Senegal, Ethiopia, South Africa, India, Brazil). These initiatives are followed by national or international NGO’s.

**Activities**

* Deliver a synthesis of the state of the art based on a meta-analysis of current project, initiatives and scientific literature aiming at assessing the multi-dimensional of agricultural systems. This assessment has to focus on impacts of agroecology but also on the factors which impact the agro-ecological transition.
* Contribute to the preparation of national workshops in the 7 countries, in collaboration with AVACLIM focal points, to identify the criteria of evaluation of several stakeholder groups (i.e. farmers, extension services and NGOs partners) to assess agroecological innovations and the agroecological transition factors of success in their own context.
* With the steering committee of the AVACLIM project, contribute to organize an international scientific workshop on the criteria and indicator needed to evaluate agroecology initiatives. This workshop will help to propose a first frame of the multi criteria and dimensional tool. This framework should contain sets of indicators to evaluate if the criteria are achieved and sets of data needed to monitor the indicators. This framework will be enriched with experiences and expertise of scientists from all around the world.
* With the scientist and NGO partners in each country, organize the country level work: validate common and context specific indicators and protocols and organize the collect of data with the local partners (follow the implement of the tool test in the 7 countries in collaboration with national NGO and scientist partners)
* Valorise the scientific results of the project (the tool, the impacts of agroecology, the factor of success for the transition) with scientific publications. Finally, the valorisation of the results of the project should also help project partners to advocate at several scale concerning the relevance of agroecology in drylands.

The objective will be to test if the framework of evaluation built by meta-analysis and workshops at different levels is actually feasible and meaningful for the evaluation of agroecological innovations, and for the definition of agroecological transition factors of success.

**Scientific environment**

The work will be coordinated by T Chevallier, JL Chotte (UMR Eco&Sols, IRD) and CARI, but it will be also supported by different scientific partners in Montpellier with various skills (economics, ecology, agronomist, soil and water scientists) and in the 7 countries of the project. One scientific partner (focal point) will be in charge of the activities in each country. Regular meeting (one per 2 months) between post doc and scientists will be organized to present and follow the activities in each country. Each scientific partner in the country will be helped by 1 or 2 trainees (southern and / or northern trainees) for the collect and analyse data tasks. 8 NGO’s are also implied in the project, in Montpellier and in the 7 countries.

**Expected competences**

The candidate should have expertise

* in agroecological innovations
* in the process of rural development
* in multi-criteria assessment methodologies
* in processing the data produced by multi-criteria assessments
* ability to work in a team environment, to be well organized and be good communicator

The candidate should have field experience and demonstrated ability to collaborate in different cultural environments. The candidate should be fluent in French and English and is expected to have knowledge in Research and NGO systems.

## ****Appendix VIII. FAO’s roles in internal organization****

FAO will be the GEF Implementing Agency of the project and, as such, FAO will supervise and provide technical guidance for the overall implementation of the project, including:

1. Administrate the portion of project GEF funds that has been agreed with the OP to remain for FAO direct implementation. These funds will be managed in accordance with the rules and procedures of FAO;
2. Monitor and oversee OP’s compliance with the OPA and project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
3. Commence and completing the responsibilities allocated to it in the Project Document in a timely manner, provided that all necessary reports and other documents are available;
4. Making transfers of funds, supplies and equipment, as applicable, in accordance with the provisions of the OPA;
5. Review, discuss with the OP, and approve the project progress and financial reports, as detailed in the OPA and its annexes. undertaking and completing monitoring, assessment, assurance activities, evaluation and oversight of the project;
6. Liaising on an ongoing basis, as needed, with the Government (as applicable), other members of the United Nations Country Team, Resource Partner, and other stakeholders;
7. Providing overall guidance, oversight, technical assistance and leadership, as appropriate, for the Project;
8. Initiating joint review meetings with the OP to agree on the resolution of findings and to document the lessons learned;
9. Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide consolidated financial reports to the GEF Trustee;
10. Conduct at least one supervision mission per year;
11. Lead the Independent Mid-Term and Final Evaluation, through the FAO Evaluation Office;
12. Monitor implementation of the plan for social and environmental safeguards, in accordance with the FAO Environmental and Social Safeguards.

In collaboration with the PCU and the PSC, FAO will participate in the planning of contracting and technical selection processes. FAO will process fund transfers to the OP as per provisions, terms and conditions of the signed OPA.

The FAO Representative in Egypt will be the **Budget Holder** (BH) and will be responsible for timely operational, administrative and financial management of GEF resources implemented by FAO directly. The budget holder will be also responsible for i) managing OPIM for results, including monitoring of risks and overall compliance with the OPA provisions; ii) review and clear financial and progress reports received from the OP and certify request for funds iii) review and clear budget revisions and annual work plan and budgets; iv) ensure implementation of the Risk Mitigation and Assurance Plan v) follow up and ensure that the OP implements all actions and recommendations agreed upon during Assurance Activities.

As a first step in the implementation of the project, the FAO Representation will establish an interdisciplinary Project Task Force (PTF) within FAO, to guide the implementation of the project. The PTF is a management and consultative body that integrate the necessary technical qualifications from the FAO relevant units to support the project. The PTF is composed of a Budget Holder, a Lead Technical Officer (LTO), the Funding Liaison Officer (FLO) and one or more technical officers based on FAO Headquarters (HQ Technical Officer).

The FAO Representative, in accordance with the PTF, will give its non-objection to the AWP/Bs submitted by the PCU as well as the Project Progress Reports (PPRs). PPRs may be commented by the PTF and should be approved by the LTO before being uploaded by the BH in FPMIS.

The **Lead Technical Officer (LTO**) for the project will be (insert officer and division). The role of the LTO is central to FAO’s comparative advantage for projects. The LTO will oversee and carry out technical backstopping to the project implementation. The LTO will support the BH in the implementation and monitoring of the AWP/Bs, including work plan and budget revisions. The LTO is responsible and accountable for providing or obtaining technical clearance of technical inputs and services procured by the Organization.

In addition, the LTO will provide technical backstopping to the PT to ensure the delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical support from PTF to respond to requests from the PSC. The LTO will be responsible for:

1. Assess the technical expertise required for project implementation and identify the need for technical support and capacity development of the OP.
2. Provide technical guidance to the OP on technical aspects and implementation.
3. Review and give no-objection to TORs for consultancies and contracts to be performed under the project, and to CVs and technical proposals short-listed by the PCU for key project positions and services to be financed by GEF resources;
4. Supported by the FAO Representation, review and clear final technical products delivered by consultants and contract holders financed by GEF resources;
5. Assist with review and provision of technical comments to draft technical products/reports during project implementation;
6. Review and approve project progress reports submitted by the NPD, in cooperation with the BH;
7. Support the FAO Representative in examining, reviewing and giving no-objection to AWP/B submitted by the NPD, for their approval by the Project Steering Committee;
8. Ensure the technical quality of the six-monthly Project Progress Reports (PPRs). The PPRs will be prepared by the NPD, with inputs from the PT. The BH will submit the PPR to the FAO/GEF Coordination Unit for comments, and the LTO for technical clearance. The PPRs will be submitted to the PSC for approval twice a year. The FLO will upload the approved PPR to FPMIS.
9. Supervise the preparation and ensure the technical quality of the annual PIR. The PIR will be drafted by the NPD, with inputs from the PT. The PIR will be submitted to the BH and the FAO-GEF Coordination Unit for approval and finalization. The FAO/GEF Coordination Unit will submit the PIRs to the GEF Secretariat and the GEF Evaluation Office, as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The LTO must ensure that the NPD and the PT have provided information on the co-financing provided during the year for inclusion in the PIR;
10. Conduct annual supervision missions;
11. Provide comments to the TORs for the mid-term and final evaluation; provide information and share all relevant background documentation with the evaluation team; participate in the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation; participate in the final workshop with all key project stakeholders, as relevant. Contribute to the follow-up to recommendations on how to insure sustainability of project outputs and results after the end of the project.
12. Monitor implementation of the Risk Mitigation Plan, in accordance with the FAO Environmental and Social Safeguards.

The **HQ Technical Officer** is a member of the PTF, as a mandatory requirement of the FAO Guide to the Project Cycle. The HQ Technical Officer has most relevant technical expertise - within FAO technical departments - related to the thematic of the project. The HQ Technical Officer will provide effective functional advice to the LTO to ensure adherence to FAO corporate technical standards during project implementation, in particular:

1. Supports the LTO in monitoring and reporting on implementation of environmental and social commitment plans for moderate risk projects. In this project, the HQ officer will support the LTO in monitoring and reporting the identified risks and mitigation measures (Appendix 4) in close coordination with the OP.
2. Provides technical backstopping for the project work plan.
3. Clears technical reports, contributes to and oversees the quality of Project Progress Report(s) (PPRs – see Section 3.5).
4. May be requested to support the LTO and PTF for implementation and monitoring.
5. Contribute to the overall ToR of the Mid-term and Final Evaluation, review the composition of the evaluation team and support the evaluation function.

The FAO-GEF Coordination Unit will act as **Funding Liaison Officer (FLO).** This FAO/GEF Coordination Unit will review and provide a rating in the annual PIR(s) and will undertake supervision missions as necessary. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the FAO GEF Coordination Unit. The FAO GEF Coordination Unit may also participate in the mid-term evaluation, and in the development of corrective actions in the project implementation strategy if needed to mitigate eventual risks affecting the timely and effective implementation of the project. The FAO GEF Coordination Unit will in collaboration with the FAO Finance Division to request transfer of project funds from the GEF Trustee based on six-monthly projections of funds needed.

The FAO Financial Division will provide annual Financial Reports to the GEF Trustee and, in collaboration with the FAO-GEF Coordination Unit, request project funds on a six-monthly basis to the GEF Trustee.

## ****Appendix IX. Financial Management****

**Financial Records**. FAO shall maintain a separate account in United States dollars for the project’s GEF resources showing all income and expenditures. Expenditures incurred in a currency other than United States dollars shall be converted into United States dollars at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the project in accordance with its regulations, rules and directives.

**Financial Reports**. The BH shall prepare six-monthly project expenditure accounts and final accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the un-liquidated obligations as follows:

Details of project expenditures on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the project document, as at 30 June and 31 December each year.

Final accounts on completion of the project on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the project document.

A final statement of account in line with FAO Oracle project budget codes, reflecting actual final expenditures under the project, when all obligations have been liquidated.

The BH will submit the above financial reports for review and monitoring by the LTO and the FAO GEF Coordination Unit. Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

**Budget Revisions**. Semi-annual budget revisions will be prepared by the BH in accordance with FAO standard guidelines and procedures.

**Responsibility for Cost Overruns**. The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the project budget under any budget sub-line provided the total cost of the annual budget is not exceeded.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above the 20 percent flexibility should be discussed with the GEF Coordination Unit with a view to ascertaining whether it will involve a major change in project scope or design. If it is deemed to be a minor change, the BH shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the project’s objectives or scope, a budget revision and justification should be prepared by the BH for discussion with the GEF Secretariat.

Savings in one budget sub-line may not be applied to overruns of more than 20 percent in other sub-lines even if the total cost remains unchanged, unless this is specifically authorized by the GEF Coordination Unit upon presentation of the request. In such a case, a revision to the project document amending the budget will be prepared by the BH.

Under no circumstances can expenditures exceed the approved total project budget or be approved beyond the NTE date of the project. Any over-expenditure is the responsibility of the BH.

**Audit**. The project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the Governing Bodies of the Organization and reporting directly to them, and an internal audit function headed by the FAO Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

**Procurement**. Careful procurement planning is necessary for securing goods, services and works in a timely manner, on a “Best Value for Money” basis. It requires analysis of needs and constraints, including forecast of the reasonable timeframe required to execute the procurement process. Procurement and delivery of inputs in technical cooperation projects will follow FAO’s rules and regulations for the procurement of supplies, equipment and services (i.e. Manual Sections 502 and 507). Manual Section 502: “Procurement of Goods, Works and Services” establishes the principles and procedures that apply to procurement of all goods, works and services on behalf of the Organization, in all offices and in all locations, with the exception of the procurement actions described in Procurement Not Governed by Manual Section 502. Manual Section 507 establishes the principles and rules that govern the use of Letters of Agreement (LoA) by FAO for the timely acquisition of services from eligible entities in a transparent and impartial manner, taking into consideration economy and efficiency to achieve an optimum combination of expected whole life costs and benefits.

As per the guidance in FAO’s Project Cycle Guide, the BH will draw up an annual procurement plan for major items, which will be the basis of requests for procurement actions during implementation. The first procurement plan will be prepared at the time of project start-up, if not sooner, in close consultation with the CTA/NPC and LTU. The plan will include a description of the goods, works, or services to be procured, estimated budget and source of funding, schedule of procurement activities and proposed method of procurement. In situations where exact information is not yet available, the procurement plan should at least contain reasonable projections that will be corrected as information becomes available.

The procurement plan shall be updated every 12 months and submitted to FAO BH and LTO for clearance, together with the AWP/B and annual financial statement of expenditures report for the next instalment of funds.

The BH, in close collaboration with the NPC, the LTO and the Budget and Operations Officer will procure the equipment and services provided for in the detailed budget in Appendix III, in line with the AWO and Budget and in accordance with FAO’s rules and regulations.

## ****Appendix X. FAO and Government Obligations****

(a) This Annex sets out the basic conditions under which FAO will assist the Government in the implementation of the Project described in the attached Project Document.

(b)The achievement of the objectives set by the Project shall be the joint responsibility of the Government and FAO.

**FAO OBLIGATIONS**

1. FAO will be responsible for the provision, with due diligence and efficiency, of assistance as provided in the Project Document. FAO and the Government will consult closely with respect to all aspects of the Project.
2. Assistance under the Project will be made available to the Government, or to such entity as provided in the Project, and will be furnished and received (i) in accordance with relevant decisions of the Governing Bodies of FAO, and with its constitutional and budgetary provisions, and (ii) subject to the receipt by FAO of the necessary contribution from the Resource Partner. FAO will disburse the funds received from the Resource Partner in accordance with its regulations, rules and policies. All financial accounts and statements will be expressed in United States Dollars and will be subject exclusively to the internal and external auditing procedures laid down in the financial regulations, rules and directives of FAO.
3. FAO’s responsibilities regarding financial management and execution of the Project will be as stipulated in the Project Document. FAO may, in consultation with the Government, implement Project components through partners identified in accordance with FAO procedures. Such partners will have primary responsibility for delivering specific project outputs and activities to the Project in accordance with the partner’s rules and regulations, and subject to monitoring and oversight, including audit, by FAO.
4. Assistance under the Project provided directly by FAO, including technical assistance services and/or oversight and monitoring services, will be carried out in accordance with FAO regulations, rules and policies, including on recruitment, travel, salaries, and emoluments of national and international personnel recruited by FAO, procurement of services, supplies and equipment, and subcontracting. The candidacies of senior international technical staff for recruitment by FAO will be submitted to the Government for clearance following FAO procedures.
5. Equipment procured by FAO will remain the property of FAO for the duration of the Project. The Government will provide safe custody of such equipment, which is entrusted to it prior to the end of the Project. The ultimate destination of equipment procured under this Project will be decided by FAO in consultation with the Government and the Resource Partner.

**GOVERNMENT OBLIGATIONS**

1. With a view to the rapid and efficient execution of the Project, the Government shall grant to FAO, its staff, and all other persons performing services on behalf of FAO, the necessary facilities including:

i) the prompt issuance, free of charge, of any visas or permits required;

ii) any permits necessary for the importation and, where appropriate, the subsequent exportation, of equipment, materials and supplies required for use in connection with the Project and exemption from the payment of all customs duties or other levies or charges relating to such importation or exportation;

iii) exemption from the payment of any sales or other tax on local purchases of equipment, materials and supplies for use in connection with the project;

iv) any permits necessary for the importation of property belonging to and intended for the personal use of FAO staff or of other persons performing services on behalf of FAO, and for the subsequent exportation of such property;

v) prompt customs clearance of the equipment, materials, supplies and property referred to in subparagraphs (ii) and (iv) above.

1. The Government will apply to FAO, its property, funds and assets, its officials and all the persons performing services on its behalf in connection with the Project: (i) the provisions of the Convention on Privileges and Immunities of the Specialized Agencies; and (ii) the United Nations currency exchange rate. The persons performing services on behalf of FAO will include any organization, firm or other entity, which FAO may designate to take part in the execution of the Project.
2. The Government will be responsible for dealing with any claims which may be brought by third parties against FAO, its personnel or other persons performing services on its behalf, in connection with the Project, and will hold them harmless in respect to any claim or liability arising in connection with the Project, except when it is agreed by FAO and the Government that such claims arise from gross negligence or wilful misconduct of such persons.
3. The Government will be responsible for the recruitment, salaries, emoluments and social security measures of its own national staff assigned to the project. The Government will also provide, as and when required for the Project, the facilities and supplies indicated in the Project Document. The Government will grant FAO staff, the Resource Partner and persons acting on their behalf, access to the Project offices and sites and to any material or documentation relating to the Project, and will provide any relevant information to such staff or persons.

**REPORTING AND EVALUATION**

1. FAO will report to the Government and to the Resource Partner as scheduled in the Project Document.
2. The Government will agree to the dissemination by FAO of information such as Project descriptions and objectives and results, for the purpose of informing or educating the public. Patent rights, copyright, and any other intellectual property rights over any material or discoveries resulting from FAO assistance under this Project will belong to FAO. FAO hereby grants to the Government a non-exclusive royalty-free license to use, publish, translate and distribute, privately or publicly, any such material or discoveries within the country for non-commercial purposes. In accordance with requirements of some Resource Partners, FAO reserves the right to place information and reports in the public domain.
3. The Project will be subject to independent evaluation according to the arrangements agreed between the Government, the Resource Partner and FAO. The evaluation report will be publicly accessible, in accordance with the applicable policies, along with the Management Response. FAO is authorized to prepare a brief summary of the report for the purpose of broad dissemination of its main findings, issues, lessons and recommendations as well as to make judicious use of the report as an input to evaluation synthesis studies.

**FINAL PROVISIONS**

1. Any dispute or controversy arising out of or in connection with the Project or this Agreement will be amicably settled through consultations, or through such other means as agreed between the Government and FAO.
2. Nothing in or related to any provision in this Agreement or document or activity of the Project shall be deemed (i) a waiver of the privileges and immunities of FAO; (ii) the acceptance by FAO of the applicability of the laws of any country to FAO, and: (iii) the acceptance by FAO of the jurisdiction of the courts of any country over disputes arising from assistance activities under the Project.
3. This Agreement may be amended or terminated by mutual written consent. Termination will take effect sixty days after receipt by either party of written notice from the other party. In the event of termination, the obligations assumed by the parties under this Agreement will survive its termination to the extent necessary to permit the orderly conclusion of activities, and the withdrawal of personnel, funds and property of FAO.
4. This Agreement will enter into force upon signature by the duly authorized representatives of both parties.

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39. For all conversions Euro to USD the following exchange rate has been used: 1.1641 [↑](#footnote-ref-40)
40. Throughout the Project Document, the term practitioners include farmers applying agroecological practices on the ground as well as CBOs and NGOs supporting the adoption of agroecological practices. When a specific group of practitioners is referred to, it will be specified, e.g. farmers practitioners. [↑](#footnote-ref-41)
41. The Economic Community of West African States (ECOWAS) is called Communauté Economique des Etats de l’Afrique de l’Ouest (CEDEAO) in French. [↑](#footnote-ref-42)
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45. FAO’s [10 elements](http://www.fao.org/agroecology/knowledge/10-elements/en/) have been derived from the key literature and multi-stakeholder dialogue on agroecology. They are: efficiency; diversity; synergies; balance/regulation; recycling; co-creation of knowledge; human and social value; circular economy; culture and food traditions; land and natural resources governance. [↑](#footnote-ref-46)
46. FAO’s approach to agroecology has been developed within the [Save and Grow](http://www.fao.org/ag/save-and-grow/) and [Sustainable Food and Agriculture](http://www.fao.org/sustainability/en/) frameworks. At the regional level, FAO’s work on agroecology has been taken place in the context of Regional Initiatives on [Family farming and inclusive food systems for sustainable rural development](http://www.fao.org/americas/perspectivas/agricultura-familiar/en/) in Latin America and the Caribbean, [Sustainable production intensification and value chain development](http://www.fao.org/africa/perspectives/agricultural-landscapes-africa/en/) in Africa, and Asia and the Pacific’s [Regional Rice Initiative](http://www.fao.org/asiapacific/perspectives/regional-rice/en/), including through [Farmer Field School](http://www.fao.org/farmer-field-schools/en/) interventions. [↑](#footnote-ref-47)
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51. External interns will be appointed for six months while national interns will be appointed for three months because socio-economic studies require more desktop-based research than technical parameters. [↑](#footnote-ref-52)
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60. Institut de l'Environnement et Recherches Agricoles [↑](#footnote-ref-61)
61. Institut Sénégalais de Recherche Agronomique [↑](#footnote-ref-62)
62. Laboratoire National de Recherches sur les Productions Végétales [↑](#footnote-ref-63)
63. Compliance Reviews following complaints related to the Organization’s environmental and social standards: <http://www.fao.org/aud/42564-03173af392b352dc16b6cec72fa7ab27f.pdf> [↑](#footnote-ref-64)
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66. *Mahila Kisan Sashaktikaran* Program (MKSP) [↑](#footnote-ref-67)
67. However, it important to notice that it also promotes the development of industrial agriculture, agricultural intensification and the use of modern agricultural technologies. [↑](#footnote-ref-68)
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85. To support strategic planning, the results matrix and the workplan and budget describe the entire chain of inputs, activities, outputs, outcomes and strategic goals. It provides an effective and transparent linkage between means and ends. [↑](#footnote-ref-86)
86. The Project objective is the medium-term result we want to achieve by the end of the project. What change do we reasonably expect we can achieve by the end of the project, if the component outcomes are achieved? Note: the project objective is not a simple aggregation or reformulation of the Component Outcomes. [↑](#footnote-ref-87)
87. Define one or two outcomes per component. [↑](#footnote-ref-88)
88. For more information, see: <http://intranet.fao.org/fileadmin/user_upload/osp/risk/BeginnersGuideRisk-Dec2013.pdf> [↑](#footnote-ref-89)