IFAD
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# Stock-take report on agroecology in IFAD operations: An integrated approach to sustainable food systems

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# Stock-take report on agroecology in IFAD operations:
## An integrated approach to sustainable food systems

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# Abbreviations and acronyms

| | |
|---|---|
| AE | Agroecology |
| AMD | Project for Adaption to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh Provinces |
| APR | Asia and the Pacific Region |
| ASAP | Adaptation for Smallholder Agriculture Programme |
| ANR | Assisted Natural Regeneration |
| BIRDP | Butana Integrated Rural Development Project |
| CBINReMP | Community-based Integrated Natural Resources Management Project |
| CFS | Committee on World Food Security |
| CSA | Community Supported Agriculture |
| CRM | Community Resources Management |
| EAF | Ecosystem Approach to Fisheries |
| ESA | East and Southern Africa |
| FAO | Food and Agriculture Organization of the United Nations |
| FAPP | Fiji Agricultural Partnerships |
| FFS | Farmer Field Schools |
| GEF | Global Environment Facility |
| GHG | Greenhouse Gas |
| HLPE | High Level Panel of Experts on Food Security and Nutrition |
| IFAD | International Fund for Agricultural Development |
| IFS | Integrated Farming Systems |
| ILRI | International Livestock Research Institute |
| IP | Indigenous Peoples |
| IPM | Integrated Pest Management |
| LAC | Latin America and the Caribbean |
| LMAPRP | Qinghai Liupan Mountain Area Poverty Reduction Project |
| M&E | Monitoring and evaluation |
| NEMA | National Agricultural Land and Water Management Development |
| NEN | Near East, North Africa and Europe |
| NRM | Natural Resources Management |
| PAPSFRA | Adapted Rural Financial Services Development Project |
| PGS | Participatory Guarantee Systems |
| PSA | Rural Sustainable Development Project in the Semi-arid Region of Bahia |
| PMI | Sustainable Production, Markets and Institutions Division |
| ProDAF | Family Farming Development Programme in Maradi, Tahoua and Zinder Regions |
| PROCASE | Cariri and Seridó Sustainable Development Project |
| SDGs | Sustainable Development Goals |
| SUSTAIN | Supporting Small-scale Traditional Rainfed Producers in Sinnar State |
| WCA | West and Central Africa |

# Executive summary

The world is struggling to achieve Sustainable Development Goal (SDG) 2 on Zero Hunger, with the number of food insecure people in the world increasing since 2015. As highlighted by the 2020 report on the State of the Food and Nutrition in the World (SOFI), an estimated 3 billion people cannot afford a healthy and diversified diet. Combined with the urgency of meeting SDG 2, addressing the increasing challenges of climate change, biodiversity loss, ecosystem fragility and land degradation requires a bold paradigm shift to trigger a transition to sustainable food systems. Small-scale producers must be at the core of this transition as they play a crucial dual role in food systems. They are both food providers and consumers in need of access to a diversity of affordable foods for their families.

One promising approach to achieving food systems transformation is through the adoption of agroecology, which holistically addresses issues related to food and agricultural production. This approach is increasingly recognized by governments, United Nations agencies and intergovernmental bodies, such as the Committee on World Food Security (CFS), private sector actors and importantly, by producer organizations including family farmers, peasants and Indigenous Peoples.

Agroecology is a transdisciplinary approach that combines traditional knowledge with scientific innovation. It integrates ecological, economic and societal development components to address the three pillars of sustainability. It recognizes the dual role and strengthens the agency of small-scale producers in food systems. It reconnects producers and consumers by supporting short food circuits to deliver healthy, nutritious and affordable food for all. It empowers and creates opportunities for women and youth. Defined by the 10 Elements of Agroecology adopted by the Food and Agriculture Organization of the United Nations' (FAO) Council in 2019, agroecological approaches guide the transition to sustainable food systems by taking into account the importance of: experimental learning and co-creation of knowledge; sustainable agricultural production based on ecological farming principles, including recycling and efficient use of resources and the integration of various crop and animal varieties in diversified farming systems; transformation and commercialization based on recycling and circular economy; responsible territorial governance and multi-stakeholder policy dialogues; and the role of women and youth in sustainable food systems.

## The IFAD stock-take on agroecology

This report presents the results of the International Fund for Agricultural Development's (IFAD) stock-take on agroecology, an outcome of IFAD's engagement in the multi-agency Scaling Up Agroecology Initiative launched in 2018. The report assesses to what degree IFAD is supporting agroecology throughout its in-country portfolio across the five IFAD regions to the benefit of small-scale producers and sustainable food systems. It also identifies gaps and opportunities for scaling up and scaling out agroecology and provides recommendations for moving forward.

The study is based on a systematic desk review, validated by the IFAD country teams, of all 207 IFAD-supported projects completing in 2018-2023 across the five IFAD regions. The project sample includes 60 projects in Asia and the Pacific (APR); 42 in East and Southern Africa (ESA); 35 in Latin America and the Caribbean (LAC); 36 in Near East, North Africa and Europe (NEN); and 34 in West and Central Africa (WCA). Data analysis was based on IFAD's Agroecology Framework developed to understand the adoption of agroecology in IFAD-supported projects.

Inspired by FAO's 10 Elements of Agroecology, the IFAD Agroecology Framework defines agroecology-relevant interventions through 33 activity groups operating at four levels typical of IFAD co-funded projects, namely: (i) farm level agroecological practices; (ii) landscape level natural resource governance, community learning and adoption of nature-based solutions to sustain and enhance ecosystem services and secure equitable access to resources for vulnerable groups; (iii) market level support for value addition and innovations in connecting small-scale producers and consumers around shared values of sustainable and healthy food; and (iv) policy level instruments and services enabling agroecology and sustainable food systems (for detailed activity groups see annex 1).

Further, to distinguish agroecology-based projects from those promoting good natural resource management practices but without the integrated agroecological approach to farming systems, the framework defines three key elements which need to be promoted at farm and/or landscape level for a project to be identified as agroecology-based: (i) increased resource use efficiency to reduce and/or substitute external inputs; (ii) recycling of water, nutrients, biomass and energy; and (iii) diversification and integration of different farming sectors (various crops and/or animals) for high levels of biodiversity. The promotion (or not) of these three key elements of agroecology at farm and/or landscape level determines the final classification of the projects as entirely, partially or non-supporting of agroecology. Finally, the framework considers to what extent the different types of projects support IFAD's four mainstreaming priorities (gender, climate change, nutrition and youth) and Indigenous Peoples.

For each IFAD region, the stock-take quantifies support for agroecology, by identifying the number of projects entirely or partially applying agroecological approaches, and determines the type of agroecological activities and practices supported. The assessment draws on the review of project design reports, mid-term reviews and completion reports, based on availability and the implementation status of the project. The data drawn is recorded in a database providing quantitative and qualitative information, including details on interventions across the 33 agroecology activity groups and four levels supporting agroecological transition.

## Results and recommendations for scaling up agroecology in IFAD

**Approximately 13 per cent of the 207 projects sampled across the five IFAD regions entirely apply agroecology, while another 47 per cent partially apply agroecological practices.** The remaining 40 per cent of projects are not based on agroecology. However, 42 per cent of these do not address crop, livestock and aquaculture production. Thus, **only 23 per cent of the IFAD projects reviewed that support agricultural and livestock production are not promoting agroecology-related practices.** This shows IFAD's solid grounding and experience in supporting governments, small-scale producers and their communities in developing integrated agroecological farming systems. It also shows a demand for this type of support from IFAD's development partners.

**RECOMMENDATION:** Further develop the framework for agroecology (e.g., in coastal fisheries in collaboration with FAO, and work with other partners interested in refining the framework in relation to pastoral production systems).

**Agroecology strongly contributes to IFAD's mainstreaming priorities (gender, climate change, nutrition and youth) and Indigenous Peoples.** When comparing the four categories of projects in relation to IFAD's priorities, more than 89 per cent of all projects address gender – IFAD's oldest mainstreaming priority area. However, for the newer priority areas, climate change, nutrition and youth, Agroecology (AE) based projects are clearly early adopters compared to non-AE projects. Nutrition is addressed in 92 per cent of fully AE projects, 55-60 per cent of partially AE projects and 20 per cent of non-AE projects; climate change in 96 per cent of fully AE projects, 60-83 per cent of partially AE projects and 18 per cent of non-AE projects; youth in 78-81 per cent of AE-related projects (fully and partially AE) and 59 per cent of non-AE projects. Indigenous Peoples are also targeted in 62 per cent of AE-related projects, compared to the 29 per cent of non-AE projects.

**RECOMMENDATION:** Consider agroecological approaches in the design of projects aimed at promoting and strengthening diversified and integrated production and commercialization systems with Indigenous Peoples (learning from indigenous knowledge on agroecological practices) and populations highly vulnerable to climate change and nutrition insecurity. The main objective would be to stabilize outputs and incomes and increase the production and availability of a diversity of foods accessible to low-income families.

**The assessment shows that AE-related projects cover different agroecological zones in a geographically well-distributed manner, reflecting the flexibility and relevance of agroecological farming systems in various contexts.** This confirms that agroecology offers a broad range of practices that are applicable to various local climatic and landscape conditions, and to different types of soils and availability of natural resources.

**RECOMMENDATION:** Conduct qualitative studies on the types of agroecological practices adapted to specific agroecological zones, with the purpose of identifying effective strategies to cope with the climatic risks and challenges, and food security and nutrition gaps, characterizing particular contexts.

**Within the 13 per cent of AE-based projects in the sample, there is wide support for different agroecological practices at farm and landscape levels. However, these projects have limited activities supporting the commercialization and marketing of agroecological products – despite some projects showing interesting market innovations.** Agroecological market innovations seek to increase the availability of diverse, affordable, safe, healthy and locally produced foods, and allocate greater value to agroecological producers and the foods they produce. Market innovation gaps were shown to limit the projects' contributions to sustainable food systems development. **Even more limited support is provided for the more systemic enabler of up-scaling agroecology by improving policies, services and instruments as part of the transition to sustainable food systems.** However, IFAD is well placed to support addressing some of the higher-level systemic barriers for small-scale producers' transition to agroecology production and commercialization and increment their contribution to sustainable food systems and SDG 2.

**RECOMMENDATION:** Document the lessons learned from the one third of IFAD AE-based projects investing in innovative approaches to organize supply and demand and connect small-scale agroecological producers with food markets and consumers and provide guidelines on best practices and innovative ways that IFAD projects can increase support for such approaches.

**RECOMMENDATION:** Develop and apply results monitoring instruments to evidence theories of change, impacts and benefits of agroecological farming and commercialization systems (e.g. income generation, resilience, food security and diverse healthy diets, empowerment and agency of women, youth and vulnerable groups, sustainability of ecosystem services, biodiversity conservation).

Document effective investment practices and enabling services for institutionalization and scaling up. Document lessons learned from IFAD AE-based projects investing in multi-stakeholder territorial platforms, where small-scale producers, women, youth and Indigenous Peoples are meaningfully engaged in discussing and finding solutions to systemic barriers for agroecological production and food systems transition.

Provide examples of best practices and innovative ways IFAD projects can increase support for such territorial platforms.

Participate in partnerships with governments and other partners supporting the development of comprehensive policy frameworks and/or adjustments and reform of key regulations enabling agroecology and sustainable food systems transition.

To understand projects' contributions to sustainable food systems, ratings of selected performance indicators were compared in a sub-sample of all IFAD projects completed between 2018 and 2020. **The indicators for gender equality and women's empowerment, food security, adaptation to climate change, environment and natural resource management, human and social capital, sustainability and effectiveness all have higher ratings in the 10 fully AE-based projects.** This shows the comparative advantage of an integrated agroecological approach in achieving IFAD's development effectiveness targets.

**RECOMMENDATION:** Increase the adoption of integrated and holistic approaches to sustainable food systems transition, such as agroecology, in IFAD-supported projects and programs; improve project sustainability and development effectiveness by focusing on key activities supporting community ownership, responsible governance and enabling policy environments.

Reviewing all cofinancing sources leveraged for the projects sampled, the total investment in fully AE and partially AE projects is US$8.25 billion, equivalent to 53 per cent of total financing analysed (US$15.5 billion). With 60 per cent of the sample being entirely AE and partially AE projects, these figures show that **non-AE projects receive more financing than projects supporting agroecology. The Adaptation for Smallholder Agriculture Programme (ASAP) and the Global Environment Facility (GEF) financing have been instrumental in leveraging funds for agroecological practices** even though these sources only constitute a small proportion of total project financing. Around 87 per cent of projects with ASAP financing and 90 per cent of projects with GEF financing are entirely or partially promoting agroecology. In general, **private sector cofinancing is very limited for all projects in the sample, with 0 per cent support for AE-based projects and 4 per cent for non-AE projects.** Even though private sector cofinancing may not always be properly captured in project reports, this still reveals a clear challenge and an opportunity to consider for the future.

**RECOMMENDATIONS:** Under IFAD's new Private Sector Engagement Strategy and in relation to sovereign investment projects, IFAD could seek partnerships with private impact investors and identify business cases and related financing instruments best suited for co-investing with agroecological entrepreneurs, working with small-scale producers in aggregation and commercialization.

Explore impact investors' mutual interest in improving and applying results-based investment tools to assess and monitor impacts of investment contributions to sustainable food systems with the aim of mutual learning, encouragement and scaling up of investments.

When considering the distribution of project types within each region, distribution was near equivalent to that of the total project sample (13 per cent fully AE, 47 per cent partially AE and 40 per cent non-AE projects). While **LAC shows higher support for agroecology (23 per cent of projects are entirely AE, 46 per cent partially AE), this is mainly attributed to IFAD's portfolio in Brazil.**

**RECOMMENDATION:** Based on this stock-take and the upcoming case studies report and lessons learned note, develop a guidance note for the design and implementation of agroecological approaches in investment projects.

Facilitate exchange and learning between regions among IFAD staff and government, non-governmental organizations (NGOs), community and private sector development partners.

# 1. Introduction

## 1.1 Background of the study

Current food and agricultural systems are at a crossroads. The increasing demand for safe, healthy and nutritious food, combined with a growing global population and the escalating impact of climate change and disasters, are challenging the current paradigm of food production and consumption. In addition, the failure to meet SDG 2 on Zero Hunger and provide access to healthy diets for all is of severe concern. According to the 2020 report on the State of the Food Security and Nutrition in the World, an estimated 3 billion people, including many poor rural families and people working in the agrifood sector, could not afford a healthy and diversified diet in 2017 (FAO, IFAD, UNICEF, WFP and WHO, 2020). A number of other key global indicators linked to the environmental impacts of food systems are also moving in the wrong direction, increasing the vulnerability of small-scale producers and food systems themselves. As a result, there is a growing recognition of the need to transform food production and consumption patterns and develop food systems in which farmers can build resilience to climate change while making nutritious food available and affordable for all without compromising natural resources and ecosystems.

Over recent years, agroecology has moved up on the global agenda as one of the innovative approaches that can lead to transformational changes in current agricultural production and food systems, and its benefits have been highlighted in several key high-level publications and policy processes.[1] Private sector actors investing in the agrifood sector are also recognizing the importance of agroecology in sustainable and responsible investments, as they "aim to accelerate the transition to agroecology as a core solution to the future of food" (Global Alliance for the Future of Food, n.d.).

The term agroecology was first used by scientists in the 1920s to refer to the application of ecological principles to agriculture, in which diversity, recycling and efficient use of resources in farming systems are central. Agroecological systems are created by integrating a diversity of crops and animals that allows for recycling of nutrients, water, biomass and energy, and significantly reduces or avoids the use of synthetic pesticides, fertilizers, antibiotics and growth promotors. The costs of these inputs are thus reduced, while the need and cost for labour may increase, creating employment opportunities. Adverse impacts on human and environmental health are avoided and benefits for biodiversity and ecosystem services are maximized.



1 E.g. indicators to achieve the Sustainable Development Goals (SDGs), the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification (UNCCD), and the Committee for World Food Security (CFS).

In the 1980s, a broader set of actors became involved in agroecology. Defined as a science, a set of practices and a social movement, agroecology evolved into a more holistic approach to developing sustainable food systems (Wezel et al., 2009) (box 1). Agroecology came to include not only natural resource management, regenerative and recycling farming practices, but also practices of co-creation and sharing within communities, and social justice in the production and commercialization of food. In 2003, Gliessman et al. famously defined agroecology as the integration of ecology, economy and society within food systems (Gliessman et al., 2003).[2]

**BOX 1:**

**Agroecological transition to sustainable food systems**

The agroecological approach lays out a transition pathway towards sustainable food systems. As such, it is not a dogmatic approach requiring full transformation by participating producers and other actors in year one. Gliessman (2007),[3] taken up by the CSF commissioned HLPE (2019),[4] conceptualizes five levels of agroecological transition. Level 1 (increase efficiency of input use and reduce use of costly, scarce or environmentally damaging inputs), Level 2 (substitute conventional inputs and practices with agroecological alternatives), and Level 3 (redesign agroecosystems) focus on improving agroecosystems at the farm and landscape levels. Level 4 (reconnect consumers and producers through the development of alternative food networks) and Level 5 (build new food systems based on participation, localness, fairness and justice) focus on rethinking value addition and commercialization to improve the functioning of food systems and ultimately Level 5 implies changing societal value systems towards sustainability and ethical thinking. However, the starting point for transition depends on a given context, and transition does not necessarily occur in a sequenced order from 1 to 5, as interventions and improvements may happen at different levels simultaneously.

Adopted by the FAO Council in December 2019, the 10 Elements of Agroecology[5] present a comprehensive analytical framework to guide the transition to sustainable food and agriculture systems by providing holistic and long-term solutions. The 10 Elements are: (i) diversity; (ii) synergies; (iii) efficiency; (iv) resilience; (v) recycling; (vi) co-creation and sharing of knowledge; (vii) human and social values; (viii) culture and food traditions; (ix) responsible governance; and (x) circular and solidarity economy. The elements are interlinked and interdependent as shown in figure 1.

2 See the complete list of definitions of agroecology: https://www.agroecology-pool.org/agroecology/.

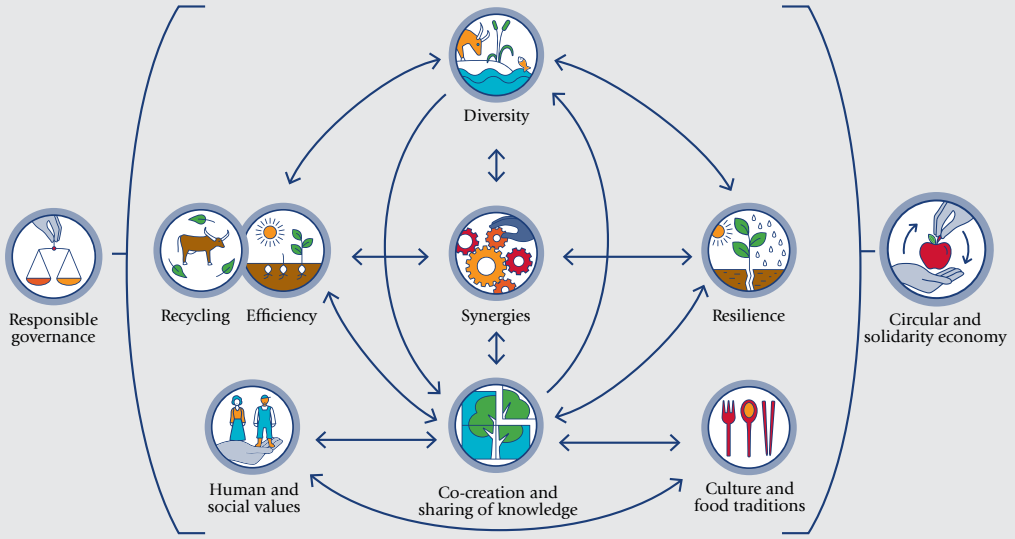
3 Gliessman S. R., *Agroecology: The ecology of sustainable food systems*, 2nd edition (Boca Roton, USA: CRC Press, 2007).

4 HLPE, *Agroecology and Other Innovative Approaches for sustainable Agriculture and Food systems that Enhance Food Security and Nutrition* (Rome: High Level Panel of Experts on Food Security and Nutrition of the Committee of World Food Security, 2019).

5 The 10 Elements have been elaborated following the international and regional symposiums on agroecology: http://www.fao.org/3/i9037en/i9037en.pdf.

**FIGURE 1:**

**The 10 Elements of Agroecology and their interaction (modified from FAO 2018)**




(Source: FAO. 2018. The 10 Elements of Agroecology: guiding the transition to sustainable food and agricultural systems. Rome: Food and Agriculture Organization of the United Nations. http://www.fao.org/3/i9037en/i9037en.pdf)

A transition to sustainable food systems is meant to address the three pillars of sustainability: social (including the right to food, participation, empowerment and just governance of access to resources and distribution of benefits), economic (including the affordability of healthy food, profitability and income stability for small-scale producers, and investment decisions based on true cost analysis,[6] factoring in currently hidden environmental and social costs and benefits alongside direct economic costs and benefits), and environmental (including conservation and sustainable use of biodiversity and ecosystem services). Small-scale producers are vital in this transition and play a dual role: as producers, small-scale farmers have the potential to increase the availability of diverse, sustainably produced, safe, healthy and affordable food supplying local and national markets; as consumers, small-scale producers and their families often remain unable to access healthy and diversified diets. This dual role is also central in IFAD's upcoming Rural Development Report on Food System Transformations.[7]

6 E.g. True Cost Accounting tools factor in the environmental, social and economic costs of a product, including all its externalities.

7 This year's Rural Development Report, produced by IFAD and Wageningen University & Research (WUR), will focus on food systems transformation for rural prosperity and will be published in the second semester of 2021.

As a holistic food systems approach, agroecology supports small-scale producers by meeting their needs and acknowledging their crucial role in sustainable food systems. Agroecology combines farmers' traditional knowledge with scientific innovation to increase their resilience capacities by reducing the costs of and dependency on external inputs, improving the fertility of soils, reducing soil erosion and water loss, and increasing functional diversity (both for livestock and for crops), among others. These practices create resilience by spreading risk and improving water and nutrient buffer capacity within a given system. At the same time, agroecological systems can contribute to biodiversity conservation and reverse land degradation. Agroecology can also reduce post-harvest losses by investing in storage and aggregation points, shortening value chains and creating direct connections between producers and consumers, when relevant and possible, and improving access to local markets (Janousek et al., 2018).

Agroecology emphasizes the importance of farmer empowerment, including peasants, Indigenous Peoples, fisher folks and pastoralists. It also acknowledges the role of women and youth in agroecology-based production, marketing clusters and value chains.[8] Farmers are considered more than just producers: their capacity to engage in co-creation of knowledge, innovation and adaptation and their cultural values and social positions are intrinsically related to the type of food they produce.

## 1.2 Study objectives

IFAD is participating in the multi-agency Scaling Up Agroecology Initiative – a process initiated by FAO in 2018 in conjunction with its Second International Symposium on Agroecology: Scaling up Agroecology to achieve the Sustainable Development Goals.[9] Other participants include the World Food Programme (WFP), the United Nations Secretariat of the Convention on Biological Diversity (SCBD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Bank, among others. The Initiative identifies three main areas of work: (i) knowledge and innovation for local problems; (ii) policy processes for transformation of food and agricultural systems; and (iii) building connections and partnerships and integrating agroecology into the United Nations system for the Sustainable Development Goals (SDGs). The first agreed action under the Initiative was for all agencies to undertake a stock-take on their work of agroecology.

This study represents IFAD's stock-take on agroecology. It is also a response to the growing interest internally and among IFAD's partners in having a systematic overview of what IFAD is doing in support of agroecology. Both as an approach to sustainable food and farming systems that works to the benefit of small-scale producers, and to determine what can be scaled and the opportunities to engage further.

8 This is aligned with the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP), https://digitallibrary.un.org/record/1650694?ln=en#record-files-collapse-header.

9 See http://www.fao.org/about/meetings/second-international-agroecology-symposium/en/.

This study covers the results of a desk review taking stock of support for agroecological interventions in IFAD's recent projects. More specifically, the study aims at the following:

1. Delineate a framework for understanding and operationalizing agroecology in IFAD's investment projects;
2. Based on the framework, quantify the support for agroecology-related activities in recent IFAD investment projects and quantify the projects that are entirely or partially based on agroecological approaches;
3. Present key findings on IFAD's current support for agroecology that can enhance IFAD's contribution to knowledge events and networks on sustainable food and farming systems, as well as IFAD's corporate strategies and documents; and
4. Identify gaps and opportunities for scaling up agroecology, including in IFAD operations, to support the resilience of small-scale producers, their families and production systems, as well as their contribution to sustainable food systems transition.

This study represents a basis for furthering IFAD's knowledge work on agroecology. The study is a precursor to other knowledge work: (i) identifying best practices and lessons learned by conducting a series of case studies on projects adopting the agroecological approach to analyse the relevance of agroecology for small-scale producers in different socio-economic and environmental/climatic contexts; and (ii) providing guidance on how to improve the integration of agroecological elements in project design and implementation by developing concrete guidance notes.

The introductory section 1 is followed by section 2, which defines the framework and methodology for the assessment. Section 3 presents the data analysis including: the distribution of agroecological and non-agroecological projects in the sample; the extent to which the different project types incorporate IFAD's four mainstreaming priorities (gender, nutrition, climate change and youth) and work with Indigenous Peoples; the incorporation of different agroecology-related activity groups; comparison of key performance indicators for finalized agroecology-based projects and non-agroecology projects; and the distribution of estimated financing amounts and sources in the analysed sample. Section 4 presents the findings on agroecology in each of the five IFAD regions. Section 5 provides final conclusions and recommendations.

# 2. Conceptual framework and methodology

## 2.1 The IFAD Agroecology Framework

The IFAD framework for understanding agroecology in its portfolio defines agroecology-relevant interventions and activity groups at four levels, typical of IFAD co-funded projects, namely: (i) farm-level agroecological practices; (ii) landscape-level natural resource governance, community learning and adoption of nature-based solutions to sustain and enhance ecosystem services and secure equitable access to resources for vulnerable groups; (iii) market-level support for agroecology-based value addition and innovations in connecting small-scale producers and consumers around shared values of sustainable and healthy food; and (iv) policy-level instruments and services enabling agroecology and sustainable food systems. The agroecology interventions and activity groups at the four levels (see table 1 and annex 1 for details) have been inspired by FAO's framework[10] and the 10 Elements of Agroecology and were further developed by IFAD experts using internal and external experiences.

In 2019, a preliminary phase of the stock-take piloted the framework on eight projects. The pilot concluded that too many projects would check one or more of the activity group boxes at one or more of the four levels relating to agroecological interventions. The resulting value of the information of the stock-take would therefore be low. As a result, a "traffic light" approach was added to the framework to distinguish projects with an agroecological approach going beyond the good natural resource management and social inclusion strategies inherent to most IFAD-supported projects. With this approach, three key elements need to be present at the farm and/or the landscape level for a project to qualify as agroecological:

- increasing resource use efficiency while reducing and/or substituting external inputs;
- recycling water, nutrients, biomass and/or energy; and
- diversifying and integrating different farming sectors (various crops and/or animals) with high levels of biodiversity to facilitate efficiency and recycling, spread risks, increase resilience and produce a greater variety of nutritious food.

These three key elements are fundamental and serve as the basis for many of the other 10 Elements of Agroecology. Resource use *Efficiency* and *Recycling* in highly diverse integrated farming systems create *Synergies* and *Resilience* (see figure 1). They are also the basis for *Circular and solidarity economie*s where waste is reduced throughout the production process, and small-scale producers are empowered by relying less on costly external inputs. Because of the knowledge and experimental learning or the landscape-level resource management required to implement *Efficiency*, *Recycling* and *Diversity*, these elements can further foster *Co-creation and sharing of knowledge*, *Responsible governance* and respect for *Human and social values*. Increasing diversity in farming systems also often leads to the integration of crop varieties and animal species that are part of local *Culture and food tradition*.



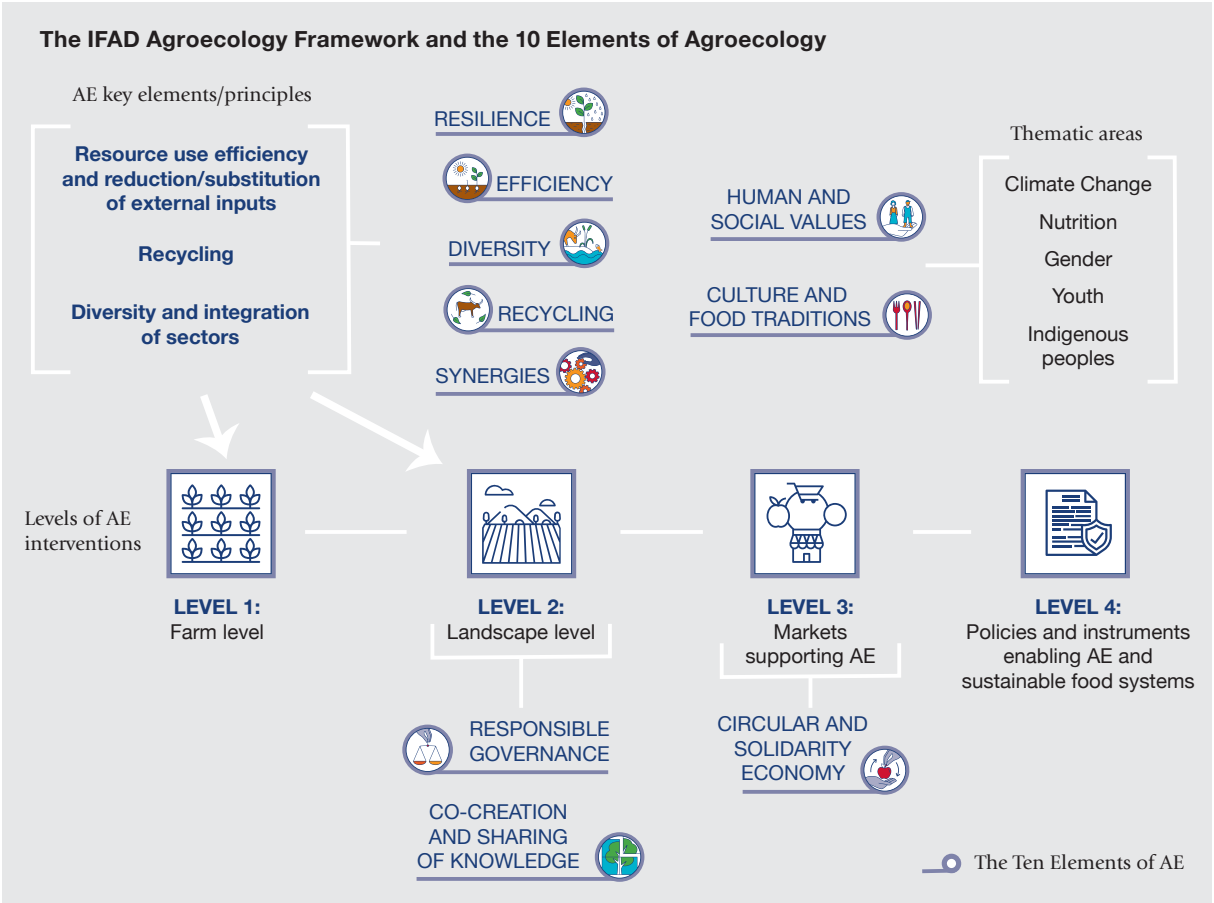
10 See http://www.fao.org/3/I9007EN/i9007en.pdf.

If a project promotes all three key elements of agroecology at the farm and/or landscape level, it is classified as entirely using an agroecological approach. It is then further reviewed to assess if it also includes agroecology-related activities at the market or policy levels. If a project supports two out of the three key elements, it is categorized as partially agroecological and is further reviewed, as explained in the next sections.

IFAD's four mainstreaming priorities (gender, climate change, nutrition and youth) and Indigenous Peoples are included in the framework as cross-cutting categories called "thematic areas". In general, all IFAD projects must mainstream gender and climate change, and 50 per cent of all IFAD11 projects need to be nutrition and youth sensitive.[11] By including these key priorities in the framework, the study aims at assessing whether IFAD projects supporting agroecology are also more prone to supporting these priorities.[12]

Figure 2 illustrates the IFAD Agroecology Framework using the three key elements as an entry point, the four levels at which the 33 activity groups are analysed, IFAD's four thematic areas and Indigenous Peoples as cross-cutting categories, and the framework's link to the 10 Elements of Agroecology.

**FIGURE 2:**




11 IFAD financing is implemented in three-year replenishment cycles upon which IFAD's Member States agree on priorities. IFAD11 and its priorities cover IFAD's financing and operations for the 2019-2021 period. See https://webapps.ifad.org/members/gc/41/docs/GC-41-L-3-Rev-1.pdf.

12 The thematic areas and Indigenous Peoples are further linked to the Elements of *Human and social values* and *Culture and food traditions*.

Table 1 below presents the agroecology activity groups, categorized under the four levels of interventions used to analyse the extent to which IFAD projects are supporting agroecology and identify gaps to engage further. A detailed description of each agroecology activity group used in the stock-take can be found in annex 1. This annex is a live document that will be updated as best practices and new innovative approaches emerge for agroecology and sustainable food systems that benefit small-scale producers and their communities. There is currently a total of 33 agroecology activity groups organized across the four levels.

**TABLE 1:**

**Agroecology activity groups**

| | |
|---|---|
|  LEVEL 1: Farm level | Water management and soil erosion control<br>Integrated soil fertility management<br>Integrated pest, disease and weed management<br>Farm animal welfare and nutrition management<br>Diversification and integration of sectors in crop-livestock-fish systems<br>Farm and household level renewable energy |
|  LEVEL 2: Landscape and community level | **Landscape land-use planning, governance and co-creation**<br>Participatory land use planning<br>Building/strengthening community institutions for natural resource governance<br>Community-owned research and learning agenda<br>Use of traditional knowledge<br>**Landscape and shared resource management**<br>Community and local seed systems<br>Community gardens and cultivation<br>Community rangeland/pasture and fodder management<br>Community forest and woodland management<br>Land and water management in farming landscapes<br>Weather monitoring for climate change adaptation actions<br>Community renewable energy |
|  LEVEL 3: Market level support for agroecology and sustainable food systems | **Value addition**<br>Food processing<br>Safe storage<br>Labelling and community-supported guarantee systems<br>**Access to markets**<br>Access to differentiated markets<br>Innovation organizing supply and demand<br>Infrastructure and physical spaces for farmers markets<br>Public procurement of agroecological produce |

LEVEL 4:
Policy level instruments and services enabling agroecology and sustainable food systems

| |
|---|
| **Enabling policies** |
| Participatory mechanism for policy dialogue<br>Institutional strengthening for formulation, implementation and M&E of agroecology-enabling policies and instruments |
| **Enabling regulations** |
| Food safety and nutrition<br>Agrochemicals and animal drugs<br>Seeds and plant genetic resources |
| **Enabling instruments and services** |
| Support to research and extension institutions for agroecology research and extension<br>Credit lines and insurance products<br>Incentive systems<br>Climate change and greenhouse gases (GHG) information systems and services |

## 2.2 Study approach and database design

The framework described in section 2.1 was applied to all IFAD-supported projects (financed by loan and grant resources) completed or to be completed in the 2018 to 2023 period. This sample covers 207 projects in all five IFAD regions: 60 in Asia and the Pacific (APR); 42 in East and Southern Africa (ESA); 35 in Latin America and the Caribbean (LAC); 36 in Near East, North Africa and Europe (NEN); and 34 in West and Central Africa (WCA). This sample allowed for a mix of coverage of recently designed projects as well as fully implemented projects to ensure that the stock-take reflects recent trends in designs (planned activities) as well as what has actually been implemented. The stock-take will be complemented by a series of qualitative case studies of projects entirely integrating the agroecological approach (still under preparation at the time of release of this report). The case studies will further analyse lessons learned and good practices for scaling up in future designs.

Drawing on the IFAD Agroecology Framework, a database was designed to undertake the quantitative and qualitative analysis presented in this report. The database is composed of the following sections:

**Project General Information**, including the region, country, title, ID, approval and closing dates, financing type, costs, number and type of beneficiaries, agroecological zone and sector orientation of the project (whether it is focusing on agriculture including crop/livestock/aquaculture, coastal fisheries or other sectors not including production);

**Project purpose and components**, including sub-components/activities;

**The three key elements of agroecology (resource use efficiency, recycling and integration of diversity)**, functioning as a "traffic light" to determine if a project is sufficiently AE-related to allow for further analysis using the four levels of agroecology;

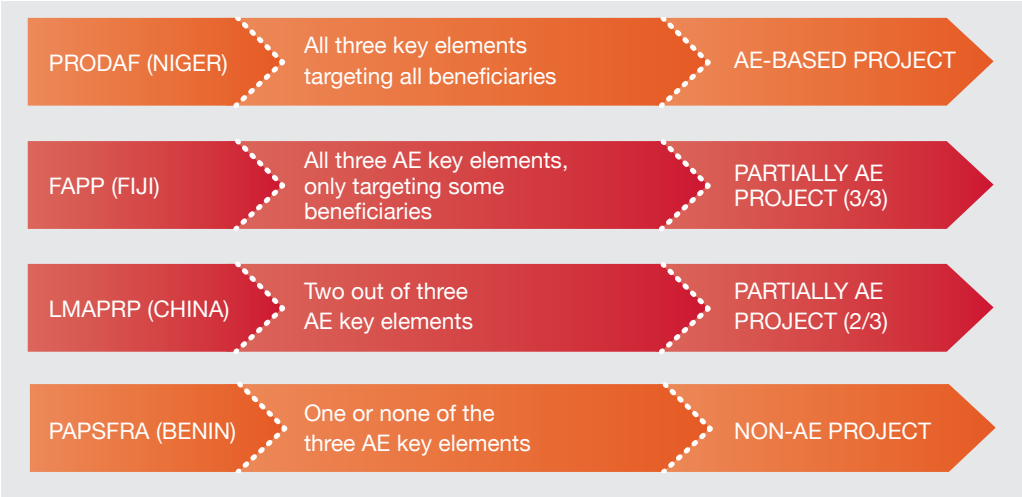
**The four levels of agroecology**, including activity clusters (when applicable), agroecology activity groups and specific interventions;

**IFAD's mainstreaming priorities**, namely gender, climate change, nutrition and youth, as well as Indigenous Peoples. In addition to representing IFAD's mainstreaming priorities, these thematic areas are all important within the 10 Elements of Agroecology;

**Project type**, the presence or absence of the three key elements of agroecology determines the classification of a project as:

- **AE-based:** all three elements are observed at farm and/or landscape level and involve all project beneficiaries and the whole project area;
- **Partially AE**, divided in two groups:
  - **Partially AE (3/3):** all three key agroecology elements are included but only implemented with part of the beneficiaries and/or project target area;
  - **Partially AE (2/3):** only two out of the three key agroecology elements are implemented; and
- **Non-AE:** one or none of the three key agroecology elements are observed at farm and/or landscape level.

The figure below shows examples of how some projects have been classified under the four project types using the three key elements of agroecology.




**General comments**, including details on the reason for project classification, and its relation to agroecology when a project is entirely or partially AE;

**Comments on the projects' contribution to the thematic areas**, including details on the activities supporting each thematic area; and

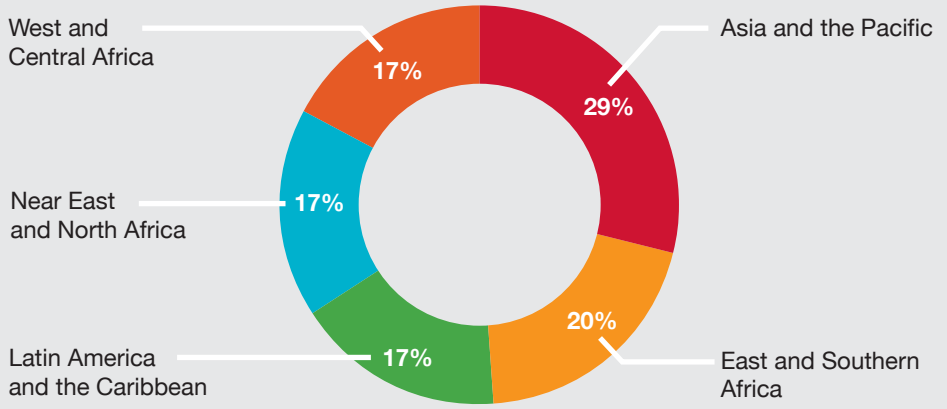
**Type of documents analysed**, depending on the phase that a given project has reached at the time of the desk review. These included design reports, supervision reports and mid-term and completion reports.

## 2.3 Sample and data collection

As mentioned in the previous sub-section, the study is based on the desk review of all 207 IFAD-supported investment projects completed or planned for completion between 2018 and 2023, distributed among the five IFAD regions (figure 3, N=207). The data drawn was recorded in the database described above, providing quantitative and qualitative information. This included details on interventions in any of the 33 agroecology activity groups supporting the agroecological transition of small-scale farming systems and contributing to the broader food system.

**FIGURE 3:**

**Distribution of projects by region in the project sample (N=207)**



## 2.4 Data analysis approach

Following data collection, the information was analysed, and findings were validated. Validation was based on feedback sought from country directors, country programme officers and other project team members on the classification of the projects, confirming whether or not the collected data reflected the reality of the projects' progress and achievements in terms of the implementation of agroecological practices. Results have been discussed and additional project documents, including supervision reports, were analysed when necessary.

The database designed provides: (i) a score of how many of the agroecology-relevant activity groups each project has integrated at each level; (ii) the total number of agroecology activity groups covered by each project; and (iii) the frequency of an activity group being supported by the projects in the sample. Analysing the frequency of use of a particular agroecology activity helps identify where IFAD projects are already strong and where there are gaps and opportunities to improve IFAD's approach to agroecology – including by seeking partnerships with other development partners. Conclusions and recommendations can also be drawn from the analysis to develop effective future strategies to promote agroecology in IFAD projects and to adjust specific components and/or activities in ongoing projects.

The main challenge faced during the review of documents, particularly of some design reports, was the limited level of detail provided on the type of agricultural practices and production methods used. While mid-term and completion reports often helped to compensate for these gaps, only a portion of projects have reached their mid-term or completion phase. Overcoming this challenge was mostly possible thanks to the feedback received from regional colleagues and project teams.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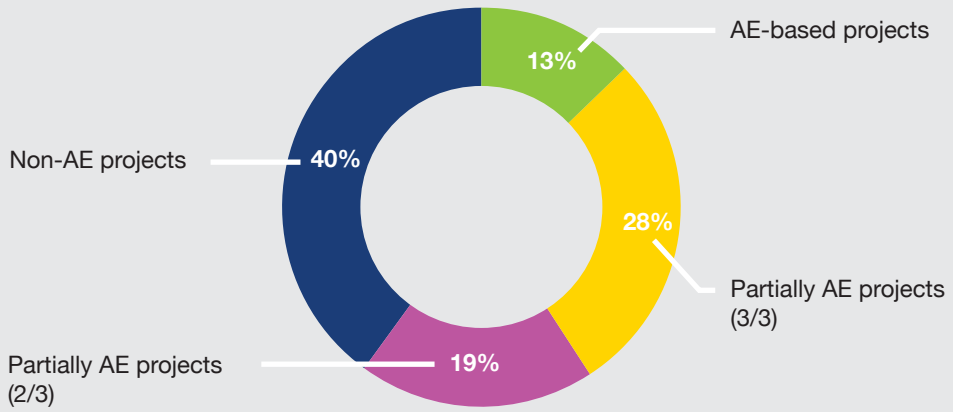
# 3. Data analysis and results

## 3.1 Distribution of projects by type

As shown in figure 4, out of the 207 projects in the sample across the five regions: (i) 13 per cent are entirely based on agroecological practices; (ii) 47 per cent are partially agroecological (28 per cent implementing all three key elements of agroecology but without involving all beneficiaries or target areas, and 19 per cent promoting two out of three key elements); and (iii) 40 per cent are not based on agroecology. This distribution shows that IFAD is already supporting agroecological approaches in most of its projects (60 per cent), but there is room for engaging more in scaling up agroecology. The partially AE group indicates there is an appetite and opportunity to do more to support small-scale producers in transitioning to agroecology in a significant portion of projects. Activities could therefore be adjusted in ongoing projects to further enhance an agroecological approach whenever relevant with participating small-scale producers.

**FIGURE 4:**

**Distribution of projects by type in the project sample (N=207)**




Interestingly, the key element of agroecology left out in two thirds of partially AE (2/3) projects is diversifying and integrating different farming sectors (high levels of agrobiodiversity of crops and/or animals). In the remaining one third of projects, the missing element is recycling. This is very much in line with the transition pathways laid out by Gliessman (2007) and the High Level Panel of Experts on Food Security and Nutrition (HLPE) (2019) (see box 1), stating that the first level of transition includes resource use efficiency, followed by recycling and redesign of farming systems to integrate greater crop and livestock diversity.

Some of the 40 per cent of projects classified as non-AE are promoting sustainable agricultural and natural resource management (NRM) practices. However, with only one or none of the agroecology key elements, they are generally not focusing on creating the synergies produced through recycling or the diversification and integration of sectors

specific to agroecological systems (e.g. the Murat River Watershed Rehabilitation Project in Turkey).[13] Another 36 per cent of the non-AE projects do not directly support activities in the crop/livestock/fish-aquaculture sectors but focus on other rural sectors, such as finance, marketing or infrastructure. A final 6 per cent of the non-AE projects invest in the coastal fisheries sector only, for which a different framework is needed as explained in box 2. If these are excluded, then only 23 per cent of all agricultural or aquaculture production projects sampled do not integrate at least two key agroecology elements.

**BOX 2:**

**The case of coastal fisheries**

The stock-take reviews five projects investing in coastal fisheries based on coastal marine ecosystems. Coastal fisheries are a different type of production system compared to crop/livestock/aquaculture production. It was determined that the Agroecology Framework developed for this stock-take is inadequate for the analysis of such systems, which would require consideration under a different set of activity groups.

The debate on how to apply agroecology to coastal fisheries is still ongoing and few references exist to understand agroecological coastal fisheries. However, a framework could likely be adapted from FAO's Ecosystem Approach to Fisheries (EAF), which draws from the FAO Code of Conduct for Responsible Fisheries (FAO 2009).

One project in the sample applying an ecosystem approach to fisheries is the Fisheries, Coastal Resources and Livelihoods Programme in the Philippines.[14] The project aims to (i) support fishing communities in adopting sustainable management of fishery and coastal resources to increase overall stocks, and (ii) support fishing households in diversifying their livelihood activities by applying an ecosystem approach to Community Resources Management (CRM). The general framework of the CRM follows the principles of the EAF, which considers the whole bay as one management unit, including its coastal, marine and land-based ecosystems.

The programme includes activities that protect both aquatic and coastal zone habitats, including mangroves, coral reefs and sea grasses. Contiguous municipalities work together to improve law enforcement and protect, rehabilitate and sustainably manage shared resources within the bays/gulfs. Moreover, project design pays careful attention to the risks of natural disasters and increased climatic variability.

## 3.2 Thematic areas

Supporting communities in applying agroecological practices to their farming and marketing systems also furthers several opportunities at the core of IFAD's poverty mandate, namely, social and economic inclusion and local community empowerment. The agroecological approach also provides opportunities to promote IFAD's thematic priority areas. Under the agroecological approach, farmers are active agents in collaborative learning and transition processes; gender equality and women's inclusion

13 See https://www.ifad.org/en/web/operations/-/project/1100001623.

14 See https://www.ifad.org/en/web/operations/-/project/1100001548.

in decision-making and income generation activities are central; youth are provided with opportunities to engage in developing innovations to optimize agroecological system efficiencies and connect producers and consumers; and Indigenous Peoples' rights are recognized, and traditional knowledge is valued and applied (box 3). As explained in the introduction, agroecology also has the potential to contribute to the food and nutrition security and climate resilience of small-scale producers and their families.

**BOX 3:**

**Examples of best agroecological practices engaging women and youth in IFAD-supported projects**

**WOMEN ENGAGED IN AGROECOLOGY – THE "AGROECOLOGICAL LOGBOOK"**

The Rural Sustainable Development Project in the Semi-arid Region of Bahia (PSA)[15] in Brazil is engaging women in using an "Agroecological Logbook"[16], a tool through which women can record, share and calculate the value of what they are producing, selling, exchanging, conserving and consuming from their agroecological gardens. The Logbook was developed by *Semear International*,[17] a programme created with IFAD support, to empower women through capacity building and co-creation of knowledge. This gender transformative approach is developing women's self-confidence and autonomy and changing their role in a male-dominated society. It helps make visible women's contribution to their families' income and food supply. As part of the project, women can come together in groups and discuss issues on agroecological production, commercialization, access to public policies, nutrition and the sustainable use of natural resources to enhance biodiversity, among others. They become aware of the importance of their work and monetary and non-monetary contribution to their community's economy.

The use of the logbooks also helps collect meaningful data on food security, social biodiversity, economic impacts, and sexual division of labour, and contributes to the M&E of projects.

**YOUTH ENGAGED IN AGROECOLOGY – THE YOUNG PROFESSIONAL PROGRAM**

The Butana Integrated Rural Development Project (BIRDP),[18] a recently completed IFAD-supported project in Sudan, promoted the Young Professional Program, which involves youth in the provision of technical advisory services to their own communities on issues around agroecology, including the transition to sustainable forest, rangeland and water management. About 747 young graduates, the majority of whom are young women, have been working as social organizers to revitalize productive economic activities in poor and remote communities. This project provided practical experiences to rural youth facing high unemployment and the choice of migrating to urban areas.

The Young Professional Program played a crucial role in the gender-transformative impacts of the project where rural women, supported by educated young women from their communities, felt empowered and motivated to participate in decision-making activities at both household and community levels. Supported by the project and the young facilitators, women also became active in women's community gardens and credit and saving groups. By starting small income-generating businesses and demonstrating tangible economic benefits, they are even inspiring men in their communities.

15 See https://www.ifad.org/en/web/operations/-/project/1100001674.

16 See https://www.ifad.org/en/web/latest/-/story/in-brazil-a-quiet-revolution-for-rural-women-makes-the-invisible-visible.

17 For more on Semear, see http://portalsemear.org.br/.

18 See https://www.ifad.org/en/web/operations/-/project/1100001332.

**FIGURE 5:**

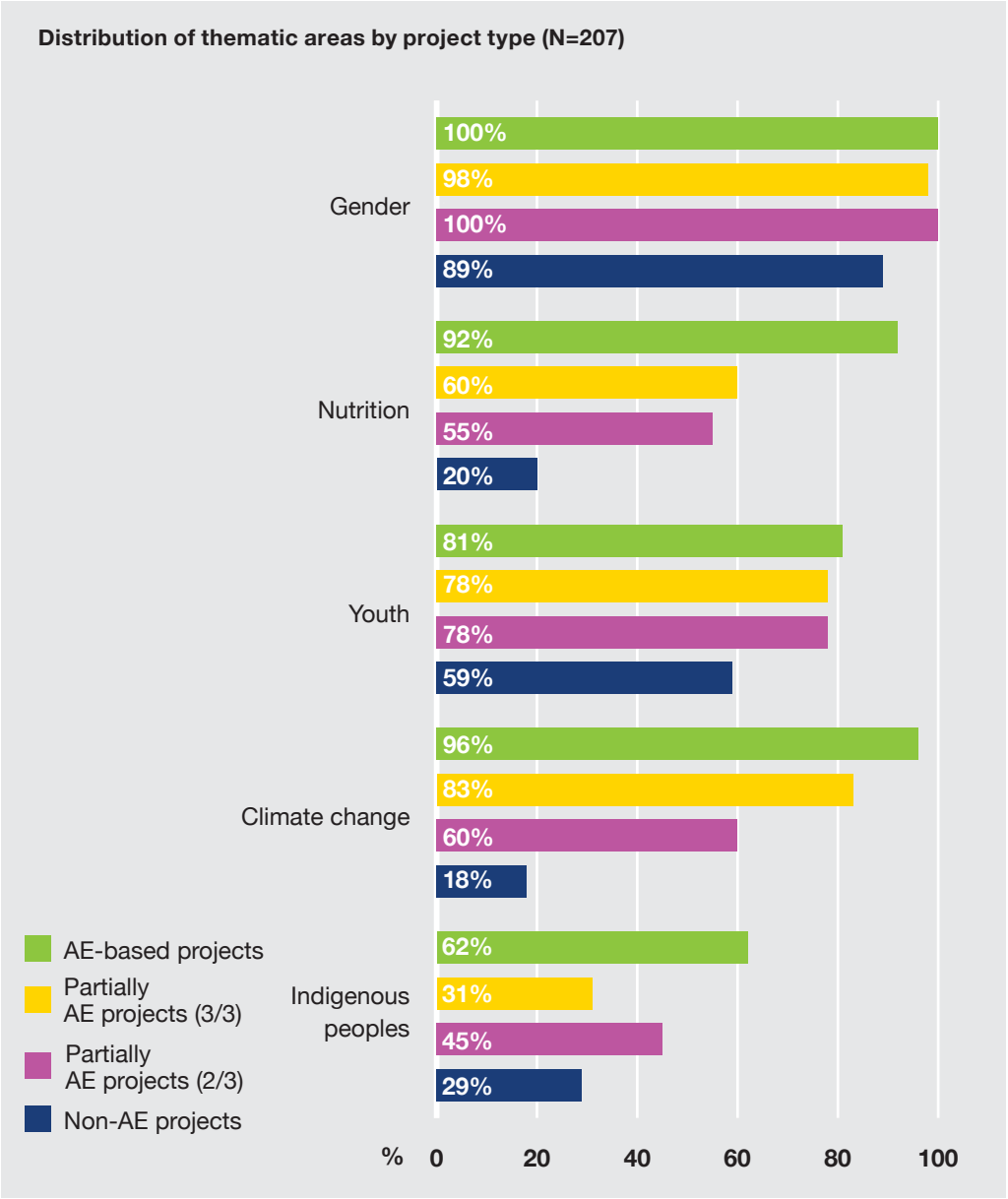



Figure 5 compares the percentage of projects across all four project types that incorporate IFAD's thematic areas. The high correlation between degree of agroecology uptake and projects' contribution to the various thematic areas shows the clear complementarity between them: AE-based projects consistently show a higher percentage of incorporation of all thematic areas, followed by partially AE projects. Non-AE projects, however, display significantly lower degrees of incorporation.

It should be no surprise that all project categories perform strongly on gender (98-100 per cent for AE projects and 89 per cent for non-AE projects), as this remains IFAD's longest standing priority area. However, agroecological projects have consistently proven early adopters in including newer thematic areas. For AE-based projects, 92 per cent and 96 per cent have incorporated nutrition and climate change respectively. In contrast, non-AE projects lag far behind at 20 per cent for nutrition and 18 per cent for climate change. Partially AE projects also fare better than non-AE projects, with 55-60 per cent

of projects incorporating nutrition and 60-83 per cent incorporating climate change. This confirms the particular strength of the agroecological approach in creating climate change resilience and nutritional benefits as detailed above.

The advantage of agroecological approaches is also evident in relation to youth. Although less distinct than for other thematic areas, specific youth activities are incorporated in 81 per cent of AE-based projects, 78 per cent of partially AE projects and 59 per cent of non-AE projects – with room to improve opportunities for youth across all project types. Lastly, projects using the agroecological approach more frequently benefit Indigenous Peoples than the other project types, confirming its relevance for improving indigenous production systems. It should be noted, however, that for many projects the involvement of Indigenous Peoples is not relevant as they are not present in the specific geographical intervention area of the projects.

## 3.3 Agroecological zones

Agroecological approaches are also highly adaptable to different contexts and agroecological zones and climatic conditions (box 4). As shown by the distribution of the 26 AE-based projects by agroecological zones (figure 6), 54 per cent are concentrated in tropical dryland, 23 per cent in mixed tropical areas (i.e. tropical climatic zones comprised of multiple agroecological zones), 15 per cent in tropical mountains, 4 per cent in tropical/lowland areas and 4 per cent in sub-tropical mountain areas. This distribution is similar to the distribution of all sampled projects across agroecological zones (figure 7), with a minor deviation in temperate zones (11 per cent of the total) which includes a greater portion of partially AE and non-AE projects.

IFAD's projects are mainly concentrated in tropical dryland zones, followed by tropical mountain zones. In these tropical and subtropical areas, drylands, mountains and lowlands, there does not appear to be greater preference for agroecological approaches than in other zones.

**FIGURE 6:**

**Distribution of AE-based projects across agroecological zones (N=26)**

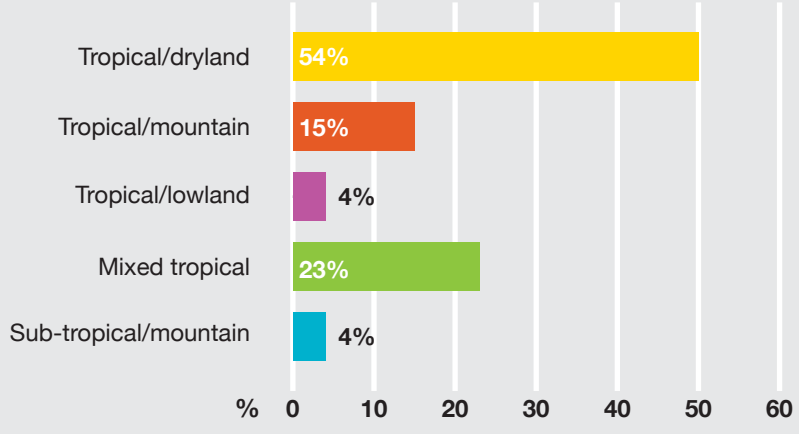
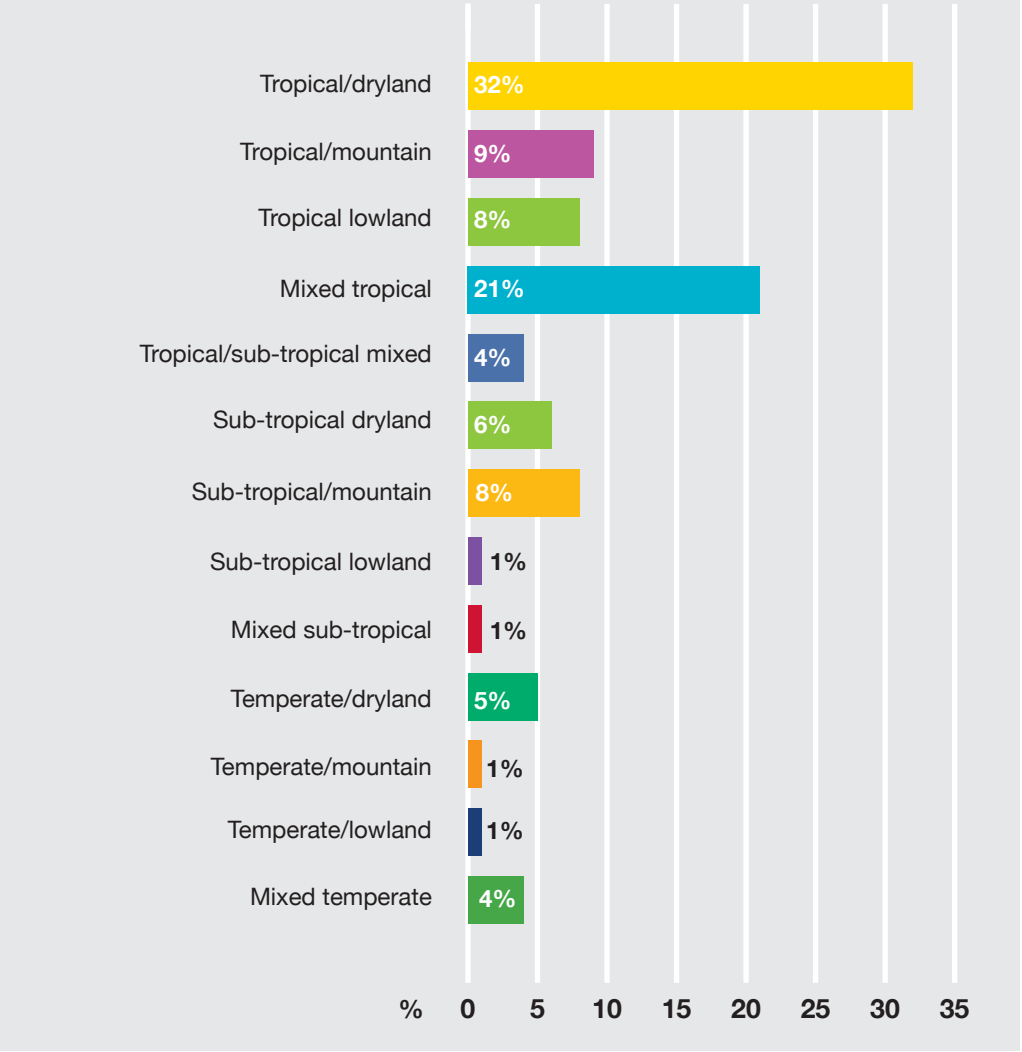


**FIGURE 7:**

**Total project distribution across agroecological zones (N=207)**




**BOX 4:**

**Examples of agroecology applied in different agroecological zones**

**AGROECOLOGY IN A TROPICAL DRYLAND CONTEXT**

The Poverty Reduction in Aftout South and Karakoro Phase II Project (PASK II)[19] in Mauritania is one example of an AE-based project in a tropical/dryland agroecological zone. The project involved poor smallholders and pastoralists, including women and youth, in natural resource development activities. At farm and landscape levels, PASK II implemented agroecological activities such as: (i) soil and water restoration achieved through an integrated watershed management approach, using slope improvement structures (utilization of stones and filtration dikes) and rainwater harvesting (rehabilitation of reservoirs and ponds development);

19 See https://www.ifad.org/en/web/operations/-/project/1100001577.

(ii) intercropping with nitrogen-fixing plants, crop rotations with leguminous plants and the use of manure and compost for increasing soil fertility; (iii) integrated crop-livestock farming systems and silvo-pastoralism; (iv) animal feeding on natural rangelands and from bio-agricultural products cultivated locally; (v) herd management techniques adopted for the recovery and sustainable use of pasture and natural rangelands; and (vi) climate change resilient rangeland and pasture management techniques (seasonal use of pastureland through closed pastures and rotational model). Training in these technologies and practices was conducted for small-scale producers and grassroots organizations through the creation of village development committees, the establishment of Collective Local Associations of Natural Resources Management and use of the Farmer Field School (FFS) approach. Combined with campaigns for climate adaptation, the FFS approach contributed to raising awareness on the impact of climate change and empowered producers. Overall, the combination of these agroecological practices helped combat desertification and improve land and water conservation and restoration, while involving local communities in the management of natural resources through co-learning and knowledge sharing. The sustainable integration of crop and livestock systems, based on the adequate use of manure for soil fertility, has been key to farmland soil restoration, along with intercropping, crop rotations and the use of compost. At landscape level, the integrated approach to watershed management and rangelands increased ecosystem services and helped communities cope with climate change and the harsh arid environment of Mauritania.

**AGROECOLOGY IN A TROPICAL MOUNTAIN CONTEXT**

The Second Cordillera Highland Agricultural Resource Management Programme (CHARMP II)[20] in the Philippines shows how agroecological practices have been employed in a tropical mountainous area. The programme mostly involved supporting Indigenous Peoples to improve the efficiency of their farming systems by using innovative agroecological technologies. The project included: (i) soil fertility management activities such as the use of organic fertilizer, the application of livestock manure derived from integrated crop-livestock systems in rice paddies, intercropping and shifting cultivation; (ii) integrated pest and disease management techniques; (iii) prevention of soil erosion through intercropping with legumes and agroforestry; (iv) water management and watershed conservation through the construction and rehabilitation of community irrigation schemes, agroforestry and reforestation to protect water sources; and (v) community forest management activities such as reforestation and agroforestry development in community watersheds, and the creation of community nurseries including native species and fruit trees. The Agroforestry FFS (AFFS) approach was used to support co-learning and adoption of these innovative farming practices, and to train producers willing to shift from intensive vegetable cultivation into organic vegetable production using agroforestry. The agroecological approach applied to the mountainous tropical context of the Cordillera region also proved its efficiency as it was able to adapt to the steep slopes covered by forests characterizing the area using the methods described above. The project also drew from Indigenous Forest Management Systems Practices (IFMSP), which used the Indigenous Peoples' traditional knowledge for the sustainable management of natural resources.

20 See https://www.ifad.org/en/web/operations/-/project/1100001395.

## 3.4 Activity performance by levels in AE-based projects

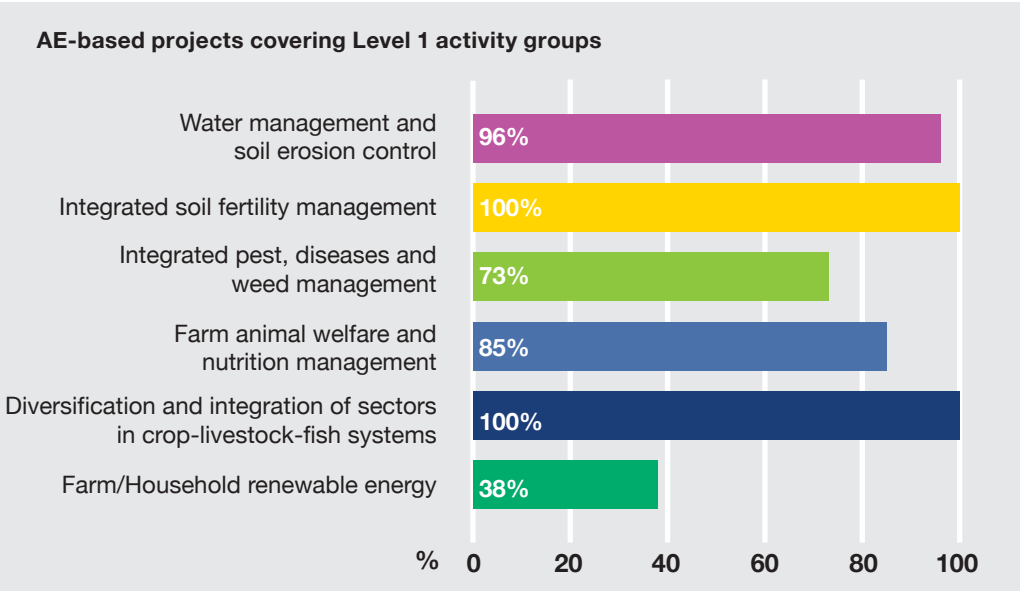
This section will take a closer look at the inclusion of different activity groups at each level in the 26 AE-based projects (described in table 1 in section 2.1 and detailed in annex 1). The aim is to verify which agroecology activity groups are primarily supported, in which activities IFAD has existing experience and which ones need more attention in order to enhance the transition to sustainable food systems to the benefit of small-scale producers and their communities.

**Level 1 (Farm level)** has been structured into six different activity groups relevant to an agroecological farm (figure 8). The key analytical finding at **Level 1 is that AE-based projects tend to cover all agroecology activity groups at the farm level – except for renewable energy**.

*Integrated soil fertility management* and *Diversification and integration of crop-livestock/crop-fish/agroforestry/silvo-pastoral/crop-livestock-fish systems* are implemented in 100 per cent of projects. *Water management and soil erosion control* activities are also implemented in almost all projects (96 per cent), followed by *Farm animal health and nutrition management* (85 per cent) and *Integrated pest, weed and diseases management* (73 per cent). *Farm/household renewable energy* activities are only promoted by a small number of projects (35 per cent).

Overall, the findings show that except for renewable energy, where there is room to engage more, AE-based projects tend to cover all agroecology activity groups at the farm level when there is capacity to do so. However, *Integrated pest, weed and diseases management* techniques could be considered more systematically in AE-based projects. These techniques are a crucial activity group for agroecology and its contribution to sustainable food systems, as the integrated management of pest, weeds and diseases reduces negative environmental and health impacts as well as the dependency on and cost of external inputs. They are also important for avoiding losses and increasing the resilience of production systems against these biotic risks.

**FIGURE 8:**

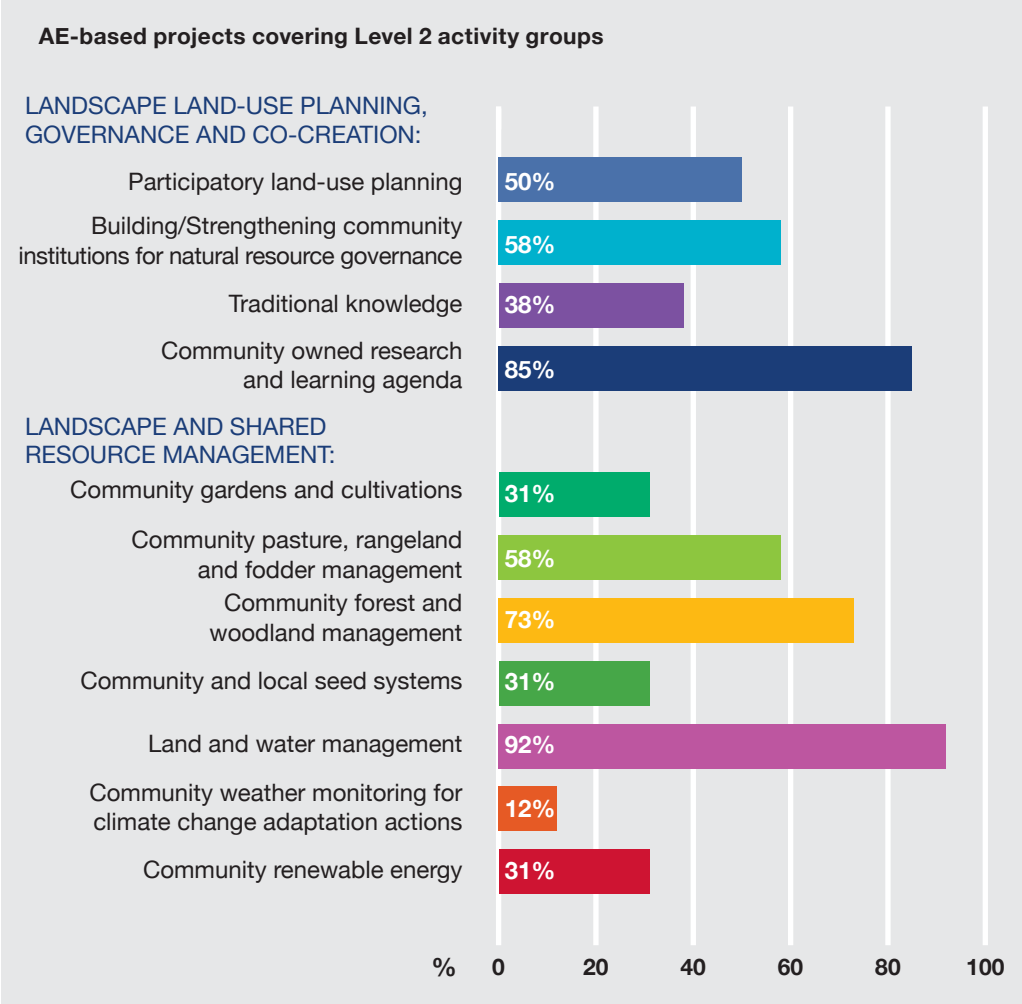


**Level 2 (Landscape level)** includes eleven agroecology activity groups divided into two thematic clusters: (i) landscape land-use planning, governance and co-learning; and (ii) landscape and shared resource management. At Level 2, key analytical findings are that **although *Participatory land-use planning* and *Building/strengthening community institutions for natural resources governance* are supported in only half of the projects, a high percentage of projects include *Land and water management* activities at landscape level. These are sustained by co-creation and learning through FFS. Opportunities exist to better support community seed systems, renewable energy and weather monitoring for adaptation actions.**

Figure 9 shows that under the first thematic cluster a high number of projects include *Community owned research and learning agenda* for co-creation and sharing (85 per cent). This is an important finding considering that this activity group is at the core of the agroecological transition process and demonstrates IFAD's strength in supporting FFS and participatory and community-based approaches (IFAD, 2020a). However, further consideration should be given to supporting *Traditional knowledge* in the co-creation and learning process, with only 38 per cent of projects including this activity group. Support for *Building/strengthening community institutions for natural resource governance* (applied in 58 per cent of projects) and *Participatory land-use planning* (applied in 50 per cent of the projects) can also be strengthened. These activity groups respond to the **Responsible Governance** element of agroecology and are important building blocks to create long-term institutional sustainability for the conservation, access to and use of natural resources at landscape level. Governance that ensures tenure security also increases incentive to invest in improving shared and individual land and natural resources over the long term.

In the second cluster, despite the insufficient attention to land-use planning and governance in the first cluster, a high percentage of projects include *Land and water management* activities at landscape level (92 per cent) – a key activity group in the agroecological landscape approach. Other activity groups in the second cluster are unlikely to be covered by all projects, as they are only relevant if the communities supported derive their livelihoods from shared land and resources. For example, *Community forest and woodland management* is included in 73 per cent of projects; *Community pasture, rangeland and fodder management* is included in 58 per cent of projects; and *Community gardens and cultivations* is included in 31 per cent of projects. Data also suggests there are important opportunities to better support *Community and local seed systems* (31 per cent), *Community renewable energy* (31 per cent) and *Community weather monitoring for climate change adaptation actions* (12 per cent). These were included in less than one third of the projects, even though *Community and local seed systems*, for example, allow for more secure access to a variety of locally adapted high-quality seeds crucial in agroecological farming systems to improve agrobiodiversity for resilience and nutrition.

**FIGURE 9:**




**Level 3 (Market level)** has seven activity groups clustered into: (i) activities contributing to value addition, and (ii) those promoting access to markets. Key analytical findings are that **projects include far less activity groups from Level 3, suggesting they may be failing to fully contribute to sustainable income generation for small-scale agroecology producers and sustainable food system development.**

The 26 AE-based projects have lower performance at Level 3 (i.e. include less activity groups) compared to Level 1 and 2 (figure 10). While market access is addressed in most projects, it is not always accompanied by activities enabling market differentiation, innovative marketing schemes or alternative labelling and/or certification of agroecological produce to support value addition.

The most frequently supported activity groups include *Safe storage* and *Food processing* (62 per cent each). The percentage of projects including other activity groups is significantly lower for: *Access to differentiated markets* (35 per cent); *Innovations organizing supply and demand* (31 per cent); *Community-based guarantee systems* (31 per cent); and *Infrastructure and physical spaces for farmers markets* (27 per cent). Very few projects include links to *Public procurement of agroecological produce* (19 per cent). Low implementation of these types of activities may be explained by the fact that some projects may address agricultural

production for subsistence consumption and do not systematically aim to link farmers to markets. Projects that do consider market opportunities may do so via conventional value-chain approaches and do not consider agroecological principles to organize supply and demand, such as community labelling and participatory guarantee schemes or improving physical infrastructure for selling local produce (see examples in box 5).

**BOX 5:**

**Differentiated markets and community-based schemes to connect producers and consumers around shared values**

**Participatory Guarantee Systems (PGS)**[21] are community-based certification mechanisms in which farmers guarantee the quality of their agroecological and/or organic produce through the application of protocols agreed on with consumers. These protocols are based on trust and social control (peer-review). PGS was first formalized in Brazil in 2004, where small-scale family farmers demanded low-cost and accessible certification to guarantee the quality of their produce to consumers. In 2007, PGS and third-party certifications were both officially recognized in Brazil to certify organic production, increasing access of small-scale producers to domestic markets (IFOAM Organics International and MAELA, 2004). Today, approximately 70 countries use PGS, including India, China, Fiji and the Philippines in Asia; Senegal, Burkina Faso, Ethiopia and Tanzania in Africa; and Argentina, Bolivia, Chile and Peru in Latin America.[22]

IFAD projects are supporting PGS initiatives. The PSA project in Brazil has established a local partnership with the Network of Agroecology Povos da Mata, experienced in capacity-building and technical assistance on PGS to support small-scale farmers in Bahia. The Network represents the first Participatory Conformity Assessment Body (*Organismo Participativo de Avaliação da Conformidade, OPAC*)23, 24 in Bahia registered at the Ministry of Agriculture (MAPA), which recognises different PGS groups across Brazil. The partnership aims to promote family farming and traditional communities' agricultural systems, organize farmers in PGS and encourage them to lead on environmental conservation, food security and food sovereignty through agroecological production, and encourage socioeconomic development of farming communities, with male, female and young farmers as the main actors in this process. Small-scale farmers and their families are organized into groups within their territory to exchange traditional knowledge and innovative agroecological experiences that conserve and protect biodiversity. This is achieved through the conservation of seeds and creole breeds, the adoption of production certifications based on trust, social interaction and peer-reviewing, and the creation of differentiated marketing channels guaranteeing stable employment and fair income.

**Community Supported Agriculture (CSA)**[25] is an alternative production and marketing scheme in which producers and consumers are directly linked by trust and transparency in the production and consumption of agroecological and organic food. Risks and benefits are equally shared between producers and consumers. Often in advance, consumers financially support the production of food as CSA members. In turn, farmers distribute products

21 See http://www.fao.org/3/I8288EN/i8288en.pdf.

22 See the PGS global map: https://pgs.ifoam.bio/.

23 For more on the Participatory Conformity Assessment Body Povos da Mata, see https://povosdamata.org.br/sobre-rede/opac-o-que-e-e-como-funciona/.

24 Guidance on the PGS implementation process through the Participatory Conformity Assessment Body (OPAC) is provided by the Practical Manual on Participatory Guarantee Systems.

25 For more see, https://urgenci.net/community-supported-agriculture-is-a-safe-and-resilient-alternative-to-industrial-agriculture-in-the-time-of-covid-19/.

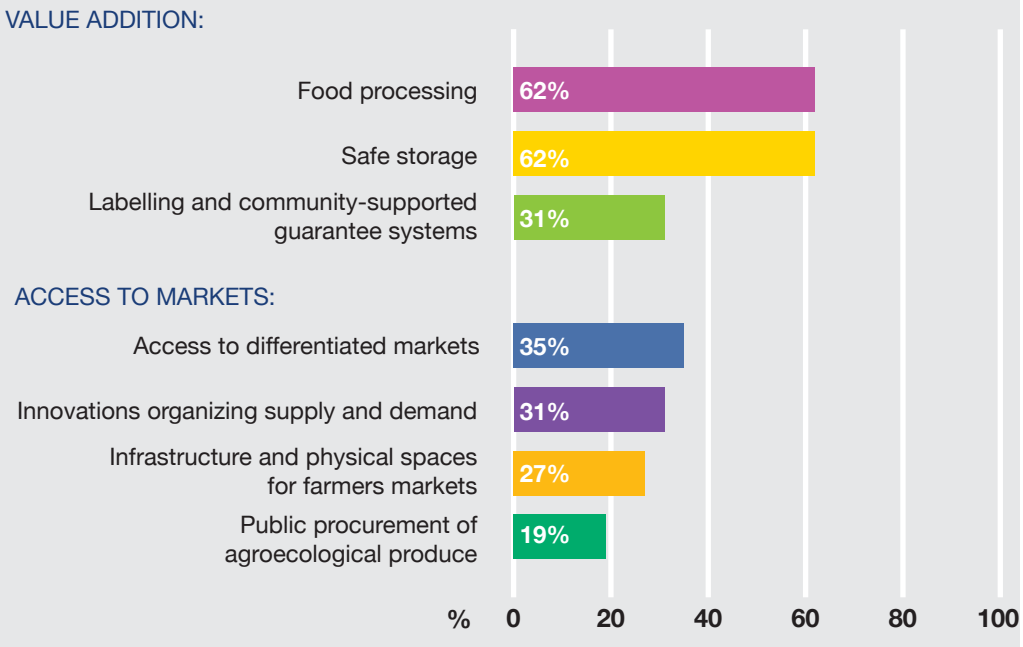
according to the harvests available throughout the seasons. Consumers also have the option to take part in production activities, such as seeding, weeding, harvesting and storing, among others. CSAs are often developed in peri-urban contexts where networks of consumers can readily support production. This system is also employed by rural communities involved in agroecological and organic farming, mainly for environmental and health reasons (Institute of Rural Reconstruction of China, 2015).

**Local markets for fresh food** are one of the most common channels to improve small-scale producers' access to markets. Local markets can be both formal and informal and their presence is crucial for providing local populations with sufficient quantities of diversified and nutritious food and ensuring income generation for producers. The BIRDP project in Sudan (see box 3) is one example of an IFAD-financed project supporting local markets for fresh and diversified produce. The project facilitates access to markets by pastoralist and agro-pastoralist households – including women-headed households – as well as poor rural communities through the construction of five primary and six secondary markets in proximity of their villages. New local market opportunities reduce transportation costs and enable producers to organize and take advantages of economies of scale for livestock and milk production and sale. Moreover, the establishment of a market information system has increased awareness among producers and traders on market prices and helps them make informed decisions when commercializing their produce.

Without these interventions, projects' contribution to sustainable food systems development remains limited, as the availability of a diversity of affordable and safe local (or national) food products is not necessarily ensured. Stronger inclusion of these interventions would reinforce small-scale producers' bargaining power and allocate more value at the farm level, direct access to consumers and access to markets that value safe and sustainably produced foods.

**FIGURE 10:**

**AE-based projects covering Level 3 activity groups**



Finally, the nine activity groups under **Level 4 (Policy level) are the least included out of all activity groups across the four levels. This constitutes a weakness in projects' ability to contribute to addressing systemic issues** that hinder the transition to sustainable food systems (figure 11). The nine activity groups are grouped under three clusters: (i) enabling policies; (ii) enabling regulations; and (iii) enabling instruments and services.

The activity groups under the first cluster are the most included but are only accounted for in a third of projects; this includes *Mechanisms for policy dialogue* (38 per cent) and *Institutional strengthening for formulation, implementation and monitoring and evaluation of agroecology enabling policies and instruments* (31 per cent). Social inclusion and representation in policy processes are fundamental components of agroecology, leaving ample room for ongoing and future projects to improve on these fronts. IFAD has an important role to play in supporting the meaningful participation of small-scale producers, women, youth and Indigenous Peoples affected by poverty in policy processes.

The second cluster is almost completely absent in sampled projects. This cluster focuses on providing technical assistance and knowledge products for evidence-based adjustments to regulations and supporting small-scale producers in complying with these regulations. Only 8 per cent of projects include support for adjustment and implementation of regulations on *Agrochemicals and animal drugs*. Supporting regulations on *Food safety and nutrition* are covered by only 4 per cent of projects, while regulations on *Seeds and plant genetic resources* are not included in any project.

The inclusion of activity groups under the third cluster on strengthening instruments is also insignificant, except for *Credit lines, incentives and insurance products* included in 42 per cent of the projects. The *Climate change and greenhouse gas (GHG) information systems and services* activity group is included in 27 per cent of projects; *Incentive systems for promoting agroecology* only in 12 per cent; and *Support to public institutions for agroecology research and extension* in only 8 per cent.

The limited inclusion of Level 4 activity groups likely reflects the fact that although agroecology has existed for some time, it has mostly been supported by farmers' organizations, NGOs, and a small number of development agencies operating at the first three levels. Only recently have a few countries started to address some of the systemic issues hindering the transition to sustainable food systems at the policy level, such as Senegal,[26] France,[27] Mexico[28], Argentina,[29] Sao Tome and Principe[30] and the Himalaya Region (Bhutan, India and Nepal),[31] among others. These countries have sought to create more favourable policy and regulatory environments for agroecology and other innovative approaches by supporting rethinking how food should be produced and consumed. The limited inclusion of the policy level may also reflect IFAD's comparative advantage in investing with small-scale producers and their communities at farm, landscape and market levels.

26 See http://www.fao.org/agroecology/database/detail/en/c/1269852/.

27 See https://agriculture.gouv.fr/agroecology-project-france#:~:text=France%20is%20committed%20to%20changing,committed%20to%20agroecology%20by%202025.

28 See https://www.gob.mx/agricultura/articulos/la-agroecologia-es-el-presente-para-el-campo?idiom=es.

29 See https://fundeps.org/en/the-creation-of-the-agroecology-directorate-at-the-national-level-was-made-official/.

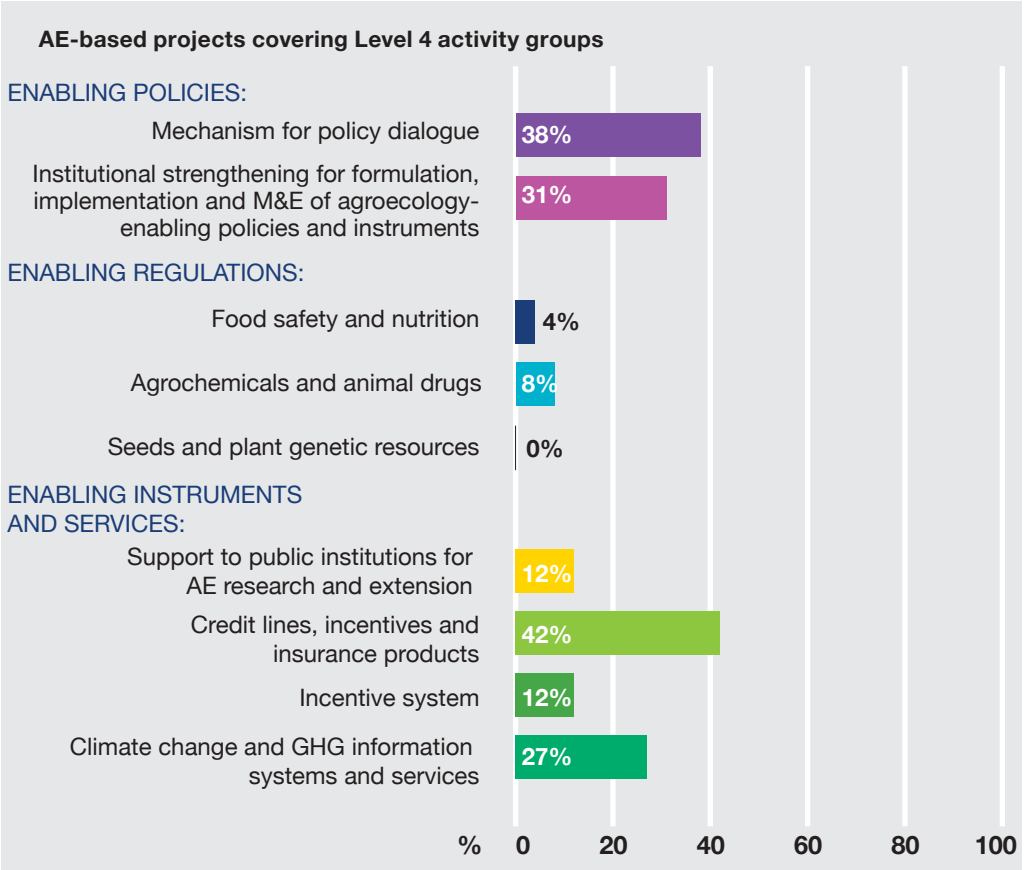
30 See http://www.fao.org/agroecology/database/detail/en/c/1295904/.

31 See https://www.worldfuturecouncil.org/wp-content/uploads/2019/09/Mainstreaming-of-Organic-Agriculture-And-Agroecology-in-the-Himalaya-Region_2019_web_version-1.pdf.

As more countries aim to address systemic issues preventing the achievement of SDG 2 (and other closely related SDGs) as well as to provide access to healthy diets for all, under increasing challenges from climate change, IFAD has much to offer from its experience in investing with small-scale producers operating in diversified and resilient farming and marketing systems. Partnerships are needed with other development entities to better support governments in creating and reforming key regulations and developing comprehensive policy frameworks. Under the joint Scaling Up Agroecology Initiative, FAO is sharing and inviting IFAD to participate in various initiatives to support governments in building agroecology policy frameworks. This includes, among others, the development of: (i) a National Agroecological Transition Plan in Mexico; (ii) a National Agroecological Production Plan in Colombia under the triangular cooperation programme between Colombia, Brazil and FAO; (iii) policy recommendations on agroecology to the Government of Senegal; (iv) the Economic Community of West African States (ECOWAS) Scaling up Agroecology Initiative in 10 member countries; and (v) a programme for strengthening agroecological production for the Province of Buenos Aires in Argentina. These initiatives are concrete opportunities for IFAD, FAO and other development partners to collaborate. This is already the case in Argentina, where IFAD and the Argentinian government, in coordination with FAO's support to the province of Buenos Aires, have designed a national investment project for small-scale agroecological producers.

In targeted countries, IFAD could select a few policy areas for which it could provide substantial inputs. Because IFAD is working with small-scale producers and communities on the ground, it could be strategically vital to step up IFAD's contributions to strengthen policy instruments and services, enabling innovation and capacity building tailored to these producers and their transition to AE-based farming and commercialization systems.

**FIGURE 11:**



To verify if the findings of this section on entirely AE-based projects are also true for AE-related projects more broadly, an analysis was done to assess the inclusion of activity groups at each of the four levels by all three AE-related project types: AE-based (N=26), Partially AE (3/3) (N=58) and Partially AE (2/3) (N=40). Except for Level 2, each activity group within a level was given equal weight in terms of percentage points, adding up to 100 per cent if all activity groups at a specific level are included in a project. Considering that not all activity groups at Level 2 are relevant in all project contexts (but depend on the farming and livelihood systems of the beneficiaries), only the activity groups relevant for all projects were included, namely: (i) *Building/strengthening community institutions for NR governance*; (ii) *Community-owned research and learning agenda*; (iii) *Community and local seed systems*; and (iv) *Land and water management*.

**FIGURE 12:**

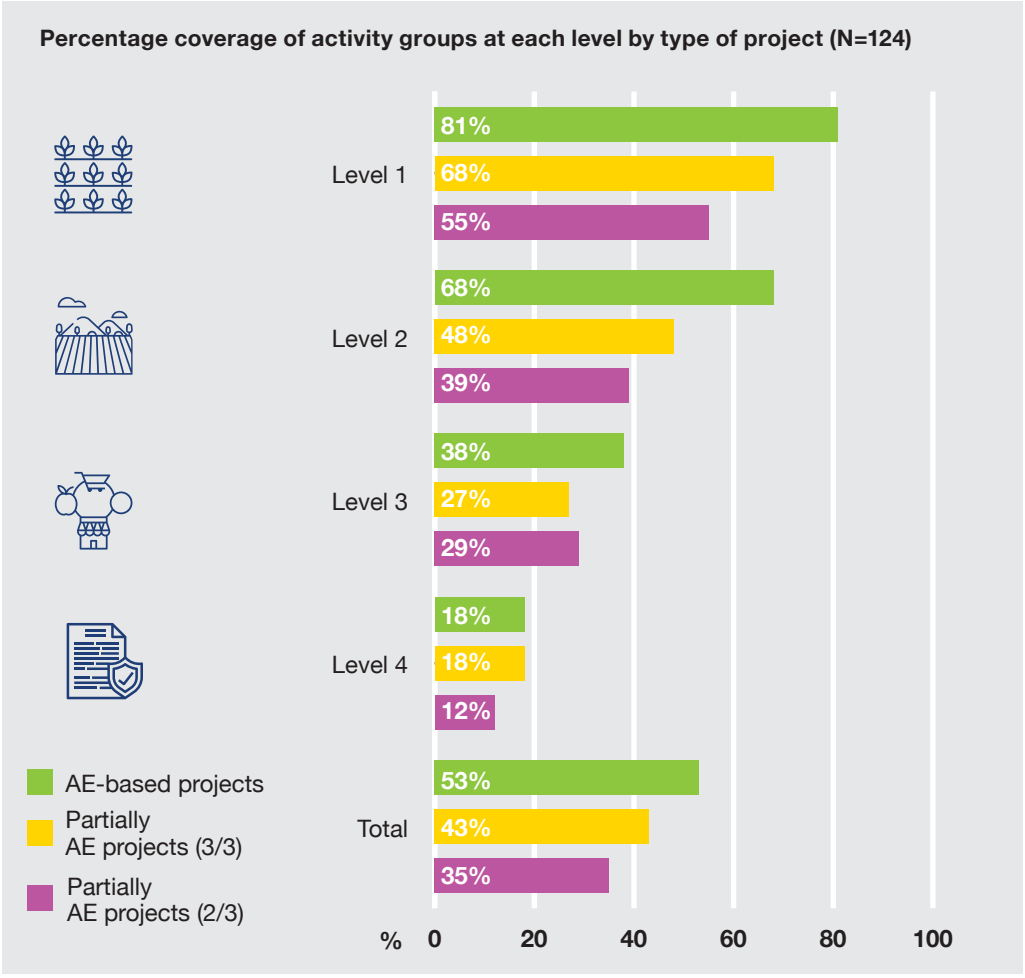



Figure 12 confirms that activity groups at Levels 1 and 2 are more consistently included across all AE-related projects than activities at Levels 3 and 4. The difference between coverage of Level 2 and Level 3 activities, however, is less pronounced. As expected, the figure also shows that entirely AE-based projects implement a wider variety of agroecology activity groups, followed by partially AE (3/3) projects, and then partially AE (2/3) projects. It further confirms the opportunities and strengths for IFAD to further invest in partially AE projects and provide further support to Level 3 and 4 activities as previously discussed.

## 3.5 Performance of AE-based projects for selected IFAD indicators

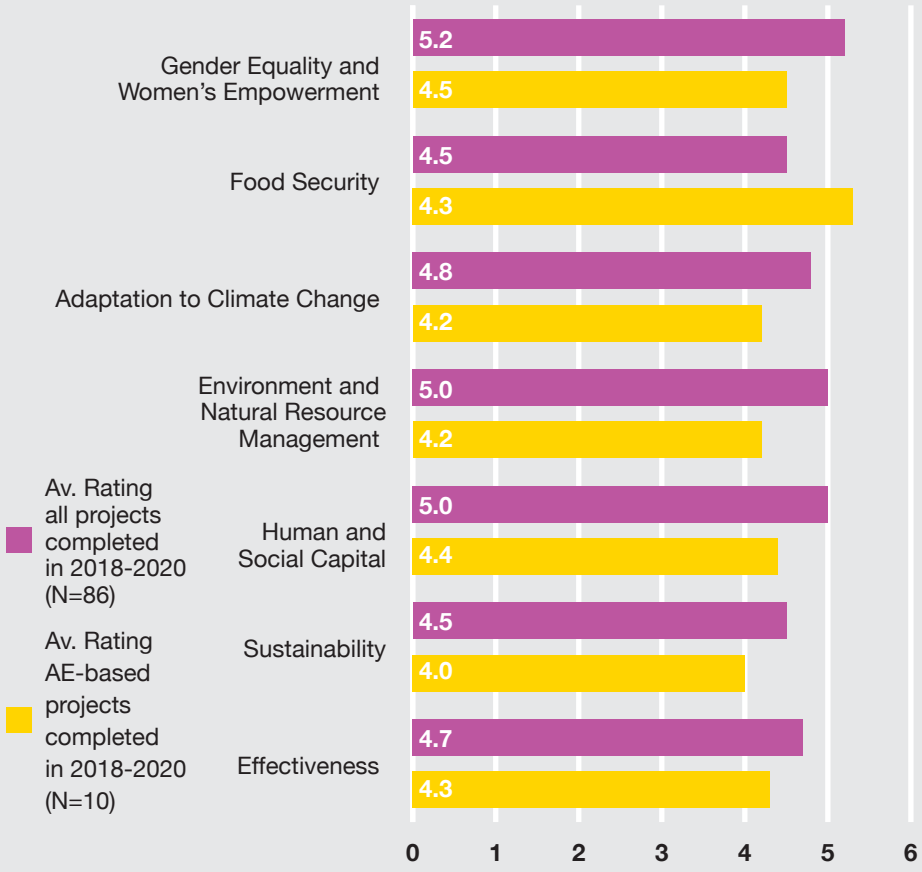
Performance rating and monitoring is part of IFAD's **Action Plan for improving its development effectiveness** (IFAD, 2008). All projects are rated annually in various performance areas by IFAD project supervision teams. Final ratings are given by the team at project completion and are validated by a completion report review team of third colleagues. The ratings for each performance indicator range from 1 to 6, with 6 being the top score, indicating a highly satisfactory performance.[32] This section analyses the performance ratings at project completion by comparing the ratings of: (i) the 10 AE-based projects in the sample completed in 2018-2020 with (ii) all 86 IFAD projects completed in 2018-2020. Seven indicators relevant to sustainable and inclusive production and food systems were analysed, namely: **Gender Equality and Women's Empowerment, Food Security, Adaptation to Climate Change, Environment and Natural Resource Management, Human and Social Capital, Sustainability** and **Effectiveness.**

By comparing the average ratings for AE-based projects and the average ratings for all projects completed between 2018 and 2020, the result indicates that the first group outperforms the second on all selected indicators (figure 13). Major performance differences are noteworthy in regard to **Gender Equality and Women's Empowerment** (5.2 against 4.5), **Environment and Natural Resource Management** (5.0 against 4.2), **Human and Social Capital** (5.0 against 4.4) and **Adaptation to Climate Change** (4.8 against 4.2). Though AE-based projects still performed better, **Food Security** (4.5 against 4.3), **Sustainability** (4.5 against 4.0) and **Effectiveness** (4.7 against 4.3) are rated lower in both groups.

32 Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory.

**FIGURE 13:**

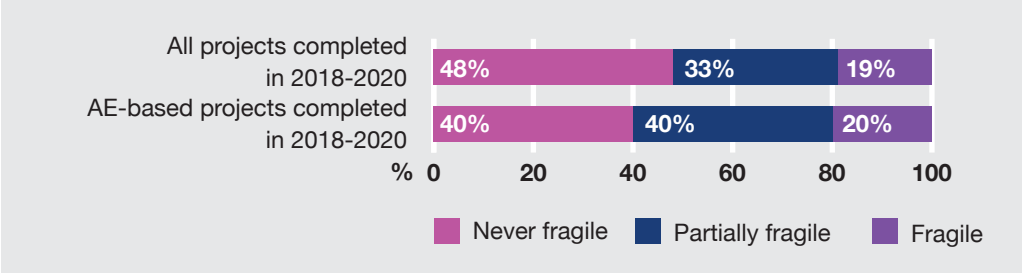
**Performance average for AE-based projects compared to all projects completed in 2018-2020**




One factor that may impact this analysis is the level of fragility in project contexts,[33] as the baseline situation for projects implemented in fragile states is more challenging than in a non-fragile context. Among the 10 AE-based projects, two were implemented in a fragile context (Sudan) and four in partially fragile contexts (Lao People's Democratic Republic, Ethiopia, the Republic of The Gambia and Mauritania). Especially for **Food Security**, **Sustainability** and **Effectiveness**, context fragility represents a bigger challenge for final project achievement, and progress can be still significant even when the final outcome has not reached expected targets. As illustrated by figure 14, 60 per cent of the 10 AE-based projects completed in 2018-2020 cover fragility-related contexts (fragile and partially fragile), compared to 52 per cent of all 86 projects completed in that period. This could further imply that fragile countries tend to adopt agroecological approaches in order to overcome development challenges.

33 "Fragile states are characterized by weak policies, weak institutions and weak governance, resulting in meagre economic growth, widespread inequality and poor human development. Fragile states are more exposed to the risk of outbreaks of violence than are non-fragile states. Fragile states may be well endowed with natural resources or be resource poor." Fragility is further defined by IFAD according to partner international financial institutions (IFIs) and the Organisation for Economic Co-operation and Development (OECD) (IFAD, 2015, pp. 9-11 and Annex 4, pp.93-94).

**FIGURE 14:** **Fragility context for AE-based projects compared to all projects completed in 2018-2020**




More details are provided below on the 10 AE-based projects' performance for the selected indicators.

- **Gender and Women's Empowerment** is rated high in all projects, with two projects rating highly satisfactory (6): the BIRDP project in Sudan and the National Agricultural Land and Water Management Development Project (NEMA)[34] in the Republic of The Gambia. The high gender inequality context in Sudan is one of the most significant reasons behind the rating, as the project was able to transform a male-dominated society through the adoption of a community-based territorial approach empowering all groups in the communities with a special focus on women. Women were involved through women committees in decision-making on community development issues. They participated in local policy-dialogue processes and benefited from project services and access to credit. Notably, their rights to access land and natural resources, including water, have been recognized throughout project activities. Women groups were constituted, and training was provided through the established Young Professionals Programme, which engaged young women in technical assistance services for rural communities with a high level of participation of rural women.

- **Environment and Natural Resource Management** performs highly in all projects, with a highly satisfactory (6) rating for the Cariri and Seridó Sustainable Development Project (PROCASE)[35] in Northeast Brazil, where several key targets were exceeded. Activities included agroecological production in integrated landscape-based systems to create synergies, and community nurseries supporting the establishment of 31 units of agroforestry systems. These units were established in areas important for conserving biodiversity and the water source for infrastructures supplying water for production and household consumption. The water mobilized for production, combined with renewable energy sources, supported increases in food production and income, and improved small-scale family farmers' resilience against droughts. In addition, the project showcased good practices in conservation and sustainable use of the Caatinga biome (the largest dryland forest area in the LAC region) in over 453 hectares (outperforming the 225 ha planned at project design). An additional 568 ha of silvo-pastoral systems (against 480 ha planed) supported the implementation of the National Policy for Livestock, Agroforestry and Silvo-pastoralism.

34 See https://www.ifad.org/en/web/operations/-/project/1100001643.

35 See https://www.ifad.org/en/web/operations/-/project/1100001487.

- **Human and Social Capital** is rated satisfactory (5) in all projects. In Sudan, BIRDP empowered women, youth, agro-pastoralists, pastoralists and marginalized communities by increasing their sense of autonomy and self-confidence. Beneficiaries act both individually and collectively to improve social relationships and agree on the management of surrounding natural resources, overcoming disputes and mobilizing support for common initiatives to protect rangelands, increase water availability and engage with youth-led social enterprises. Social change occurred throughout the formulation of a natural resources management framework for the entire Butana region. It involved five states and developed through a multi-stakeholder participatory process. Human empowerment is the major achievement in BIRDP, which created new and strengthened existing grassroots institutions. It built capacity of local development agents and supported the growth of networks of interest groups and community organizations. A major success in terms of human social development included the establishment of 17 community networks connecting neighbouring villages around shared landscape and natural resources management, and 77 community range reserves engaging communities in the sustainable management of natural resources.

- **Adaptation to Climate Change** is rated relatively high in all projects, with seven out of 10 rating between satisfactory (5) (e.g. the Community-based Integrated Natural Resources Management Project (CBINReMP in Ethiopia)[36] and highly satisfactory (6) (e.g. PROCASE in Brazil). Implemented in a region characterized by a tropical highland monsoon climate, CBINReMP succeeded in overcoming severe land degradation and increasing communities' resilience to climate change with a specific sub-component: Sustainable adaptation to climate change, dedicated to achieving this purpose. PROCASE, Brazil, was implemented in a semi-arid, tropical zone. During its implementation phase, the project adapted by respond to severe drought hitting the Caatinga since 2010 and redirect funding to relevant activities to increase water availability (boreholes, dams, desalinization, etc.). Combined with agricultural production practices based on agroecology and diversification of crop and forage production, this approach increased the resilience of production systems to climatic shocks and highly contributed to climate change adaptation capacity.
  The completion report shows that while project beneficiaries managed to maintain their income levels during the drought, family farmers in the control group suffered from increased poverty levels.

- **Food Security** is rated between moderately satisfactory (4) and satisfactory (5) – a notable result considering that the majority of projects belong to fragile and partially fragile contexts. In the Republic of The Gambia, NEMA vegetable growers adopted agroecological practices to promote consumption of nutritious foods. The "mothers' circles" approach[37] was used to promote hygiene and childcare. This generated a substantial increase in the food security of poor rural men and women and exceeded project targets. The number of food insecure households was reduced from 384 to 283 and the duration of the hungry season from 2.8 to 1.2 months (IFAD, 2019a).

- **Sustainability** is rated satisfactory (5) in half of the projects, with the other half rated as moderately satisfactory (4). This rating was obtained despite the fragile context the majority of projects were implemented in. IFAD projects generally obtain modest scores on sustainability, as analysed in the 2020 IFAD Corporate Portfolio Stock-take

36 See https://www.ifad.org/en/web/operations/-/project/1100001424.

37 Nutrition education activities consisted of cooking demonstrations at communities using mothers' circles, promoting the consumption of healthy foods, hygiene and childcare, all of which contribute to food security.

(IFAD, 2020b). When looking at performance against targets (percentage of projects rated moderately satisfactory (4) or higher), it is observed that Sustainability is rated 4 or above in 70 per cent of projects closed in 2019 against a target of 85 per cent. However, all 10 AE-based projects rated above IFAD targets of 4 or above.

A recent analysis on the sustainability performance of IFAD projects conducted by IFAD's Operational Policy and Results (OPR) Division highlights policy engagement and government ownership as two important positive drivers for sustainability (IFAD, 2020c). This is confirmed by the analysis of the completed AE-based projects, of which three of the five rated 5 on **Sustainability** supported **Mechanisms for policy dialogue**. Also of note, all five AE-based projects with a sustainability rating of 5 included the activity group, **Building/strengthening community institutions for natural resource governance**. This activity appears a crucial factor for sustainability by improving community ownership (table 2).

**TABLE 2:**

**Activities on policy and governance covered by projects strong on sustainability (rated 5)**

| Project title | Building/ Strengthening community institutions for natural resource governance | Mechanisms for policy dialogue | Institutional strengthening for formulation, implementation and M&E of agroecology-enabling policies and instruments |
|---|---|---|---|
| CHARMP II, Philippines | ✓ | ✓ | |
| AMD, Viet Nam | ✓ | ✓ | ✓ |
| CBINReMP, Ethiopia | ✓ | ✓ | ✓ |
| PROCASE, Brazil | ✓ | ✓ | |
| BIRDP, Sudan | ✓ | ✓ | |

BIRDP (Sudan, fragile context) and CBINReMP (Ethiopia, partially fragile) both rated satisfactory (5) for sustainability. The main factor for sustainability in BRIDP was the consistently high involvement of community-based organizations both in land-use and investment planning and in implementation of livelihood and natural resources management activities to build a sense of ownership. Strengthening capacities of community-based organizations and local government was a successful factor to recover investment costs in range and water development and market infrastructure, and to apply the proceeds to build and maintain services for the livestock sector. Other factors contributing to sustainability included the previously mentioned framework for management of natural resources for the Butana; the development and strengthening of community-based organizations responsible for the management and protection of range and water resources; and the promotion of rural finance through saving and credit groups. In CBINReMP, sustainability was observed through responsible governance with communities taking the lead role in watershed planning

and management, land administration, certification and registration, and in all activities related to rehabilitation of degraded lands. The focus on community participation has been expanded through domestic experience-sharing training sessions, grassroots level organization and a participatory planning process for watershed development. Community ownership was strongly supported by a ctivities on tenure security, such as land certification being integrated with natural resource management.

- **Effectiveness** follows the sustainability trend in terms of performance average. Seven of the 10 AE-based projects rated satisfactory (5) on effectiveness. For example, in BIRDP the achievements of development objective, outcomes and outputs went beyond initial targets despite several challenges faced during implementation, including a high inflation rate, the shortages of cash in the banking system and low availability of diesel and fuel.

## 3.6 Support for biodiversity in agroecology-related projects

Biodiversity is fundamental to agroecology through the application of ecological principles to farming (mimicking nature). High levels of diversity in agroecological farming systems are the main contributor to these systems' resilience and nutrition advantages. Indeed, one of the 10 Elements of Agroecology is **Diversity**, which includes the sustainable use and conservation of biodiversity.

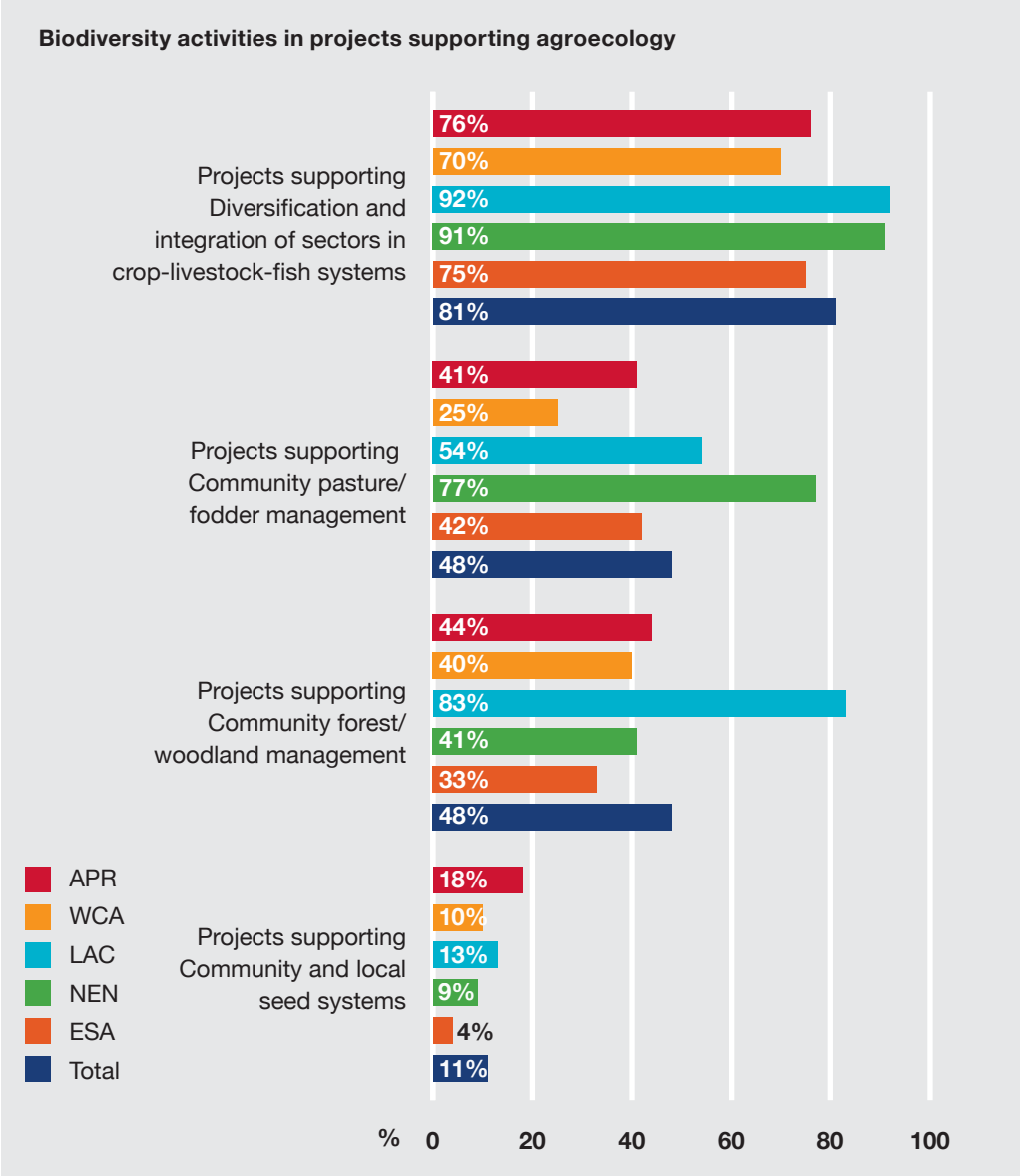
IFAD not only recognizes the importance of biodiversity for sustainable farming systems, but also acknowledges the potentially adverse impacts of agriculture on biodiversity. In recognition of the global biodiversity crisis and its link to the climate crisis, in 2021, IFAD will develop and adopt a new biodiversity strategy. As an input to this strategy, this section takes a closer look at key agroecology activity groups important for the conservation and sustainable use of biodiversity in 60 per cent of projects (124 projects) supporting agroecology, including: **Diversification and integration of sectors (various crops and animals) in farming systems, Community rangeland/pasture management, Community forest management** and **Community seed systems.**

**Diversification and integration of sectors in farming systems** with high levels of agro-biodiversity is one of the three core elements of the stock-take framework (section 2.1) assessed at Level 1. Within the 124 projects related to agroecology, figure 15 shows that 81 per cent of projects promote **Diversity**, with some variation between the regions – LAC having the highest score (92 per cent) and WCA the lowest (70 per cent). As noted in section 3.1, however, two thirds of the 40 partially AE (2/3) projects do not support **Diversity**. This suggests that **Diversity** may only be considered further down the agroecological transition process compared to the other two core elements. It thus becomes all the more important for IFAD to strengthen the **Diversity** element in its support of small-scale producers' adoption of agroecology.

**Community rangeland/pasture management** and **Community forest management** are two other activity groups with high co-benefits for biodiversity conservation. Figure 15 shows that 48 per cent of projects supporting agroecology are also supporting these two activity groups. It should be noted, however, that these activity groups are only relevant for projects working with communities deriving livelihoods from shared rangelands and forest/wood lands. **Community seeds systems** also highly contribute to managing,

conserving and supporting crop agrobiodiversity through activities including the construction of seed banks, the appointment of seed guardians, participatory trials and selection of a mixture of varieties better adapted to local conditions. As only 11 per cent of agroecology-related projects promote community seeds systems, this is clearly an area in which IFAD can better engage and support local communities in collecting, conserving and exchanging seeds to boost local agrobiodiversity for resilience and nutrition.

**FIGURE 15:**

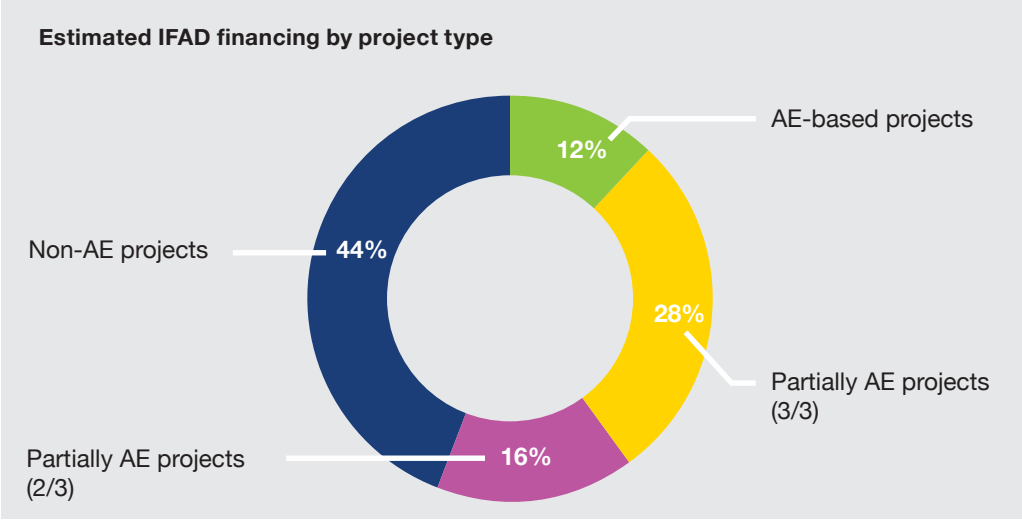


## 3.7 Estimated IFAD investment in agroecology-related projects

This section analyses the funds invested in the projects in the sample.[38] It has not been possible to quantify the precise amount invested in agroecology in a given project given that the agroecological activities cannot be identified as a project component or sub-component with a corresponding budget. Instead, agroecology is linked to the very nature of a project and to a cross-cutting set of activities defined by interlinking elements and principles. Including the Adaptation for Smallholder Agriculture Programme (ASAP)[39] and Global Environment Facility (GEF)[40] funding, a rough estimate of IFAD funds invested in agroecology would represent 100 per cent of funds invested in AE-based projects and an estimated 50 per cent funds invested in the partially AE projects. From these assumptions, of the total US$6.67 billion invested by IFAD in all 207 projects in the sample, an estimated US$2.28 billion have gone to agroecology related activities.

When considering the distribution of financing across the four project types, non-AE projects represent 40 per cent of all projects sampled but received 43.8 per cent (US$2.92 billion) of IFAD financing (including GEF and ASAP). This amount increases to 47 per cent if all sources of financing are considered (government, beneficiary, private sector and international sources). Figure 16 shows that of the total IFAD funds analysed (US$6.67 billion), approximately US$813 million are financing fully agroecological projects (12.2 per cent), while partially AE (3/3) projects receive US$1.85 billion (27.8 per cent) and partially AE (2/3) receive US$1.08 billion (16.2 per cent).

**FIGURE 16:**




38 The up-to-date amounts derive from IFAD's Oracle Business repository, based on July 2020 data.

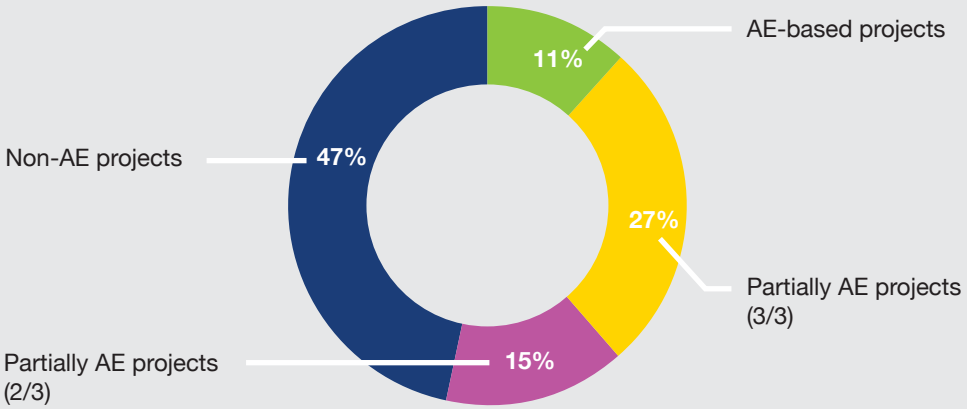
39 See https://www.ifad.org/it/asap.

40 See https://www.thegef.org/.

Of the total amount invested by all financing sources (IFAD/GEF/ASAP, government, beneficiaries, private sector and international sources) – equivalent to US$15.50 billion for 207 projects – approximatively US$1.76 billion are financing AE-based projects (11.4 per cent). Partially AE (3/3) projects receive US$4.11 billion of total financing (26.5 per cent) and partially AE (2/3) projects receive US$2.38 billion (15.4 per cent). The remaining US$7.25 billion (46.8 per cent) is financing non-AE projects (figure 17).

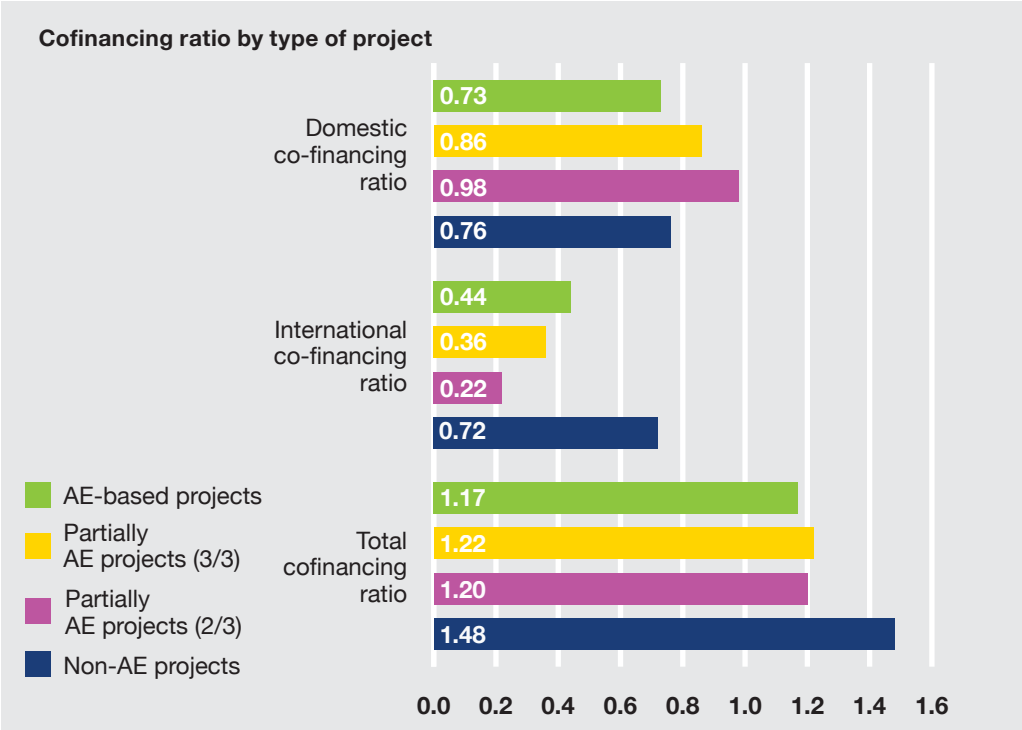
**FIGURE 17:**

**Estimated total project financing by project type (all funding sources)**



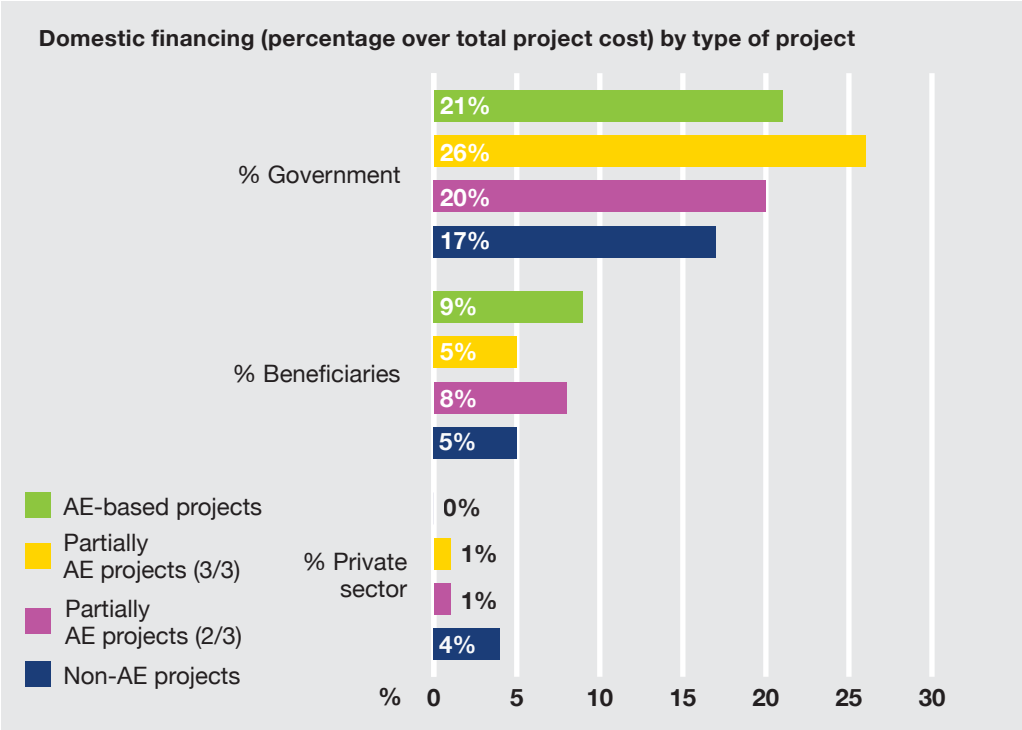

As shown in figure 18, the cofinancing ratio for all 124 projects promoting agroecology (between 1.17 and 1.22) is smaller than for non-AE projects (1.48). This is due to lower levels of international cofinancing and therefore collaboration with international financing partners in projects with agroecology activities than in conventional projects. Domestic cofinancing, on the other hand, presents similar or higher levels for AE-based projects compared to non-AE projects. This could indicate the interest of governments and local partners in investing in agroecology presumably because of its contribution to sustainable food systems benefitting the rural vulnerable populations.

**FIGURE 18:**




When analysing the breakdown of domestic cofinancing, no significant trend is observed. Government and beneficiary cofinancing are slightly higher in agroecological projects, and private sector cofinancing is slightly higher in non-AE projects (figure 19). However, it can be observed that private sector cofinancing is insignificant for AE-based projects and supports only 4 per cent of non-AE projects. Even though private sector cofinancing may not always be properly captured in project reports, there is a clear opportunity to encourage private sector financing to improve and mainstream agroecology.

**FIGURE 19:**




ASAP and GEF financing have proved to be instrumental in mainstream agroecological practices. While the overall share of these funding sources in total project funding is limited (less than 3 per cent in the case of ASAP), data shows that the incidence of ASAP and GEF financing is higher in AE-based and partially AE projects. Of projects with ASAP or GEF financing 88 per cent are either AE-based or partially AE (87 per cent of projects with ASAP financing and 90 per cent of projects with GEF financing) (figure 20). The incidence of AE-based and partially AE projects with ASAP and/or GEF financing (88 per cent) is three quarters higher than AE-related projects without GEF and ASAP financing (51 per cent) (figure 21).

**FIGURE 20:**

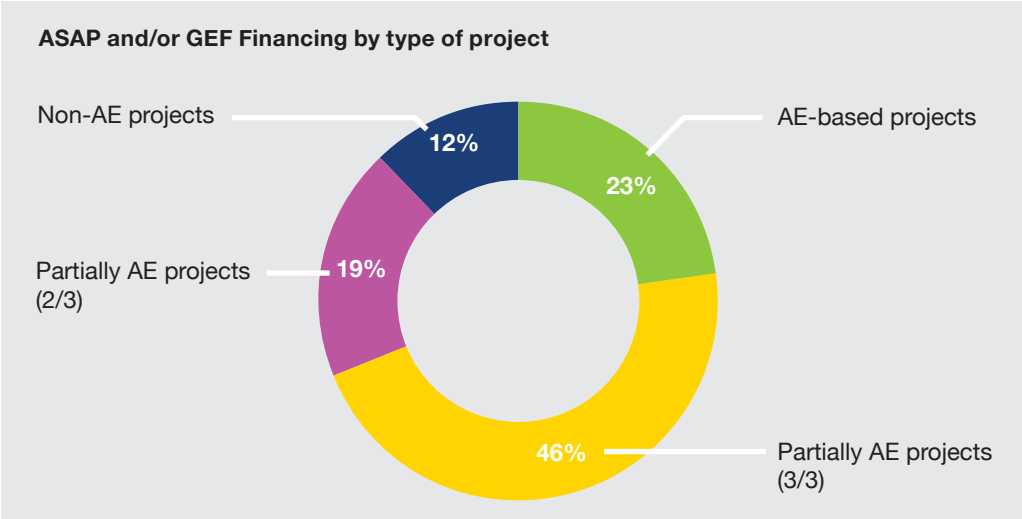
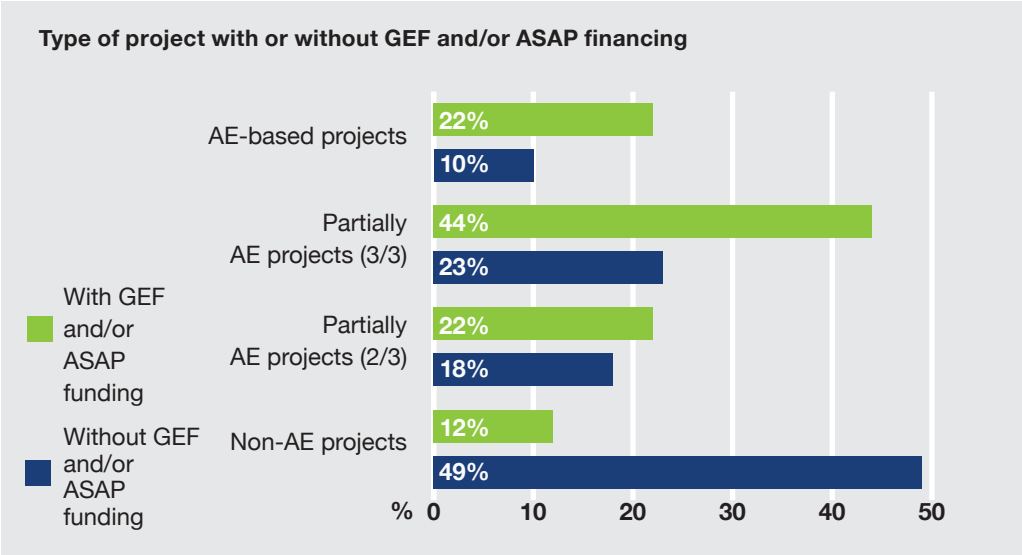



**FIGURE 21:**




Zone-1

# 4. Agroecology in the regions

## 4.1 Agroecology in the Asia and Pacific Region (APR) Portfolio

APR represents the largest IFAD portfolio and therefore has the highest number of projects of the 207 analysed. This corresponds to 60 IFAD APR projects that are completed or will be completed between 2018 and 2023. Using the agroecology framework developed for the stock-take, the assessment identified six projects as fully AE-based (10 per cent of the APR sample), 28 projects as partially AE (46 per cent) and 26 projects as non-AE (44 per cent) (figure 22). This distribution is similar to what is observed for the whole sample across all regions (13 per cent AE-based projects, 47 per cent partially AE projects and 40 per cent non-AE projects).

**FIGURE 22:**

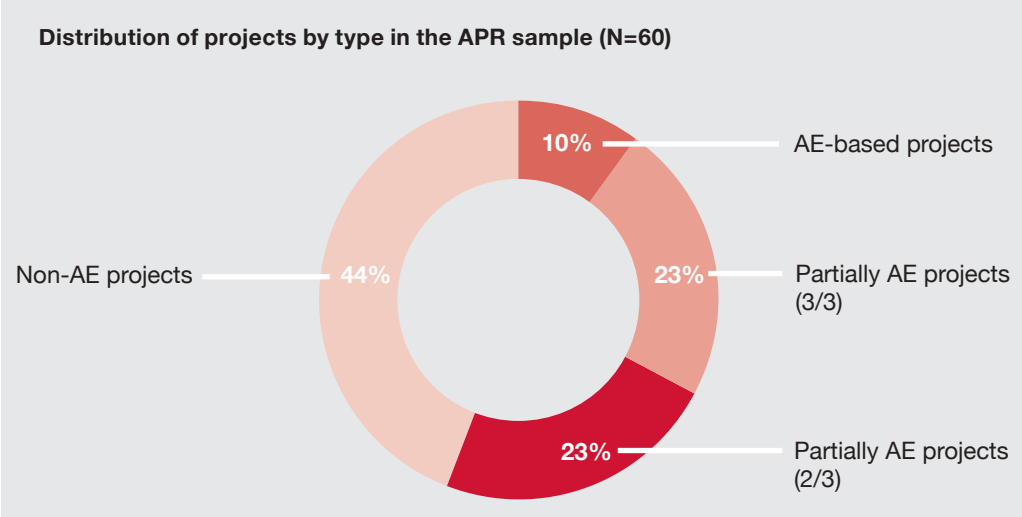
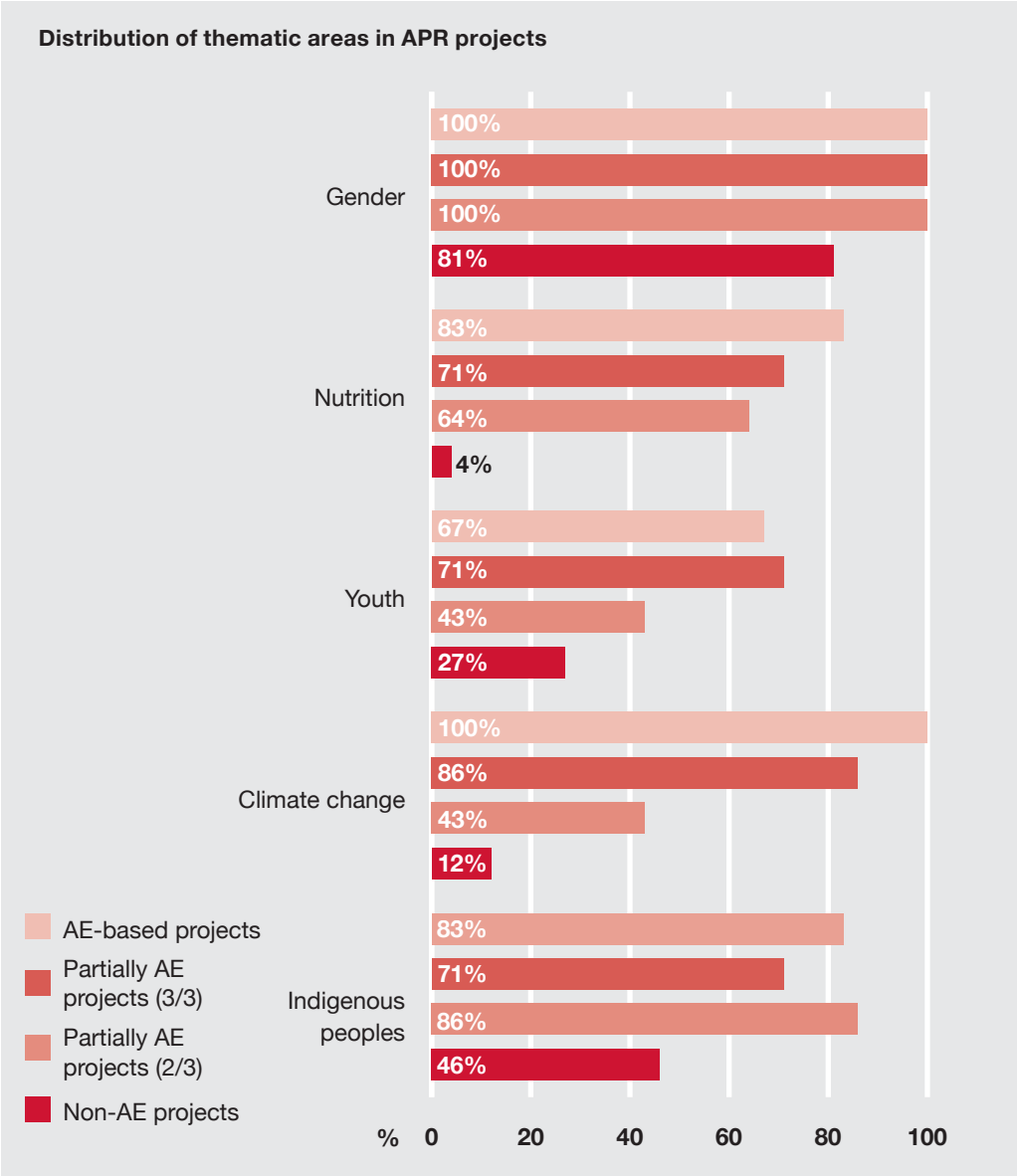



Figure 23 shows the inclusion of IFAD's mainstreaming priorities and Indigenous Peoples by project type. It confirms the findings from the total project sample that AE-based projects have high incorporation rates of IFAD's thematic areas (above 80 per cent), but less frequent incorporation of youth (67 per cent). In comparison, and with the exception of gender (81 per cent), non-AE projects have a much lower incorporation rate of IFAD's mainstreaming priorities with only 4 per cent of non-AE projects covering nutrition, 12 per cent mainstreaming climate change, and 27 per cent targeting youth activities. Finally, in APR there is a higher tendency to work with Indigenous Peoples in agroecological projects (71 per cent to 86 per cent) compared to non-AE projects (46 per cent).

**FIGURE 23:**




The **Project for Adaption to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh Provinces (AMD)**[41] represents a good example of agroecological practices applied in a tropical-mountainous context in APR (box 6). Completed in 2020, the ASAP-funded programme worked with smallholder farmers including women and ethnic minorities in Ben Tre and Tra Vinh provinces of Viet Nam, with the aim of strengthening the capacity of 15,000 beneficiaries to cope with a changing climate. The project supported farmers in enhancing resource use efficiency, in particular water, and adapting farming activities and practices to the increased levels of water salinity by introducing intercropping (rice, fruits and vegetable), rotational systems (rice-shrimp) and improving practices for integrated soil fertility management.

41 See https://www.ifad.org/en/web/operations/-/project/1100001664.

**BOX 6:**

**Project for Adaption to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh Provinces (AMD)**

| | |
|---|---|
| **Country:** | **Viet Nam** |
| **Approval date:** | 13/12/2012 |
| **Completion date:** | 30/06/2020 |
| **Financing type:** | Loan/Grant (ASAP) |
| **Implementing agencies:** | The Provincial People's Committee (PPC) of Ben Tre and Tra Vinh provinces |
| **Project type:** | AE-based project |
| **Agroecological zone:** | Tropical/mountain |
| **Target area:** | Ben Tre and Tra Vinh provinces in the north-east Mekong Delta Region |
| **Target group:** | Smallholder farmers; household enterprises; Community Interest Groups (CIGs); cooperatives, small and medium enterprises; women; ethnic minorities. |
| **Project purpose:** | To achieve "sustainable livelihoods for the rural poor in a changing environment" by strengthening the adaptive capacity of target communities and institutions to better contend with climate change. |
| **Components:** | **Component 1:** Building adaptive capacity to climate change; **Component 2:** Investing in resilient livelihoods. |
| **Key AE activities:** | ▪ Rice integration with fruits and vegetables to cope with salinity;<br>▪ Rice-shrimp rotations;<br>▪ Water use efficiency;<br>▪ Soil fertility management through System of Rice Intensification;<br>▪ Organic integrated pest and soil fertility management in coconut, rice and shrimp cropping systems (no use of synthetic pesticides and fertilizers);<br>▪ Water saline content monitoring and forecasting system, and participatory community vulnerability mapping and scenario development (natural disaster, salinization, climate change impacts);<br>▪ Integration of climate change concerns into the provincial Socio-Economic Development Plan;<br>▪ Policy dialogue at provincial and national levels on vulnerable populations/social vulnerability in climate change policy, planning, and investment;<br>▪ Cofinancing for climate change adaptation through matching grants introduced in communes and villages;<br>▪ Rural finance to improve financial inclusion and financial service delivery in rural areas through the promotion of community-based savings and credit groups and transformation of credit networks into microfinance institutions. |

In collaboration with farmers, participatory adaptive research was conducted on saline tolerant crops by research institutions and universities to increase knowledge and capacity to adopt irrigation techniques and salinization accumulation reduction practices. Simple methods building on farmers' knowledge and practices were developed to improve irrigation practices and enhance water use efficiency. Shrimp farming has improved through better management practices in aquaculture and provision of better seed stock, while the use of catfish sludge as fertilizer in dry agriculture has reduced the environmental impacts of catfish farming and contributed to waste management and nutrient recycling.

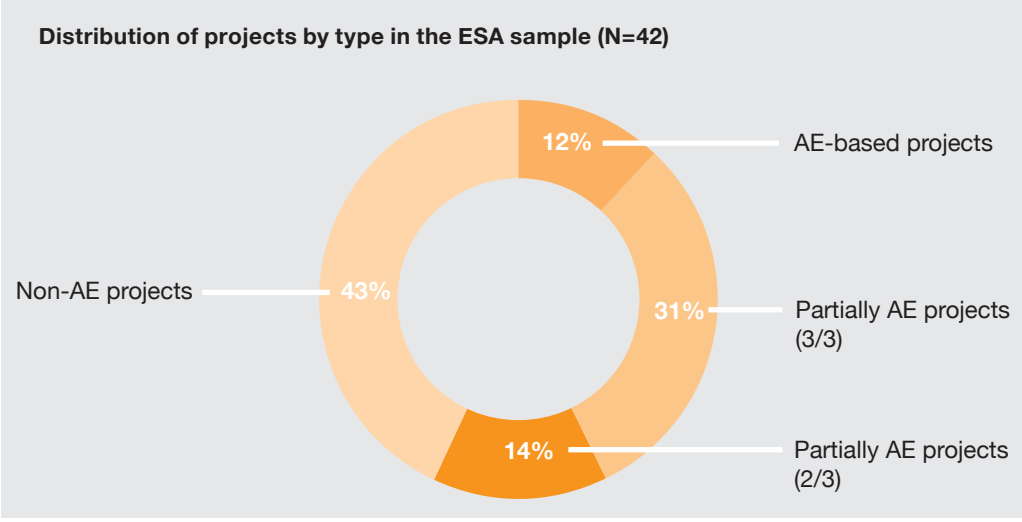
Investments in the irrigation system to improve water management facilitated a transition away from excessive use of irrigation water in farming systems. These included investments in conversion to other cropping systems and improvement of irrigation canal systems adopted by farmers shifting to shrimp/more saline tolerant crops to reduce water loss.

The project has financed climate change adaptation measures, especially in shifting from intensive rice production to more climate change resilient perennial crops production, among other environmentally-sound investments. The most common climate change adaptation technologies in the project were based on organic farming. Organic coconut growing and the organic shrimp-rice model constituted good examples of a shift to organic inputs, Integrated Pest Management (IPM) and soil fertility management practices.

## 4.2 Agroecology in the East and Southern Africa (ESA) Portfolio

ESA has the second largest IFAD portfolio in the analysed sample of 207 projects, corresponding to 42 projects completed or to be completed in the 2018-2023 period. Using the agroecology framework developed for the stock-take, five projects were classified as AE-based (12 per cent), 19 as partially AE (45 per cent) and 18 as non-AE (43 per cent) (figure 24). This distribution is similar to the distribution across the total sample.

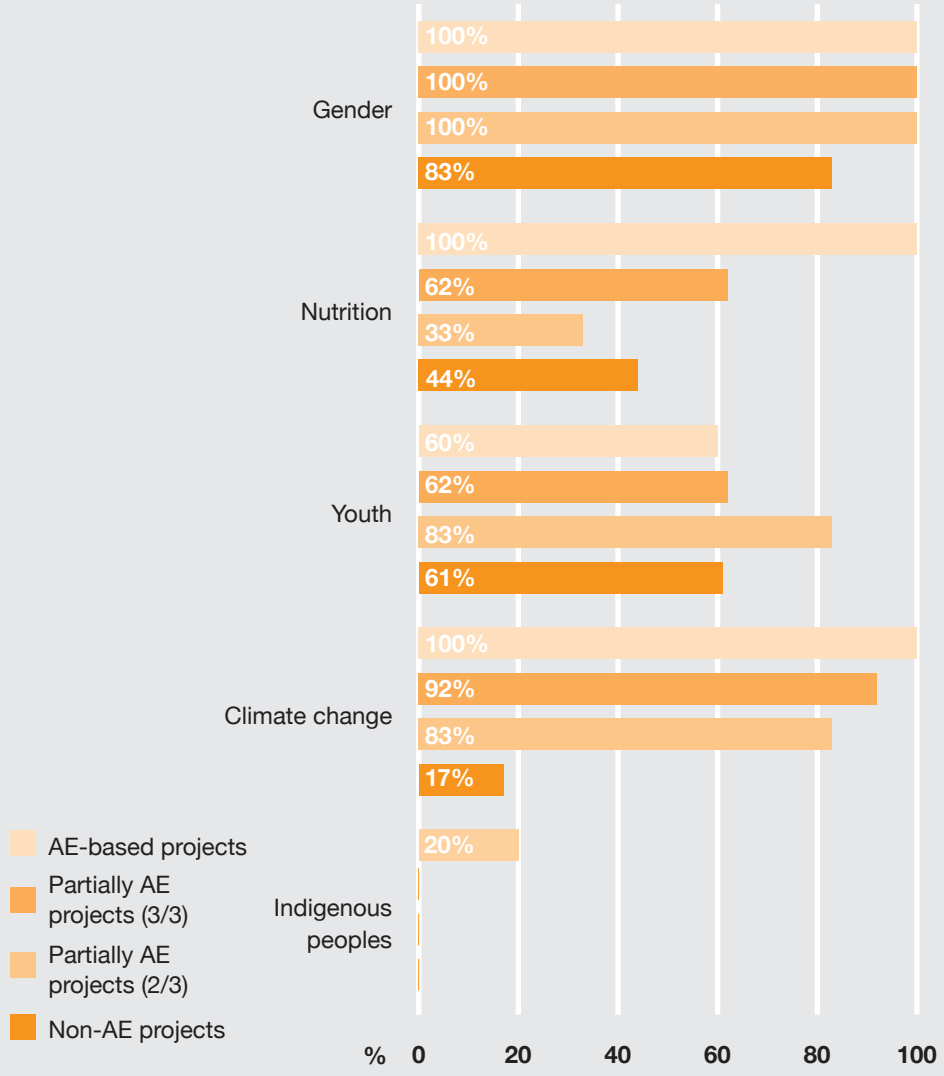
**FIGURE 24:**



In regard to incorporating IFAD's mainstreaming priorities and Indigenous Peoples by type of project, the ESA projects show similar findings to the assessment of all projects: projects supporting agroecology are more likely to incorporate the mainstreaming priorities. Almost 100 per cent of AE-based projects incorporate gender, nutrition and climate change – a significantly higher uptake compared to non-AE projects (83 per cent, 44 per cent and only 17 per cent respectively) (figure 25). With 20 per cent of AE-based projects being the only ones to work with Indigenous Peoples, the higher tendency of agroecology to support Indigenous Peoples is also replicated in ESA, even though in much lower percentages than findings from the full sample. Only support for rural youth, one of the newest mainstreaming priorities in IFAD, seems to be picked up equally well by agroecological and non-AE projects in ESA.

**FIGURE 25:**

**Distribution of thematic areas in ESA projects**



The completed GEF co-funded **CBINReMP project in Ethiopia** represents an insightful example of how agroecology was applied in a tropical-dryland context in ESA (box 7). The project was implemented between 2009 and 2018 in the Lake Tana watershed in the Ahmara region, benefitting 450,000 rural families of near landless, landless and unemployed youth, including women. Local indigenous groups were also involved since the activities linked to production and natural resource conservation was guided by documented traditional knowledge and indigenous practices. The purpose of the project was to combat land degradation and promote sustainable land management in order to increase agricultural productivity, household food security and incomes and to engage unemployed youth and women in income-generating activities such as bee-keeping and sericulture.

In a context of degraded natural resources, the project promoted agroforestry by using indigenous species to improve watershed management and integrated farming systems based on crop production and livestock and pasture management to enhance ecosystem integrity and biodiversity conservation. Community-based management activities were the strength of the project, as management of forests and pastureland involved local communities and grassroots organizations in a participatory manner, through activities related to mapping land use patterns and land ownership. Central and community-based gene banks were set up for storing and exchanging seeds between farmers, contributing to agro-biodiversity enhancement. This was supported by the Institute of Biodiversity Conservation, which developed guidelines for the management of the gene-banks, including seed quality certification, storage, distribution to farmers and replenishment.

Nutritional security and resilience to climate change were central across project activities, as agroecological practices helped enhance both nutritious food availability and climate change adaptation and mitigation. The project also worked to mainstream gender. For instance, workload on women was reduced throughout the introduction of water lifting techniques enhancing water availability and allowing them to engage in diversified vegetable production on their homestead plots. Simultaneously, the rehabilitation of degraded forest through agroforestry and the use of alternative energy such as biogas and solar energy, combined with the use of energy saving cook stoves, have contributed to reducing carbon emissions.

**BOX 7:**

**Community-based Integrated Natural Resources Management Project (CBINReMP)**

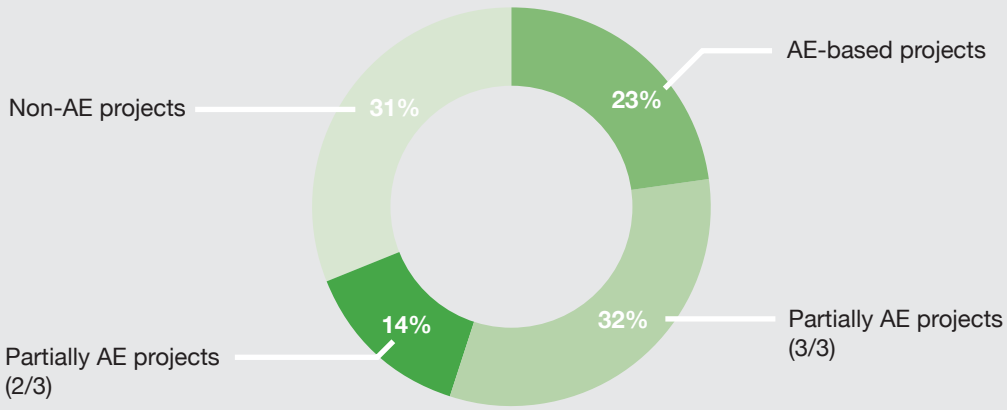
| | |
|---|---|
| **Country:** | **Ethiopia** |
| **Approval date:** | 30/04/2009 |
| **Completion date:** | 30/09/2018 |
| **Financing type:** | Loan/Grant (GEF/IFAD internal) |
| **Implementing agencies:** | Bureau of Environmental Protection, Land Administration and Use (BoEPLAU) of the Amhara Regional State Government (ARSG); Bureau of Finance and Economic Development (BoFED) |
| **Project type:** | AE-based |
| **Agroecological zone:** | Tropical/dryland |
| **Target area:** | Lake Tana Watersheds |
| **Target group:** | Near landless, landless, and unemployed youth including women |
| **Project purpose:** | Reducing poverty for about 312,000 households in the Lake Tana Watersheds. Its primary objective was to combat land degradation and promote sustainable land management to increase agricultural productivity, household food security and incomes. It also aimed at benefiting all of the estimated 450,000 smallholder households living in the LTWs; and about 25,000 unemployed youth, including young women, by supporting them in engaging in off-farm income generating activities. |
| **Components:** | **Component 1:** Community Based Integrated Watershed Management;<br>**Component 2:** Institutional, Legal and Policy Analysis and Reform;<br>**Component 3:** Project Coordination and Knowledge Management;<br>**Component 4:** Sustainable Adaptation to Climate Change. |
| **Key AE activities:** | ▪ Traditional agroforestry and plantation of indigenous trees;<br>▪ Land-use mapping and integrated management of crop and livestock activities;<br>▪ Biogas facilities providing manure for soil fertility, along with mulching and composting;<br>▪ Soil erosion control measures such as hillside terracing and small-scale irrigation for water use efficiency;<br>▪ Construction of central and community-based gene banks;<br>▪ Community-based participatory watershed development; and<br>▪ Participatory domestic experience-sharing training sessions. |

## 4.3 Agroecology in the Latin America and Caribbean (LAC) Portfolio

Out of the 207 projects in the sample, 35 projects completed or to be completed in the 2018-2023 period are from LAC. Using the IFAD agroecology framework developed for the stock-take, the distribution of projects across the four project types in LAC appears slightly different compared to the other four regions. Eleven projects qualified as non-AE, representing only 31 per cent of total LAC projects, compared to 40 per cent in the full sample (figure 26). In addition, the percentage of projects fully based on agroecology is much higher, corresponding to 23 per cent (8 projects) for LAC, compared to 13 per cent in the full sample. Lastly, 46 per cent of LAC projects (16 projects) belong to the two partially AE groups – similar to the 47 per cent of the full sample. The high incorporation of agroecology in LAC is, however, mainly due to IFAD's portfolio in Brazil. Out of the 8 projects classified as AE-based, 6 are from the North-East of Brazil portfolio, where IFAD has consistently supported the government and invested in communities shifting to agroecological practices for the management of farms and landscapes. Remarkably, these projects contributed to the creation of innovative ways of connecting producers to markets, e.g. through public procurement or through linkages with local tourist services rediscovering and serving local food. Agroecological innovations also included engagement of small-scale producers and their communities through multi-stakeholder territorial platforms to discuss solving systemic barriers to income generation and agroecological transition.

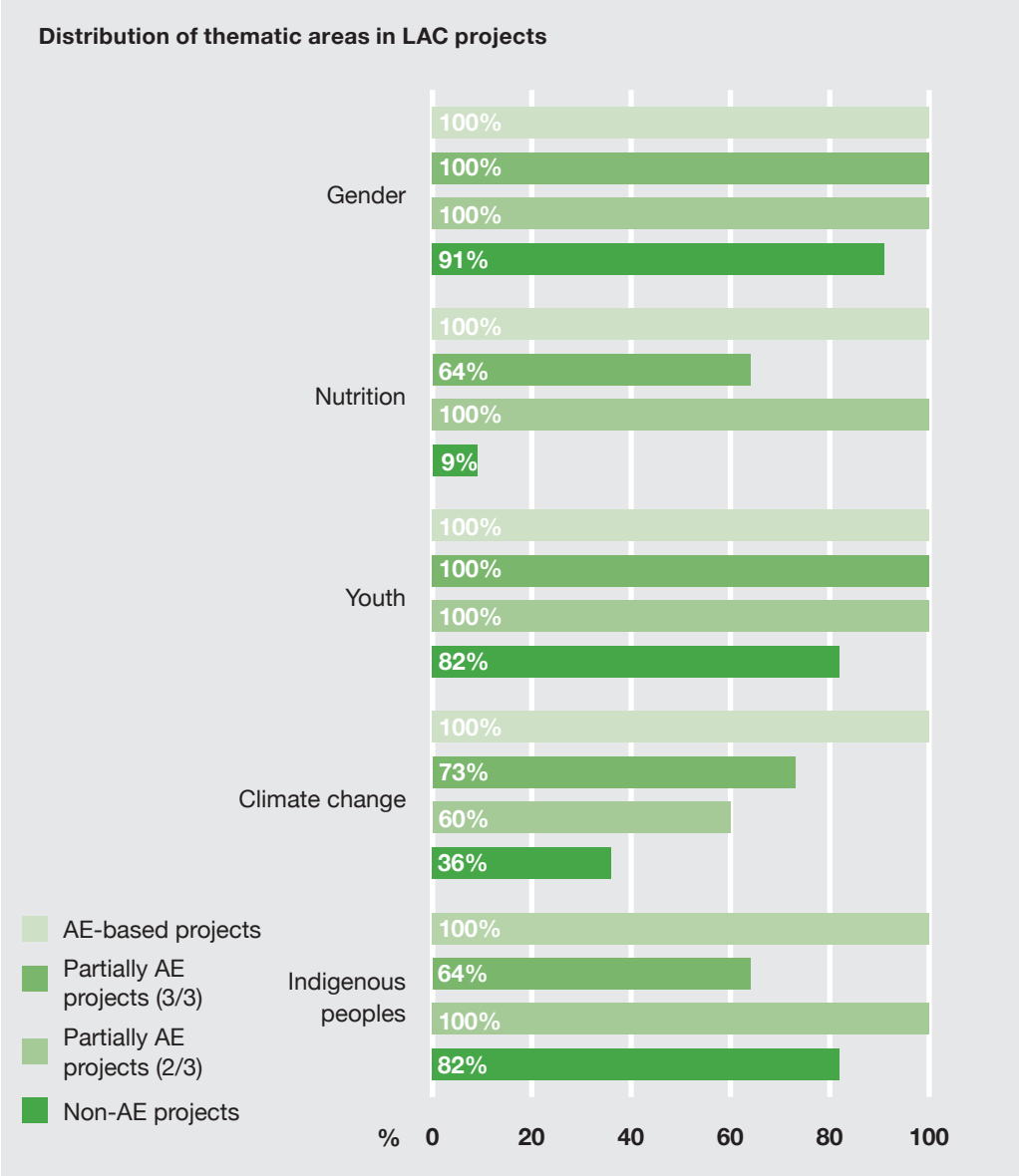
**FIGURE 26:**

**Distribution of projects by type in the LAC sample (N=35)**




Another remarkable feature of the projects in LAC is the even higher incorporation of IFAD's mainstreaming priorities and Indigenous Peoples in AE-based and partially AE projects. This inclusion strongly confirms the findings from the assessment of all projects in the sample. Almost 100 per cent of AE-based projects in LAC incorporate all four mainstreaming priorities, compared to non-AE projects which included gender in 91 per cent of cases (gender being IFAD's oldest mandatory mainstreaming priority), nutrition in 9 per cent of cases, climate change in 36 per cent of cases and youth in 82 per cent of cases (figure 27). In addition, 100 per cent of the AE-based projects support Indigenous Peoples, compared to 82 per cent of non-AE projects. As shown in the full sample, these findings once again demonstrate how projects applying the agroecological approach have been much faster in incorporating IFAD's mainstreaming priorities – particularly nutrition and climate change, even before they became IFAD priorities.

**FIGURE 27:**




The **PSA project in Brazil (2013-2022)** represents a good example of a fully agroecological project implemented in a tropical-dryland semi-arid context (box 8, see also box 3 in section 3.2). The aim of the project is to contribute to rural poverty reduction through income generation, increased and enhanced production, creation of job opportunities in agricultural and non-agricultural sectors and development of human and social capital, with particular focus on women and youth. The goal is sought through capacity building on sustainable agricultural production and rural business, and access to public policies and programmes. Special attention is also paid to sustainable natural resource management. Agroecological practices are implemented to cope with semi-arid conditions and to guide agricultural production and natural resource management of family farmers.

*Quilombola* and *Fundo de Pasto* traditional communities represent the project's key groups of beneficiaries. Agroecological approaches are embedded in the programme activities along with traditional methods of cultivation practiced by traditional communities and indigenous groups. These include collective management of grazing practices and recovery

of landscape ecosystem services practiced by the *Fundo de Pasto* communities. The project is making use of agroecological backyard gardens mostly managed by women, in which trees are integrated with crops to support the diversification and production of nutritious food while increasing soil fertility, also supported by soil restoration and conservation activities. Project interventions were chosen for their ability to diversify production systems, their contribution to recovering semi-arid region ecosystem services, and their contribution to enhancing resilience capacities to climate shocks and stresses. Furthermore, the construction of biogas facilities at household level helped reduce pollution and increase soil fertility. The use of eco-stoves also served to alleviate women's workload, since they had to walk long distances from their villages in order to collect firewood.

Fundamental for the beneficiaries of the project is the increased access to differentiated markets, including local and traditional markets, institutional markets and public procurement through which producers are able to sell their certified family farming, organic and fair-trade products based on agroecological production practices. Marketing was also supported through training in food processing and storage, rural business, quality improvement and increasing food supply.

Finally, particular attention is given to empower women and youth. Women's role in food sovereignty, nutrition resilience and preservation of biodiversity has now been highly recognized in the communities. Women are contributing to the increase in number of agroecological backyard gardens; renovation of community houses and kitchens for food preparation and processing; creation of mechanisms for the sale of family farming products; use of "agroecological logbooks" to render visible and monitor women's contribution to agrobiodiversity, family food security and nutrition and income generation; and engagement as seed guardians for local seed banks, collecting and storing native creole seeds; among others. Young people are encouraged to engage in family farming thanks to the Youth Development Agents trained to mobilize and support local communities.

**BOX 8:**

**The Rural Sustainable Development Project in the Semi-arid Region of Bahia (PSA)**

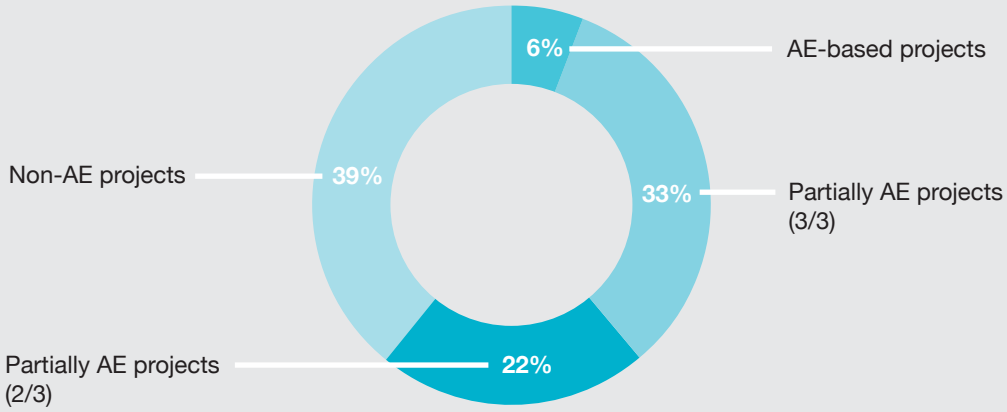
| | |
|---|---|
| **Country:** | **Brazil** |
| **Approval date:** | 11/12/2013 |
| **Completion date:** | 30/09/2020 |
| **Financing type:** | Loan |
| **Implementing agencies:** | The Secretariat of Rural Development (SDR) of Bahia through the Regional Development and Action Company (CAR) |
| **Project type:** | AE-based project |
| **Agroecological zone:** | Tropical/dryland (semi-arid) |
| **Target area:** | Thirty municipalities in the north-eastern Bahia State |
| **Target group:** | family farmers, especially women and youth, living in rural areas and villages below 10 000 inhabitants; *Quilombola* and *Fundo de Pasto* communities |
| **Project purpose:** | Contribute to rural poverty reduction through income generation, increased and enhanced production and creation of job opportunities in agricultural and non-agricultural activities, and development of human and social capital, with special focus on women and youth. The specific objectives are: (i) to strengthen the individual and associative capacities of the rural population and their organizations, including improving their skills to develop productive activities and rural business, enhancing their access to markets and reinforcing their access to public policies and programmes; and (ii) to support the development of sustainable and profitable productive activities and their insertion in supply chains and access to markets, paying particular attention to the sustainable management of natural resources. |
| **Components:** | **Component 1:** Human and social development;<br>**Component 2:** Productive development, market access and environmental sustainability. |
| **Key AE activities:** | ▪ Agroecological backyard gardens integrating vegetables and fruit trees production increasing soil fertility;<br>▪ Restoration of riparian forests and sustainable management of the Caatinga biome;<br>▪ Use of the *Fundo de Pasto* communities' traditional system of collective farming and management of grazing practices;<br>▪ Diversification of different market opportunities and setting up of certification systems to strengthen agroecological practices;<br>▪ Use of biogas facilities and eco-stoves reducing women's workload and reducing risks of respiratory diseases; and<br>▪ Use of agroecological logbooks engaging women in documenting activities that increase agrobiodiversity while contributing to family nutrition security and income generation from surplus production. |

## 4.4 Agroecology in the Near East, North Africa and Europe (NEN) Portfolio

Out of the 207 sample projects, 36 projects completed or to be completed in the 2018-2023 period took place in NEN. Using the IFAD agroecology framework developed for the stock-take, the distribution of projects among the four project types in NEN represents a particular case. Two AE-based projects make up only 6 per cent of NEN projects compared to the 13 per cent of the total sample for all regions (figure 28). However, the percentage of both types of partially AE projects amount to 55 per cent (20 projects), higher than the 47 per cent of all projects sampled. Lastly, the 14 non-AE projects correspond to 39 per cent of NEN projects, similar to the 40 per cent of the full sample. This coverage indicates that while many projects in the NEN portfolio are supporting a transition towards agroecology-based production systems, there is room for these projects to become fully agroecological.

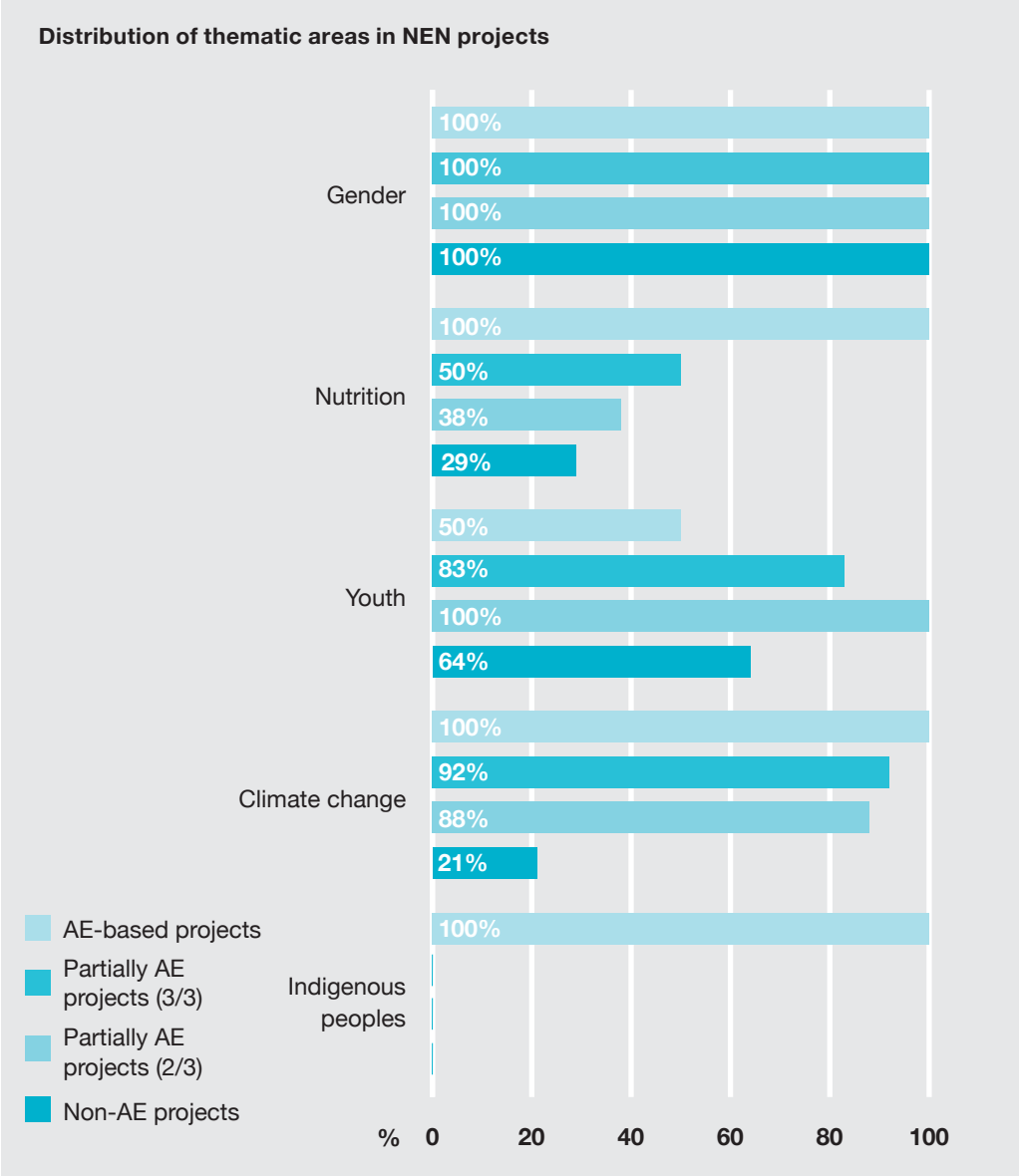
**FIGURE 28:**

**Distribution of projects by type in the NEN sample (N=36)**




As in the LAC and WCA portfolios, AE-based projects in NEN have a remarkably high incorporation rate of IFAD's mainstreaming priorities, with the exception of youth. One hundred per cent of AE-based projects in NEN are mainstreaming gender, nutrition and climate change, and support Indigenous Peoples (figure 29). While 100 per cent of non-AE projects in NEN incorporate gender, only 29 per cent of non-AE projects incorporate nutrition, 21 per cent incorporate climate change and none support Indigenous Peoples. However, as in the ESA portfolio, an exception is observed regarding youth, which is covered by only 50 per cent of AE-based projects compared to 64 per cent of non-AE group and 83-100 per cent of partially AE projects, suggesting that young people are more involved in projects supporting a moderate transition towards agroecological production systems. As also shown in the full sample assessed and in a number of other regions, these findings confirm how projects applying the agroecological approach have been much faster at incorporating IFAD's nutrition and climate change priorities, before they were identified as such.

**FIGURE 29:**




The completed **Supporting Small-scale Traditional Rainfed Producers in Sinnar State (SUSTAIN)**[42] (2011-2018) project in Sudan represents a good example of a NEN agroecology-based project implemented in a tropical-dryland agroecological zone (box 9). The project aimed at reducing rural poverty while increasing food security and incomes of about 20,000 rural families, including smallholders and settled pastoralists, with particular attention paid to destitute women displaced from Sinnar 10 years prior to the start of the project.

42 See https://www.ifad.org/en/web/operations/-/project/1100001524.

Agroecological approaches were strongly supported by SUSTAIN through agroforestry and the integration of crop and livestock systems in land-use planning, and by using crop residues and introducing fodder crops in crop rotation systems to improve animal nutrition. Soil fertility was enhanced by compost techniques combined with poultry manure, while pests and disease were managed through IPM. Limited-tillage conservation agriculture practices were introduced to improve soil health and for their capacity to store water and recycle nutrients. These practices were combined with the minimum use of herbicides and alternative methods for weed management, in particular thanks to women's understanding of the environmental, production and health challenges in the use of agrochemicals. To support nutritional security, women were also trained in family nutrition, cooking practices and food processing.

At community level, the project supported land-use planning, laying the basis for sustainable rangelands rehabilitation and management, namely through water harvesting techniques and community forests management. This included forage production and storage, and enrichment of forests with quality fodder species. Recycling credit schemes were used to introduce gas stoves to save on wood for cooking. The project also supported access to markets to promote selling of animals and access to credit lines to establish new income generating activities.

**BOX 9:**

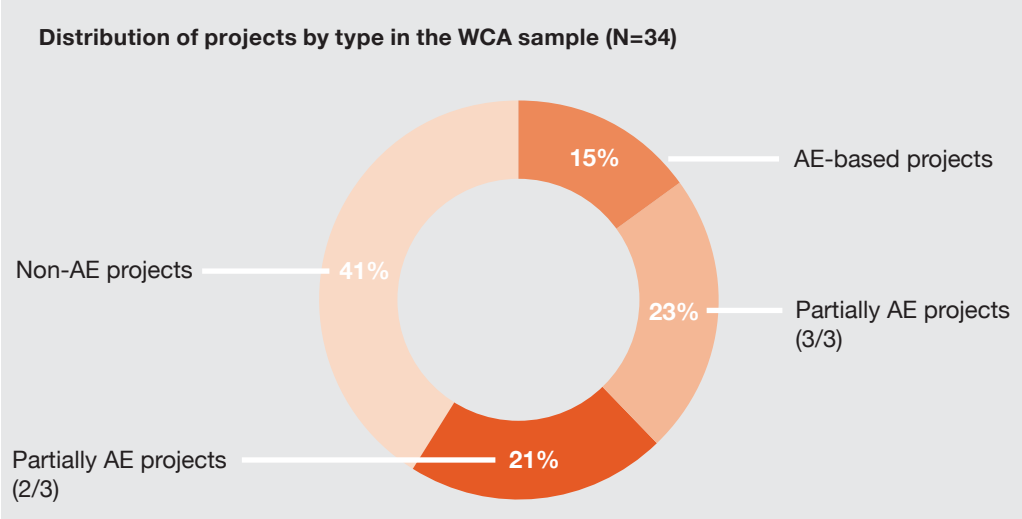
**Supporting Small-scale Traditional Rainfed Producers in Sinnar State (SUSTAIN)**

| | |
|---|---|
| **Country:** | Sudan |
| **Approval date:** | 13/12/2011 |
| **Completion date:** | 31/03/2018 |
| **Financing type:** | Loan/Grant (IFAD internal) |
| **Implementing agencies:** | The Project Management Office of the Minister of Agriculture, Animal Wealth and Irrigation (MAAWI) |
| **Project type:** | AE-based project |
| **Agroecological zone:** | Tropical/dryland |
| **Target area:** | Three of the seven localities constituting the State of Sinnar |
| **Target group:** | Smallholders; settled pastoralists; destitute women |
| **Project purpose:** | The aim of the project was to reduce rural poverty, increase food security and incomes of about 20,000 households in the project area. Its objective was to increase productivity of staple and cash crops as well as small ruminants. Its outputs were to: (i) demonstrate improved technological packages for livestock and crop production; (ii) build the capacity of agro-pastoralists to adopt improved project-supported technologies; (iii) implement appropriate measures to improve the quality and outreach of extension services; (iv) facilitate market access in the rainy season and diversify production in the dry season; (vii) put in place appropriate incentives that enable producers to finance the scaling up and replication of successful technological packages; (viii) remove barriers impeding private machinery operators from providing timely services to smallholders; and (ix) put in place the necessary measures for effective project management and implementation. |
| **Components:** | **Component 1:** Technology transfer;<br>**Component 2:** Market access and post-harvest management;<br>**Component 3:** Capacity building and strengthening of institutions. |
| **Key AE activities:** | ▪ Technological packages integrating crop, livestock and forestry and creating agroforestry-based production systems;<br>▪ Introduction of fertilization with compost combined with poultry manure;<br>▪ Improved nutritional package for livestock based on crop residues and utilization of fodder crops introduced in crop rotations;<br>▪ Avoidance of herbicides from the minimum tillage packages, developing alternatives to herbicides and reducing the use of pesticides through the application of IPM;<br>▪ Utilization of the FFS approach for participatory learning; and<br>▪ Increase of natural fodder production of reserved rangelands and community forests. |

## 4.5 Agroecology in the West and Central Africa (WCA) Portfolio

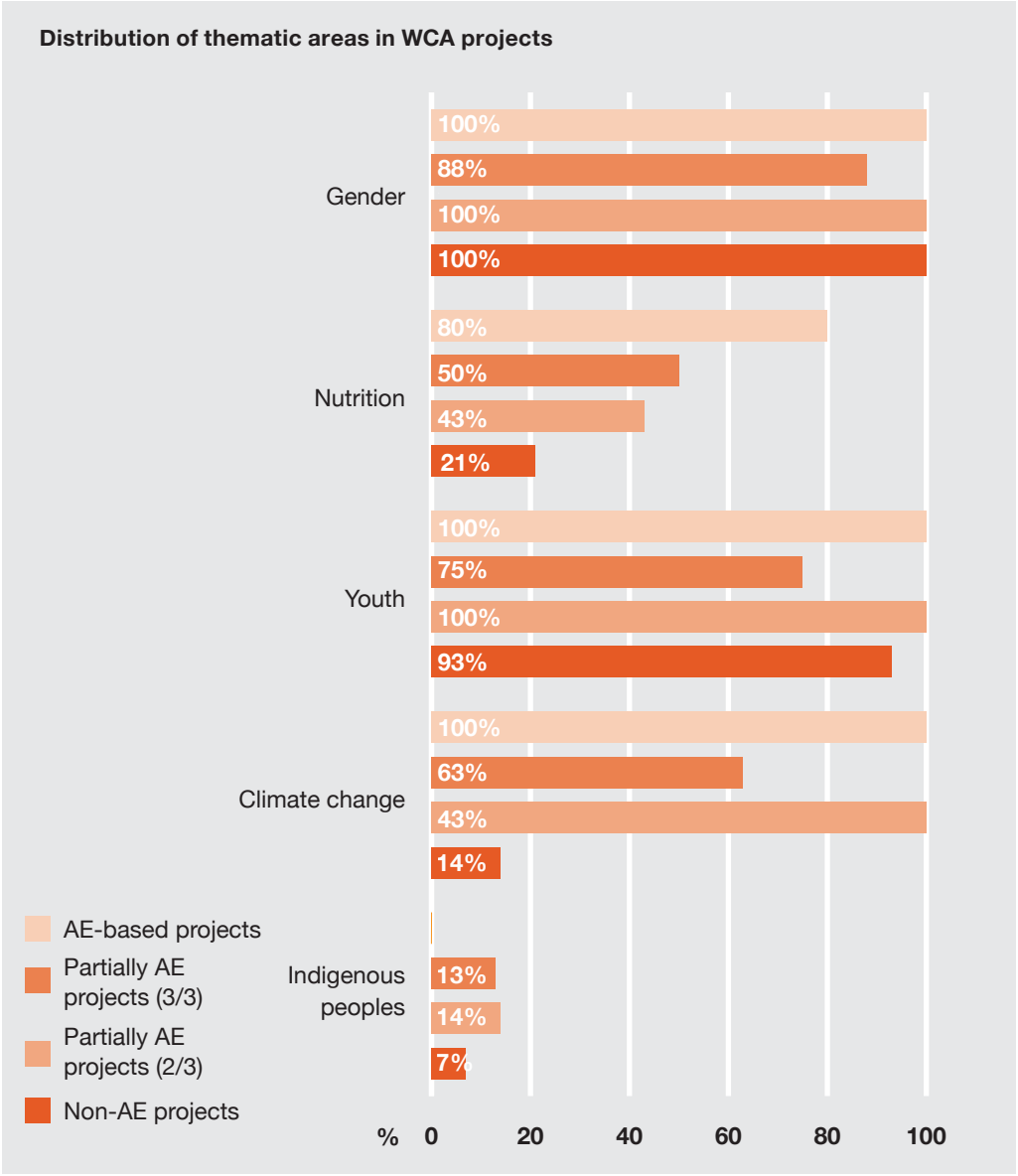
The WCA portfolio consists of 34 projects completed or to be completed between the 2018-2023 period. By using the IFAD agroecology framework developed for the stock-take, the assessment classified 5 projects as AE-based (15 per cent), 15 as partially AE (44 per cent) and 14 as non-AE (41 per cent) (figure 30). This distribution is similar to the distribution across all regions in the total sample.

**FIGURE 30:**




As in the LAC and NEN portfolios, AE-based projects in WCA have a remarkably high incorporation rate of IFAD's mainstreaming priorities, once again confirming similar findings from the assessment of all projects in the sample. One hundred per cent of AE-based projects in WCA are mainstreaming gender, youth and climate change, while 80 per cent incorporate nutrition. In the case of gender and youth, there is no difference when comparing AE-related projects and non-AE projects, which incorporate gender in 100 per cent and youth in 93 per cent of cases (figure 31). However, as observed in the full sample, projects applying an agroecological approach have been much more effective than non-AE projects in incorporating nutrition and climate change, even before they became IFAD mainstreaming priorities. Non-AE projects only incorporate nutrition in 21 per cent of projects and climate change in 14 per cent of projects.

**FIGURE 31:**


Distribution of thematic areas in WCA projects
Gender
100%
88%
100%
100%
Nutrition
80%
50%
43%
21%
Youth
100%
75%
100%
93%
Climate change
100%
63%
43%
14%
Indigenous peoples
13%
14%
7%
AE-based projects
Partially AE projects (3/3)
Partially AE projects (2/3)
Non-AE projects
% 0 20 40 60 80 100

The **Family Farming Development Programme in Maradi, Tahoua and Zinder Regions (ProDAF)**[43] project in Niger represents a good example of a WCA project implemented in a dryland context using an agroecological approach (box 10). ProDAF is funded by ASAP and GEF, in addition to other funding sources. It aims at guaranteeing food and nutrition security and improve rural households' resilience to crises in the targeted regions. The project works mainly with family farmers involved in agro-silvo-pastoral activities, including women and youth, benefiting 290,000 rural households.

At the farm and landscape levels, ProDAF is implementing agroecological activities including: (i) Assisted Natural Regeneration (ANR) for water infiltration and improvement of soil organic matter content; (ii) IPM and the use of neem extract as plant protection to reduce the use of synthetic inputs and related costs in pest, weed, and diseases management; (iii) feed and forage improvement techniques, as well as livestock disease control for small livestock and poultry, based on the productive use of synergies generated by integrated production systems (production and use of manure and compost to enhance soil fertility); (iv) intercropping of nitrogen fixing trees and cereals through ANR; and (v) sustainable watershed management through water-mobilization infrastructure and water use efficiency, dune fixation and recovering degraded lands.

The project is also embracing the broader social and economic aspects of agroecology by linking farmers to markets, building capacity for co-learning among family farmers through FFS, empowering women and youth, and undertaking climate change adaptation and mitigation activities relevant to sustainable small-scale farming. In addition, ProDAF is contributing to the food and nutritional security of the most vulnerable, particularly women and children, and reducing chronic malnutrition by improving diets through production diversification.

43 See https://www.ifad.org/en/web/operations/-/project/1100001688.

**BOX 10:**

**Family Farming Development Programme in Maradi, Tahoua and Zinder Regions (ProDAF)**

| | |
|---|---|
| **Country:** | Niger |
| **Approval date:** | 22/04/2015 |
| **Completion date:** | 30/09/2023 |
| **Financing type:** | Loan/Grant (ASAP/GEF) |
| **Implementing agencies:** | Regional Programme Management Units (URGP) of the Ministry of Agriculture and Livestock |
| **Project type:** | AE-based project |
| **Agroecological zone:** | Dryland |
| **Target area:** | Maradi, Tahoua, Zinder regions |
| **Target group:** | Family farmers involved in agro-silvo-pastoral activities; women and youth |
| **Project purpose:** | The goal of the project is to contribute to sustainably guarantee food and nutrition security and rural household resilience to crises in the Maradi, Tahoua and Zinder regions. The development objective is to sustainably increase the income of 240,000 family farms, their resilience to external shocks (including climate change), and their access to local, urban and regional markets in each of the three regions. |
| **Components:** | **Component 1**: Strengthening of sustainable family farming;<br>**Component 2:** Access to markets;<br>**Component 3:** Programme management and coordination, M&E, and knowledge management. |
| **Key AE activities:** | ▪ Community agroforestry and ANR;<br>▪ IPM and neem extract application against pests/weeds/diseases;<br>▪ Sustainable watershed management;<br>▪ Feed and forage improvement techniques. |

In addition, IFAD and partners are involved in The Alliance for Agroecology in West Africa (3AO),[44] a coordination and information platform made up of farmers' organizations, civil society, NGOs, research institutions, and international organizations seeking to promote agroecological transition in West Africa. The second workshop was held in Dakar in 2019. It was supported and attended by IFAD. IFAD intends to continue its contribution to the initiative through the ASAP programme.

44 The Alliance includes the Network of Peasant Organizations and Agricultural Producers in West Africa (ROPPA), the National Council for Rural Dialogue and Cooperation (CNCR) of Senegal and other national platforms of farmers' organizations (FOs) in West Africa, including the Association for the Environment and Development Action for the Natural Protection of Terroirs (ENDA-PRONAT), the Alliance for Food Sovereignty in Africa (AFSA), the European Union (EU), FAO, the French Agricultural Research Centre for International Development (CIRAD), the International Panel of Experts on Sustainable Food Systems (IPES-Food), Action Against Hunger, the Senegalese Institute for Agricultural Research (ISRA), the West and Central Africa Council for Agriculture Research and Development (CORAF-WECARD), the Economic Community of West African States (ECOWAS), among others.

# 5. Conclusions and recommendations

This section summarises the main conclusions and recommendations of the assessment of agroecology in the IFAD portfolio based on the sample of all 207 IFAD projects completed or to be completed between 2018 and 2023.

## Support for agroecological approaches in the IFAD portfolio

The main conclusion of the stock-take is that even though only some project documents explicitly mention agroecology as an approach used in the project, **60 per cent of the projects assessed include agroecological activities. Specifically, 13 per cent of projects in the sample are fully based on agroecology.** These projects promote production systems that integrate a high level of diversity of crops and animals to create synergies, resource use efficiency, and recycling of water, nutrients, biomass and energy. Another 47 per cent of projects in the sample partially promote agroecological approaches either by (i) fully promoting the three core elements (**Diversity**, **Efficiency**, and **Recycling**), but only among some of its beneficiaries, or (ii) by only promoting two of the three core elements among all project beneficiaries. Of the 40 per cent of projects not adopting agroecological approaches, 36 per cent are not primarily investing in the agricultural, livestock or aquaculture sectors and 6 per cent invest in coastal fisheries, a sector not included in the agroecology framework used for this stock-take. **Only 23 per cent of IFAD projects supporting agricultural and livestock production are not promoting agroecology-related practices.** Through this analysis, IFAD demonstrates a long-standing tradition of supporting sustainable farming practices and natural resource management at farm and landscape levels. It also shows a solid starting point from which IFAD can continue to build its experience in supporting governments, small-scale producers and their communities in transitioning towards integrated agroecological farming systems. Lastly, it shows a demand for this type of support among IFAD's development partners.

**RECOMMENDATION:** Further develop the framework for understanding agroecology as an integrated approach to sustainable food systems benefiting small-scale producers and rural vulnerable communities For example, (e.g. in coastal fisheries in collaboration with FAO, and to work with other partners, interested in refining the framework for agroecology in pastoral production systems) such as ILRI.

## The correlation between IFAD's mainstreaming priorities and agroecology in the IFAD portfolio

There is only a small difference between projects that adopt or do not adopt agroecological practices and the incorporation of activities supporting gender equality in IFAD projects. With 98-100 per cent of AE-related projects and 89 per cent of non-AE projects incorporating gender, almost all IFAD projects support this priority. Gender is IFAD's oldest mainstreaming priority and has been mandatory to incorporate in all projects for decades, explaining its prevalence across all project types. For IFAD's newer mainstreaming priorities, **there is a clear positive correlation between projects promoting agroecology and projects incorporating nutrition, climate change and youth. Agroecology-related projects particularly proved early adopters of the nutrition and climate change priorities** – further reflecting agroecology's ability to improve on these crucial areas. Nutrition is addressed in 92 per cent of fully AE-based projects and 55-60 per cent of partially AE projects compared to only 20 per cent of non-AE projects. Climate change is addressed by 96 per cent of AE-based projects and 60-83 per cent of partially AE projects, while it is covered by only 18 per cent of non-AE projects. While differences are less pronounced for youth, coverage remains lower in non-AE projects (59 per cent) compared to AE-related projects (78-81 per cent). Indigenous Peoples are targeted by 62 per cent of the AE-based projects compared to 29 per cent of non-AE projects. **By promoting agroecology in its projects, IFAD is holistically addressing its four mainstreaming priorities. The agroecological approach also appears of particular relevance to projects working with Indigenous Peoples.** IFAD's contribution to achieving SDG 2 (Zero Hunger) is likely to benefit significantly from agroecological approaches, given their contribution to nutrition security and climate change adaptation and resilience, particularly for small-scale producers and their communities.

**RECOMMENDATION:** Consider agroecological approaches in the design of projects aimed at promoting and strengthening diversified and integrated production and commercialization systems with rural communities that are highly vulnerable to climate change and nutrition insecurity, as well as learning from the knowledge in agroecological practices of Indigenous Peoples. The main objective would be to stabilize outputs, improve incomes and increase the production and availability of a diversity of foods accessible to low-income families.

## Trends in the adoption of agroecology in different agroecological contexts and climatic zones

The stock-take has not identified any tendency for agroecology to be applied more frequently in some agroecological contexts or climatic zones than in others. **The assessment shows that agroecology-related projects are well distributed across different agroecological zones and geographic areas. This reflects the relevance of agroecological farming systems in various contexts and agroecology's capacity to adapt to local realities.** This is because agroecology offers a broad range of practices applicable to a variety of local climatic and landscape conditions, and to different types of soils and availability of natural resources. The greater prominence of AE-based projects in tropical/dryland (54 per cent), tropical/mixed (23 per cent), and tropical/mountain (15 per cent) areas reflects IFAD's higher overall engagement in these areas due to their high levels of rural poverty.

**RECOMMENDATION:** Conduct qualitative studies on the types of agroecological practices best adapted to specific agroecological zones, with the purpose of identifying effective strategies to cope with climatic risks and food security and nutrition gaps characterizing particular contexts.

## Gaps in IFAD-supported agroecology activity groups and implications for contributions to sustainable food systems

The analysis of the different agroecology activity groups supported by AE-based projects in the sample concludes that **IFAD AE-based projects widely support different agroecological practices at farm and landscape levels but provide limited support for activities enabling commercialization and market access for agroecological products. Even more limited support is provided at the systemic level to improve policies, services and instruments to scale up agroecology as part of a transition to sustainable food systems.**

At Level 1 (farm) and Level 2 (landscape), a few activity groups receive less frequent support and greater attention could be given to their implementation. These include strengthening renewable energy use; the use of traditional knowledge in co-creation and sharing; community institutions for responsible natural resource governance and participatory land-use planning; and local seed systems to improve access to a variety of quality seeds adapted to the local environment.

In the case of Level 3 activities (improved access to markets), support is mostly limited to traditional investments in IFAD projects such as food processing and storage. Projects are failing to benefit from important elements of agroecological systems. Only one third of AE-based projects are exploring innovative ways of organizing supply and demand and directly connecting small-scale producers, their organizations and consumers around shared values of sustainably produced food (e.g. using information and communication technologies (ICT) for e-commerce and trust creating platforms, developing low-cost community-based guarantee systems, developing infrastructure and physical spaces for farmers markets, supporting public procurement of healthy food from small-scale producers, creating linkages with private sector partners who share similar values for the sustainable production and commercialization of food). **Gaps in supporting market level innovations limit IFAD AE-based projects in fully contributing to sustainable food systems transition. Agroecological market innovations allow for greater availability of diverse, safe and affordable foods on local or national markets, where more value can be accrued to small-scale producers.** Stronger inclusion of these interventions would reinforce small-scale producers' and their organizations' direct access to markets and consumers sharing similar values on sustainable food. It would also increase their bargaining power and allocate greater value at the farm level. IFAD is well-placed to support market level innovations, as demonstrated in one third of IFAD's AE-based projects.

**RECOMMENDATION:** Document the lessons learned from the one third of IFAD AE-based projects investing in innovative market approaches and provide guidelines on best practices for IFAD projects to improve their support for such approaches.

**Inclusion of Level 4 activities in IFAD AE-based projects (supporting policies, services and instruments enabling agroecology) remains the most limited.** This presumably reflects IFAD's comparative advantage in investing with small-scale producers and their communities at farm, landscape and market levels, but also **reveals opportunities to improve on and develop partnerships to affect the policy level and improve services for small-scale agroecological producers.** IFAD is well placed to support addressing systemic barriers for small-scale producers' transition to agroecology production and commercialization and increment their contribution to sustainable food systems and the achievement of SDG 2. Because IFAD is investing and learning with small-scale producers, their organizations and communities and government partners, IFAD can: (i) generate evidence and knowledge products as inputs into policy processes and support for scaling up investments in small-scale producers' transition to agroecology-based production and commercialization systems; (ii) support the strengthening of instruments and services (e.g. financing, economic incentives, participatory research, technical assistance and extension) enabling innovation, co-creation and capacity building; and (iii) facilitate partnerships with the private sector, e.g. around the use of ICT and Fintech services working with small-scale producers' organizations to support agroecological transition processes.

As demonstrated by the 35 per cent of AE-based projects investing in inclusive mechanisms for policy dialogue, IFAD projects have proven successful in supporting multi-stakeholder territorial platforms, where systemic barriers are discussed and solutions are found. These barriers are often exposed when projects investing with farmers and their organizations in production and commercialization confront system-level challenges. Multi-stakeholder territorial platforms can be very effective in meaningfully engaging small-scale producers, women, youth and Indigenous Peoples in dialogue and finding solutions that work for them while enabling broader systemic impacts. IFAD should also aim to develop partnerships with entities better placed to support policy and regulatory reform processes to enable agroecological and sustainable food systems development. IFAD and FAO are already collaborating on the Scaling Up Agroecology Initiative. In Argentina, for example, FAO and IFAD are working together with national and provincial governments to build policy frameworks and invest in small-scale agroecological producers. The United Nations Decade of Family Farming (UNDFF) is another initiative under which IFAD can work with other agencies and governments to support South-South exchange and enhance policy engagement to resolve systemic barriers to the transition of agroecology and sustainable food systems, and the realization of SDG 2.

**RECOMMENDATIONS:** Develop and apply results monitoring instruments to provide evidence on the impacts and benefits of agroecology-based farming and commercialization systems (e.g. income generation, resilience, food security and diverse healthy diets, empowerment and agency of women, youth and vulnerable groups, sustainability of ecosystem services and biodiversity conservation); and document effective investment practices and enabling services for institutionalization and scaling up.

Document lessons learned from IFAD AE-based projects investing in multi-stakeholder territorial platforms, where small-scale producers, women, youth and Indigenous Peoples are meaningfully involved in discussing and finding solutions to the systemic barriers to the transition of agroecological and sustainable food systems and to provide examples of best practices and innovative ways IFAD projects can step up support for such territorial platforms.

Participate in partnerships with governments and other development entities supporting the development of comprehensive policy frameworks and the adjustment or reform of key regulations enabling agroecology and sustainable food systems.

## Performance of projects fully applying agroecology

The 10 fully AE-based projects completed in 2018-2020 performed better on all selected IFAD indicators, crucial to the projects' contribution to sustainable food systems, compared to all other IFAD projects completed in the same period. **Gender Equality and Women's Empowerment, Food Security, Adaptation to Climate Change, Environment and Natural Resource Management, Human and Social Capital, Sustainability and Effectiveness all have higher ratings in the AE-based projects, showing the comparative advantage of integrated agroecology approaches in achieving IFAD's development effectiveness targets.** IFAD has a strong commitment to improve performance on sustainability – currently one of its least performing indicators. All 10 completed AE-based projects met or surpassed IFAD's target rating of 4 (moderately satisfactory) in sustainability, compared to only 70 per cent of all IFAD projects completed in the same period achieving a rating of at least 4. The analysis also highlights the importance of certain agroecology activity groups in strengthening a project's sustainability outcomes and impacts, namely **Building/Strengthening community institutions for NR governance**, **Mechanism for policy dialogue** and **Institutional strengthening for formulation, implementation and M&E of agroecology policies and instruments.**

**RECOMMENDATION:** Increase the adoption of integrated and holistic approaches for sustainable food systems transition, such as agroecology, in IFAD-supported projects and programmes and improve project and programme sustainability and development effectiveness by focusing on key activities supporting community ownership, capacity building for responsible governance and policies that enables transition.

## IFAD's leverage of financing for agroecology

In the sample of all 207 IFAD projects completed or to be completed between 2018-2023, **56 per cent of IFAD financing (including GEF and ASAP) is supporting AE-based and partially AE projects (US$3.75 billion out of a total of US$6.67 billion)**. Including all cofinancing sources leveraged for these projects, the total amount invested in AE-based and partially-AE projects is US$8.25 billion, corresponding to 53 per cent of the total financing analysed (US$15.5 billion). However, as 60 per cent of projects sampled are AE-based and partially-AE, these figures demonstrate that non-AE projects still receive more financing than projects supporting agroecology.

**ASAP and GEF financing have been instrumental in leveraging support for agroecological practices** even though these sources only constitute a small proportion of total project financing (3 per cent in the case of ASAP). Around 87 per cent of projects with ASAP financing and 90 per cent of projects with GEF financing are fully or partially promoting agroecology.

In general, it is observed that **private sector cofinancing is very limited for all projects in the sample, contributing 0 per cent of financing in the case of AE-based projects and 4 per cent for non-AE projects.** Even though private sector cofinancing may not always be properly captured in project reports, it is still revealing a clear challenge and opportunity to consider for the future. IFAD could seek partnerships and co-investment with private sector actors to secure more financing for small-scale agroecology producers and value addition and commercialization businesses. Private impact investors are increasingly seeking to identify how and whether investments contribute to the transition of sustainable food systems. For example, the Global Alliance for the Future of Food and its Transformational Investing in Food Systems (TIFS) initiative is developing interesting tools to support true cost analysis. These tools account for externalities that increases vulnerabilities to climate change and consider a broader set of social, climate mitigation and adaptation, and economic criteria to understand the impacts of investments in the agrifood sector.

Under IFAD's new Private Sector Engagement Strategy and instruments, as well as in relation to sovereign investment projects, IFAD could partner with private sector impact investors to identify co-investment opportunities to invest with agroecological entrepreneurs and small-scale producers working in aggregation and commercialization. Likewise, there could be a mutual interest in improving and applying results-based investment tools (e.g. true-cost accounting, economic and financial analysis plus (EFA+) triple bottom line, ecological footprint, social return on investment) to monitor impacts of investments' contributions to sustainable food systems (e.g. recovering and improving ecosystem services, creating jobs, promoting inclusion and empowerment of women and youth, increasing incomes, food and nutrition security, and resilience of small-scale producers and their families). The evidence generated from such tools is much needed to improve learning, encourage and scaling up of investments. For example, some foundations and development agencies are developing blended finance investments tools that factor in social, environmental and economic outcomes in return calculations while providing a risk management mechanism (e.g. first loss facilities) attractive to private sector participation. These and other emerging investment mechanisms will be critical to advancing agroecology.

**RECOMMENDATIONS:** Under IFAD's new Private Sector Engagement Strategy and in relation to sovereign investment projects, IFAD could seek partnerships with private impact investors and identify business cases and related financing instruments best suited for co-investing with agroecological entrepreneurs, working with small-scale producers in aggregation and commercialization.

Explore impact investors' mutual interest in improving and applying results-based investment tools to assess and monitor impacts of investment contributions to sustainable food systems with the aim of mutual learning, encouragement, and scaling up of investments.

## Differences between regions in IFAD support for agroecology

The distribution of projects by project types in each region is more or less equivalent to the distribution in the total sample (13 per cent AE-based, 43 per cent partially AE, and 40 per cent non-AE projects). **LAC remains the outlier with high support for agroecology (23 per cent of projects are AE-based and 46 per cent partially-AE). This is, however, mainly due to IFAD's portfolio in Brazil.** Out of the 8 projects classified as AE-based in LAC, 6 are from IFAD's portfolio targeting the North-East of Brazil, where projects have consistently invested with communities in developing agroecological practices for farm and landscape management. They have most remarkably supported innovative ways of connecting to markets, e.g. through public procurement and linking to local tourist services rediscovering and serving local food. They have also facilitated small-scale producers and their communities to engage in multi-stakeholder territorial platforms to discuss opportunities for greater income generation from commercialization of agroecological products and to find solutions to the systemic barriers to agroecological transition.

LAC is followed by WCA (15 per cent AE-based, 44 per cent partially AE projects), ESA (12 per cent AE-based, 45 per cent partially AE projects), APR (10 per cent AE-based, 46 per cent partially AE projects) and NEN, with the lowest percentage of AE-based projects (6 per cent), but highest percentage of partially AE projects (55 per cent). The total sample shows a wealth of agroecological approaches and practices used across all regions, and points to the possibility of improvement and further engagement in the important number of partially AE projects.

To facilitate cross-learning, in collaboration with ECG, PMI is developing a lessons learned note based on this stock-take, six detailed case studies on AE-based projects, and lessons learned documented by other partners. These knowledge products will be followed by a guidance note on best practices and innovative approaches for supporting agroecology and sustainable and resilient food systems in IFAD project design and implementation.

**RECOMMENDATIONS:** Based on this stock-take and the upcoming case studies report and lessons learned note, develop a guidance note for design and implementation of agroecological approaches in investment projects.

Facilitate exchange and learning between regions among IFAD staff and government, NGOs, community and private sector development partners.

# References


Gliessman, S.R. et al. 2003. Agroecology: The Ecology of Food Systems. *Journal of Sustainable Agriculture*, 22(30): 99-118 (available at: https://www.researchgate.net/publication/233138094_Agroecology_The_Ecology_of_Food_Systems).

Gliessman S. R. 2007. *Agroecology: The ecology of sustainable food systems*. 2nd ed. Boca Roton, USA: CRC Press.

Global Alliance for the Future of Food. n.d. Trends and Challenges (available at: https://futureoffood.org/our-work/the-challenges-and-opportunities/).

FAO, IFAD, UNICEF, WFP and WHO. 2020. *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets.* Rome: FAO.

FAO (Food and Agriculture Organization of the United Nations). 2019. *The Ten Elements of Agroecology.* 163th Session of the FAO Council (2-6 December). Rome: FAO (available at: http://www.fao.org/3/ca7173en/ca7173en.pdf).

FAO (Food and Agriculture Organization of the United Nations). 2018a. *The 10 Elements of Agroecology Guiding the Transition to Sustainable Food and Agricultural Systems.* Rome: FAO (available at: http://www.fao.org/3/i9037en/I9037EN.pdf).

FAO (Food and Agriculture Organization of the United Nations). 2018b. Participatory Guarantee Systems (PGS) for sustainable local food systems. Rome: FAO (available at: http://www.fao.org/3/I8288EN/i8288en.pdf).

FAO (Food and Agriculture Organization of the United Nations). 2009. *Ecosystem approach to fisheries and aquaculture: Implementing the FAO Code of Conduct for Responsible Fisheries.* Rome: FAO (available at: http://www.fao.org/3/i0964e/i0964e.pdf).

FAO (Food and Agriculture Organization of the United Nations). (n.d.). *Second International Symposium on Agroecology: Scaling up Agroecology to Achieve the SDGs.* (available at: http://www.fao.org/about/meetings/second-international-agroecology-symposium/en/).

HLPE (High Level Panel of Experts on Food Security and Nutrition of the Committee of World Food Security). 2019. *Agroecology and Other Innovative Approaches for sustainable Agriculture and Food systems that Enhance Food Security and Nutrition.* Rome: FAO (available at: http://www.fao.org/3/ca5602en/ca5602en.pdf).

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). 2019. *Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on the work of its seventh session.* IPBES (available at: https://ipbes.net/sites/default/files/ipbes_7_10_add.1_en_1.pdf?file=1&id=35329&type=node).

IFAD (International Fund for Agricultural Development). 2020a. *Community-driven development in IFAD-supported projects*. IOE, IFAD (available at: https://www.ifad.org/documents/38714182/41898849/ESR+CDD+-+final+with+cover.pdf/d2e08746-c023-da36-3c3d-2b50ab0ab90e).

IFAD (International Fund for Agricultural Development). 2020b. Corporate Portfolio Stocktake. Programme Management Department (OPR). (Rome: IFAD, July 2020).

IFAD (International Fund for Agricultural Development). 2020c. What makes projects sustainable? Brainstorming Session with project teams (Rome: IFAD, December 2020).

IFAD (International Fund for Agricultural Development). 2019a. *Completion Impact Survey Report*. IFAD (available at: https://www.ifad.org/documents/38714182/41331982/ARRI2019_Web.pdf/3a6b4016-3c6c-f040-a12f-3c46e8e82d5b).

IFAD (International Fund for Agricultural Development). 2019b. *IFAD Private Sector Engagement Strategy 2019-2024*. Executive Board – 127th Session, 10-12 September. IFAD (available at: https://www.ifad.org/en/document-detail/asset/39500277).

IFAD (International Fund for Agricultural Development). 2017. *Mainstreaming of climate, gender, nutrition and youth*. Consultation on the Eleventh Replenishment of IFAD's Resources – Third Session. Rome, 19-20 October (available at: https://webapps.ifad.org/members/repl/11/03/docs/IFAD11-3-R-4.pdf).

IFAD (International Fund for Agricultural Development). 2015. *IFAD's Engagement in Fragile and Conflict-affected States and Situations*. IFAD (available at: https://www.ifad.org/documents/38714182/39711120/cle_fragile.pdf/1666bcfd-665d-48ac-a298-cb9ad3ac8531?t=1516913569000).

IFAD (International Fund for Agricultural Development). 2008. *IFAD' s Action Plan for Improving its Development Effectiveness*. IFAD (available at: https://www.ifad.org/en/web/knowledge/-/publication/ifads-action-plan-for-improving-its-development-effectiveness).

IFAD (International Fund for Agricultural Development). n.d. *Adaptation for Smallholder Agriculture Programme* (available at: https://www.ifad.org/it/asap).

IFAD (International Fund for Agricultural Development). (n.d.). *Butana Integrated Rural Development Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001332).

IFAD (International Fund for Agricultural Development). (n.d.). *Cariri and Seridó Sustainable Development Project* (PROCASE-Paraiba). IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001487).

IFAD (International Fund for Agricultural Development). (n.d.). *Community-based Integrated Natural Resources Management Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001424).

IFAD (International Fund for Agricultural Development). (n.d). *Family Farming Development Programme in Maradi, Tahoua and Zinder Regions*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001688).

IFAD (International Fund for Agricultural Development). (n.d.). *Fisheries, Coastal Resources and Livelihood Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001548).

IFAD (International Fund for Agricultural Development). (n.d.). *Murat River Watershed Rehabilitation Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001623).

IFAD (International Fund for Agricultural Development). (n.d.). *National Agricultural Land and Water Management Development Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001643).

IFAD (International Fund for Agricultural Development). (n.d.). *Poverty Reduction Project in Aftout South and Karakoro – Phase II*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001577).

IFAD (International Fund for Agricultural Development). (n.d.). *Project for Adaption to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh Provinces*. IFAD. (available at: https://www.ifad.org/en/web/operations/-/project/1100001664).

IFAD (International Fund for Agricultural Development). (n.d.). *Rural Sustainable Development Project in the Semi-arid Region of Bahia*. IFAD. (available at: https://www.ifad.org/en/web/operations/-/project/1100001674).

IFAD (International Fund for Agricultural Development). (n.d.). *Second Cordillera Highland Agricultural Resource Management Project*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001395).

IFAD (International Fund for Agricultural Development). (n.d.). *Supporting Small-scale Traditional Rainfed Producers in Sinnar State*. IFAD (available at: https://www.ifad.org/en/web/operations/-/project/1100001524).

IFOAM Organics International and MAELA. 2004. International Workshop on Alternative Certification. (available at: https://archive.ifoam.bio/sites/default/files/page/files/internationalworkshoponalternativecertification_torres_en.pdf).

IFOAM Organics International. 2021. *Participatory Guarantee Systems worldwide* (available at: https://pgs.ifoam.bio/).

Independent Group of Scientists appointed by the Secretary-General. 2019. Global Sustainable Development Report: *The Future is Now – Science for Achieving Sustainable Development. New York: United Nationa* (available at: https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf).

Institute of Rural Reconstruction of China. (n.d.) *Revitalizing Agroecology in China*. Rome: FAO (available at: http://www.fao.org/3/be865e/be865e.pdf).

IPCC. 2019. *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)].

Janousek, A., Markey, S. and Roseland, M. 2018. "We see a real opportunity around food waste": exploring the relationship between on-farm food waste and farm characteristics. *Agroecology and Sustainable Food Systems*, 42(8): 933-960.

Rede de Agroecologia Povos da Mata. 2021. Manual prático de sistema participativo de garantía – SPG. Serra Grande (available at: http://www.sdr.ba.gov.br/sites/default/files/2021-06/MANUAL%20PRATICO%20DE%20SISTEMA%20PARTICIPATIVO%20DE%20GARANTIA%20-%20CARTILHA%20-%20WEB.pdf).

Rede de Agroecologia Povos da Mata. 2017. *OPAC: o que é e como funciona* (available at: https://povosdamata.org.br/sobre-rede/opac-o-que-e-e-como-funciona/).

United Nations General Assembly. 2018. *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas*. Human Rights Council, 39th session (10-28 September) (available at: https://digitallibrary.un.org/record/1650694?ln=en#record-files-collapse-header).

URGENCI International Network. 2020. *Community Supported Agriculture is a Safe and Resilient Alternative to Industrial Agriculture in the Time of Covid-19* (available at: https://urgenci.net/community-supported-agriculture-is-a-safe-and-resilient-alternative-to-industrial-agriculture-in-the-time-of-covid-19/).

Wezel, A., Bellon, S., Doré, T. et al. 2009. Agroecology as a science, a movement and a practice. A review. *Agronomy for Sustainable Development*, 29: 503–515 (available at: https://doi.org/10.1051/agro/2009004).

# Annex 1 – The IFAD levels of agroecology interventions

The IFAD agroecology framework captures four levels of interventions at which operations can implement agroecological practices: farm, landscape, market and policy levels. Emphasis is placed on the need for changes in production systems at the farm and/or landscape level before a project can be considered as supporting agroecology. Therefore, three key elements of agroecology at farm and landscape levels have been identified, which need to be supported for a project to qualify as agroecological. These three key elements are:

- increasing resource use efficiency while reducing and/or substituting external inputs;
- recycling water, nutrients, biomass, and/or energy; and
- diversifying and integrating different farming sectors (various crops and/or animals) in systems with high levels of biodiversity to facilitate efficiency and recycling, spread risks, increase resilience, and produce a greater variety of nutritious food.

To analyse further agroecology in investment projects beyond these three key elements, IFAD experts have identified agroecology activity groups in each of the four levels drawing on the literature and internal and external experiences. Each activity group includes a variety of practices based on the agroecological approach as described in detail below. The total 33 activity groups are further organized under thematic clusters, when relevant. Notably, this annex is a live document that will be updated as best practices and new innovative approaches emerge for agroecology and sustainable food systems that benefit small-scale producers and their communities.

## Level 1: Farm level

**1.1. Water management and soil erosion control:** practices to increase soil water retention, recharge aquifers and control soil erosion on farm (e.g. grass banks and ridges, contour planting and bunds, terraces and stone walls, half-moon bunds and bunds around trees, green wind shields, diversion ditches for drainage, all-season soil coverage, minimum tillage – conservation agriculture); rainwater harvesting and storage on farm, complementary irrigation and water-use efficiency in irrigation systems (e.g. cisterns and ponds, covered channels, drip and sprinkler irrigation, water-use efficiency monitoring); integrated agroforestry systems, in particular on slopes and silvo-pastoral systems; use of a diversity of drought, flood or salt resistant crops and plant genetic resources as needed to reduce climate change risks.

**1.2. Integrated soil fertility management:** use of cover crops, intercropping, integration of multiple-use trees for mulching and green manure, and growing crops to build soil nutrients in intercropping or crop rotation systems (e.g. nitrogen-fixing crops, green manure); reducing tillage; when possible, reducing and eliminating the use of mineral fertilizers; use of organic composts, manure and mulching techniques that recycle nutrients; ploughing under crop residues and avoiding burning of fields.

1.3. **Integrated pest, diseases and weed management:** a combination of various techniques for integrated pest management (IPM) minimizing and when possible abolishing the use of synthetic pesticides (e.g. biological pest management, "push-pull" systems, insect traps, bio pesticides, intercropping and crop rotation, other organic farming practices); planting a diversity of crop varieties using pest and diseases resistant plant genetic resources to reduce and spread risks; cover cropping for weed control in conservation agriculture systems to reduce or abolish the use of herbicides; livestock grazing in orchards and integration of ducks or fish in flood irrigated systems for weed and pests control and soil fertilization.

1.4. **Farm animal welfare and nutrition management:** on-farm rotational grazing systems with a mixture of resilient and nutrient-rich grass and fodder plant species to avoid overgrazing and improve soil conservation; use of cut and carry systems in areas vulnerable to overgrazing, and integration of fodder trees and crops in cropping systems for quality dry-season and winter feeding improving animal health and productivity; improving animal housing and sheds for animal welfare and health; balance the needs for reintegration of crop residues in soils for mulching with grazing on crops residues (co-benefitting soil fertilization) or crop residues off-field feeding (co-benefitting the reduction of waste); increasing water availability for livestock (e.g. divert water to drinking troughs away from the water source, when relevant, to avoid over trampling around and contamination of the water source); reducing the use of antibiotics by decreasing stocking rates and improved hygiene and animal health monitoring and management; no use of growth promoters and hormones; supporting local programmes for exchange and improvement of the diversity of animal breeds adequate for agroecological systems and resilient to climate shocks and stresses.

1.5. **Diversification and integration of sectors in crop-livestock-fish systems:** practices increasing biodiversity and ecological functioning by using a diversity of locally adapted plant and animal genetic resources to spread risks, increase resilience, and increase the local and national availability of a diversity of nutritious food in farming systems (e.g. planting of evolutionary populations consisting of a mixture of varieties of the same crop able to adapt to changing climate shocks and pressures); implementing ecologically based optimum planting density in intercropped and rotational systems, integrating multiple-use tree species and plants attracting pollinators to increase synergies and circulation of resources (e.g. permaculture); diversifying into biodiverse home gardens using organic practices and complementary irrigation by rooftop and other simple rainwater harvesting systems or by recycling treated household waste water; implementing integrated agroforestry, silvo-pastoral and other crop-livestock systems to increase synergies and circulation of resources (e.g. rice-fish or rice-duck systems, aquaculture-crop systems).

1.6. **Farm/Household renewable energy:** practices improving access to alternative energy sources (e.g. solar panels, biogas, and wind, and maximum use of sunlight in housing architectures); activities promoting energy efficient technologies in farming systems (e.g. gravity-based irrigation, water-use efficiency in solar or wind pumping-based irrigation systems, animal traction); promotion of alternative energy sources for household needs to reduce deforestation in areas dependent on wood as primary energy source (e.g. household composting units and bio-digesters for cooking, efficient cook stoves and insolation of houses in cold areas with co-benefits for indoor air quality and health reducing respiratory diseases and reduction in women and children's workload for fire-wood collection).

# Level 2: Landscape level

## Landscape land-use planning, governance and co-learning

**2.1. Participatory land-use planning:** participatory mapping and diagnostic of landscape resources, their use for different livelihood activities for different groups of users, possible conflicts over the use of resources, and degradation hotspots where ecosystem services and the resilience and productivity of the landscapes are reduced; participatory and community-led development of land use plans (LUPs) that consider climate change risks, ecosystem services and biodiversity conservation needs, the needs and equitable access to resources for different users including women, men, youth and different ethnic groups, when relevant, and the integration of sectors creating synergies and stimulating ecological functions and recycling processes sustaining resilient production and livelihood systems.

**2.2. Building/Strengthening community institutions for natural resource governance:** local recognition and registration of LUPs and when relevant, issuing of user rights or other tenure certificates to different user groups integrating customary local practices, and using geographic information systems when relevant; strengthening local governance institutions and including all user groups (women, youth and ethnic groups) in governance decisions on access to and sustainable use of land and other resources; building conflict resolution mechanisms, when relevant.

**2.3. Community-owned research and learning agenda (co-creation and sharing):** promotion of farmers, producers, community and/or youth groups/networks' joint research and experimentation agendas and implementing applied research in collaboration with researchers, extension workers and the communities, to monitor performance and benefits of agroecology systems (e.g. productivity, cost structure and net income, benefits for ecosystem services, social inclusion, resilience, nutrition) and improve agroecological practices on farms and in the management of shared landscapes; farmer-to-farmer exchange activities and platforms and Farmer Field Schools (FFS), community of practice using two-ways ICT tools to boost sharing and co-learning of agroecological practices.

**2.4. Traditional Knowledge:** promotion of the documentation and use of traditional knowledge relevant to improving agroecological practices in traditional and indigenous farming systems and integrated in co-creation and learning processes.

## Landscape and shared resources management

**2.5. Community and local seed systems:** participatory diagnostic of gaps and barriers for small-scale farmers and communities' access to a diversity of seeds and tree seedlings adequate for agroecology-based systems supporting resilience, and the availability of a diversity of nutritious food, and identification of opportunities for increasing complementarities between local and formal seed systems; support for seed conservation and community seed banks, local seed fairs and farmer-to-farmer exchange of seeds and seedlings; strengthening the quality of local community, producer group or individual seed production and tree nurseries, and locally-based seeds quality guarantee systems.

**2.6. Community gardens and cultivation:** collectively cultivated plots on private or public land managed by communities often led by women and using agroecological practices mentioned under level 1; complementary irrigation systems with high water use efficiency as needed to increase the level and resilience of the production allowing for the selling of surplus; cultivation of a diversity of nutritious crops including fodder crops, as relevant, seeking to address nutrition gaps and affordable food availability for diversified healthy diets for local communities.

**2.7. Community pasture, rangeland and fodder management:** establishment of community and joint community groups for rangeland rehabilitation and management including the management of water points; rehabilitation of degraded rangelands (e.g. Assisted Natural Regeneration – ANR, by collecting seeds, multiplying or growing seedlings, if needed, and broadcasting of seeds and planting of seedlings of local multi-benefit species, rainwater harvesting and increased soil water storage techniques, protecting areas from grazing to allow for recovery, supporting a diversity of resilient and nutritious grass, other fodder plants and scrub species and, when feasible, integration of trees balancing the need for high nutrition value for livestock and soil erosion control and integration with medicinal plants relevant for livestock for self-medication); improvement of grazing and stocking practices (e.g. agree on sustainable rotational grazing rules among all rangeland users to avoid overgrazing and degradation, reserve areas for use as a fodder buffer only in case of a particular difficult year with low fodder availability, harvesting and storing hay and inclusion of fodder trees and crops in cropping systems for dry season and winter feeding); increasing water availability for livestock in the rangeland (e.g. spreading of water harvesting and other livestock water points throughout the rangeland to avoid overcrowding and grazing around a few points, divert water to drinking troughs away from the water source, when relevant, to avoid over trampling around and contamination of the water source).

**2.8. Community forest and woodland management:** establishment of community and joint community groups for forest and woodland conservation and management; diagnostic of forest resources, their potential ecosystem services and status and drivers for deforestation and forest degradation and participatory development of forest or woodland management plans; conservation and rehabilitation of forest ecosystems services (e.g. demarcation, support for community tree nurseries and tree planting of native and multi-beneficial tree species, use of ANR techniques on lands with forest vocation – slopes and upper parts of watersheds and along water courses protecting water provisioning and soil conservation services, habitats for forest and woodland-dependent biodiversity, areas important for forest carbon sinks, etc.); community-based management and sustainable harvesting of forest resources and products (e.g. wood, roots, fruits, nuts, honey); community agroforestry.

2.9. **Land and water management:** establishment of watershed, catchment or groundwater water unit management committees with meaningful participation of local communities and vulnerable groups and participatory development of management plans for water units shared by communities (considerations given to climate change risks and the interactions between communities and their livelihood activities and the conservation of ecosystem functions such as provision of recycling of soil nutrients and water, biodiversity habitats and carbon sinks); rehabilitation and conservation of ecosystem functions of the water units including integrated land and water conservation practices (e.g. check dams to block gully erosion and reduce the force of water flows in the steep part of watershed, vegetation cover on slopes and along water courses, terracing, grass stripping, other living barriers, contour farming, gabion walls and sand dams in seasonal rivers to stop erosion and harvest water in soils and facilitate recharge of aquifers); investments in rainwater harvesting and storage infrastructures for community multi-use and strengthening of local institutions for the equitable governance of water and operation and maintenance of infrastructures; spatial distribution and diversification of farming and other livelihood activities.

2.10. **Community weather monitoring for climate change adaptation actions:** capacity-building of communities and local extension services in climate change risk monitoring and analysis of farming system vulnerabilities using downscaled data of historical trends and future projections; community recording, analysis and monitoring of weather data and capacity-building in linking the data to adaptation options of different agroecological practices in their farming systems (e.g. in their practices for management and use of water resources, water budgeting based on cropping plans, selection of crop and varieties for intercropped and rotation systems, management of planting and harvest times, selection of the mixture of livestock species and breeds to keep in integrated farming systems).

2.11. **Community renewable energy:** community-level renewable energy systems and energy saving measures such as community bio-digesters, windmills and solar panels providing energy for collective cooling and processing facilities and common irrigation systems applying water use efficient technologies and practices and their monitoring.

# Level 3: Market level

## Value addition

**3.1. Food processing:** support for strengthening agroecological farmers' cooperatives and other economic organizations; investments in processing facilities for agroecological products applying resources use efficiency and recycling; using renewable energy when possible, and minimizing the use of artificial additives and with a focus on food safety.

**3.2. Safe storage:** post-harvest infrastructure and storage facilities for agroecology products to minimize food losses.

**3.3. Labelling, community-supported guarantee systems:** agroecology principles and practices; compliance labelling and guarantee systems facilitating consumer trust-building and communicating the sustainability, food culture, health and safe food values of agroecological products (e.g. Participatory Guarantee Systems (PGS), economically accessible for small-scale producers or organic, Fair-trade or other sustainable agriculture certifications).

## Access to markets

**3.4. Access to differentiated markets:** logistics and capacity-building support for small-scale agroecology producers and farmers' organizations in negotiating contracts and partnership agreements directly with consumers, with private sector actors, or public institutions managing wholesale markets that allow access to differentiated markets (e.g. organic, Fair-trade, Slow Food, urban markets for locally or nationally produced agroecological and other green/sustainable products).

**3.5. Innovations organizing demand and supply:** support for multi-stakeholder platforms and local and regional networks (e.g. producers and farmers' organizations, CSOs and NGOs supporting agroecological transition processes, green or agroecology market facilitating businesses, consumer groups, public entities, bio-inputs producers, financial and technical service providers) to facilitate the creation of markets for agroecological products and services for developing agroecology-based short value chains or production and consumption clusters; support for innovations, eventually using ICT, in linking consumers and producers of agroecological products, reducing intermediary costs and strengthening the direct transfer of agroecological sustainability and inclusive production values, as part of building circular and solidarity economies (e.g. systems for food baskets ordered online directly from producer groups, organization of local farmers' markets, Community Supported Agriculture (CSA) arrangements linking producers and consumers).

**3.6. Infrastructure and physical spaces for farmers markets:** designation of spaces and investments in infrastructure for local government and/or community-supported farmers markets; investments in transportation logistics and storage infrastructure and equipment and access to water and other facilities for hygiene standards.

**3.7. Public procurement of agroecological products:** support for linking small-scale agroecological producers and their organizations to public food procurement programmes such as food for school feeding, hospitals, prisons and social protection programmes.

# Level 4: Policy level

## Enabling policies

**4.1. Mechanisms for policy dialogue:** support to local, state and national institutions in policy dialogues for improving services, policies and regulatory frameworks that enable small-scale producers' transition to agroecological production, value addition and commercialization systems and that strengthen their role in sustainable food systems (e.g. participatory platforms for policy dialogue, research networks for evidence-based policies and resources programming, networks/multi-stakeholder platforms for policy dialogues on sustainable natural resources and production landscapes management); strengthening farmers, small-scale producers and community organizations' participation in policy processes and their advocacy capacities; promoting mechanisms for policy coordination among concerned ministries and departments.

**4.2. Institutional strengthening for formulation, implementation and M&E of agroecology enabling policies and instruments:** institutional strengthening including technical assistance and training for designing and implementing policies, regulatory frameworks and services that enable small-scale producers' transition to agroecological production, value addition and commercialization systems while strengthening their role in sustainable food systems; support for development of monitoring and assessment tools of the effectiveness of the implementation of policies, regulations and services for achieving the economic inclusion of small-scale producers and their organizations in sustainable food systems that provides food security and diversified healthy diets for the low income segments of the population.

## Enabling regulations

**4.3. Food safety and nutrition:** food safety regulations and compliance mechanisms adjusted to small-scale producers' conditions; regulation of nutrition labelling of foods and regulation of unhealthy content of processed food (e.g. sugar, salt, saturated fats); public support measures for farmers to enhance food safety and increase production of nutritious and healthy foods; regulatory frameworks for PGS labelling.

**4.4. Agrochemicals and animal drugs:** laws and regulations that promote the safe and restricted use of pesticides, mineral fertilizers, animal growth promoters (which should be avoided) and antibiotics; establishment of policies on bio inputs.

**4.5. Seeds and plant genetic resources:** seed regulatory frameworks that allow for a complementary existence of formal and local seed systems (e.g. securing the right and ability to use and locally exchange farmer saved seeds, the use and local exchange of seed mixtures for evolutionary adaptive populations and plant breeding); seed regulations that support farmers' resilience linked to secured access to seeds adopted to their agroecology-based production systems while safeguarding their food sovereignty.

## Enabling instruments and services

**4.6. Support to public institutions for agroecology research and extension:** investments in public and private agroecology research and development; support for technological innovation, including by using ICT, for small scale producers' agroecology-based systems; fostering co-learning between small-scale producer practitioners and researchers; capacity-building activities for public institutions aimed at promoting quality-applied research and extension programs to improve the productivity, benefits and resilience of small-scale producers' agroecology-based systems relying on co-creation of knowledge (e.g. programmes for participatory variety selection and evolutionary plant breed for improved seeds for agroecology); support for the formation of technicians and youth promotors of agroecology; comparative analysis of socioeconomic benefits for small-scale producers and public good benefits (e.g. conservation of ecosystem services, contribution to sustainable food systems) of agroecology versus agrochemical and monoculture-based farming systems.

**4.7. Credit lines and insurance products:** agroecology credit lines and investment schemes to promote agroecology-based production and commercialization for small-scale producers; specific financing, including blended financing, and insurance products to support the agroecological transition, including social, environmental and financial returns.

**4.8. Incentive system:** awareness campaigns and tax and other market incentive mechanisms to encourage consumption of locally produced healthy food; moving subsidies from chemical fertilizers and pesticides to payments for ecosystem services (PES); support for start-ups offering innovative solutions for agroecology-based production systems prioritising youth and women entrepreneurship.

**4.9. Climate change and greenhouse gases (GHG) information systems and services:** support for improving climate information services for farmers and their organizations; information and knowledge products for farmers and their organizations on climate trends and scenarios and agroecology practices adaptation options for different zones and farming systems; early warning systems for climatic events with actionable advice to small-scale agroecology farmers; carbon benefit/GHG emissions monitoring services of different farming systems to document their contribution to building carbon sinks and mitigate climate change.

# Annex 2 - Sample of all 207 IFAD projects completing in 2018-2023

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| **ASIA AND THE PACIFIC REGION** | | | | |
| Afghanistan | Community Livestock and Agriculture Project (CLAP) | 08/04/2013 | 30/06/2022 | Partially AE (3/3 key elements) |
| | Support to National Priority Programme (SNAPP II) | 08/12/2015 | 31/03/2022 | Non-AE |
| Bangladesh | Participatory Small-scale Water Resources Sector (PSWRSP) | 06/11/2009 | 30/06/2018 | Non-AE |
| | Char Development and Settlement IV (CDSP IV) | 09/05/2011 | 31/03/2022 | Partially AE (3/3 key elements) |
| | Haor Infrastructure and Livelihood Improvement - Climate Adaptation and Livelihood Protection (HILIP-CALIP) | 18/07/2012 | 30/09/2020 | Partially AE (3/3 key elements) |
| | Coastal Climate Resilient Infrastructure (CCRIP) | 28/06/2013 | 30/06/2019 | Non-AE |
| | Promoting Agricultural Commercialization and Enterprises (PACE) | 11/12/2014 | 31/12/2020 | Non-AE |
| | National Agricultural Technology Programme Phase II | 07/08/2016 | 30/09/2021 | Non-AE |
| | Participatory Small-scale Water Resources Sector (PSWRSP) | 06/11/2009 | 30/06/2018 | Non-AE |
| Cambodia | Tonle Sap Poverty Reduction and Smallholder Development Project | 15/02/2010 | 28/02/2023 | Non-AE |
| | Project for Agricultural Development and Economic Empowerment (PADEE) | 08/06/2012 | 30/06/2018 | Partially AE (3/3 key elements) |
| | Agricultural Services Programme for Innovation, Resilience and Extension (ASPIRE) | 28/02/2017 | 31/03/2023 | Partially AE (3/3 key elements) |
| | Accelerating Inclusive Markets for Smallholders (AIMS) | 05/03/2015 | 31/03/2022 | Partially AE (2/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| China | Yunnan Agricultural and Rural Improvement Project (YARIP) | 31/01/2013 | 31/03/2018 | Partially AE (2/3 key elements) |
| | Shiyan Smallholder Agribusiness Development (SSAD) | 30/01/2014 | 31/03/2019 | Non-AE |
| | Jiangxi Mountainous Areas Agribusiness Promotion (JiMAAPP) | 15/02/2015 | 15/06/2020 | Non-AE |
| | Qinghai Liupan Mountain Area Poverty Reduction Project (LMAPRP) | 04/11/2015 | 31/12/2020 | Partially AE (2/3 key elements) |
| | Sustaining Poverty Reduction through Agribusiness Development in South Shaanxi (SPRAD) | 07/05/2018 | 30/06/2023 | Non-AE |
| Fiji | Fiji Agricultural Partnerships (FAPP) | 03/12/2015 | 31/12/2019 | Partially AE (3/3 key elements) |
| India | Tejaswini Rural Women's Empowerment Programme | 23/07/2007 | 30/09/2018 | Partially AE (2/3 key elements) |
| | Post-Tsunami Sustainable Livelihoods Programme for the Coastal Communities of Tamil Nadu | 09/07/2007 | 31/03/2020 | Partially AE (3/3 key elements) |
| | Convergence of Agricultural Interventions in Maharashtra's Distressed Districts Programme (CAIM) | 04/12/2009 | 31/12/2018 | Partially AE (3/3 key elements) |
| | Integrated Livelihood Support Programme (ILSP) | 01/02/2012 | 31/03/2021 | Partially AE (2/3 key elements) |
| | Jharkhand Tribal Empowerment and Livelihoods Programme (JTELP) | 04/10/2013 | 31/12/2021 | Partially AE (2/3 key elements) |
| | Livelihoods and Access to Markets Programme (LAMP) | 09/12/2014 | 31/12/2022 | Partially AE (3/3 key elements) |
| | Andhra Pradesh Drought Mitigation Programme (APDMP) | 07/09/2017 | 30/09/2022 | Partially AE (3/3 key elements) |
| Indonesia | Village Development Programme (ex National Programme for Community Empowerment in Rural Areas) (VDP ex PNPM) | 17/03/2009 | 31/12/2018 | Non-AE |
| | Smallholder Livelihood Development in Eastern Indonesia (SOLID) | 05/07/2011 | 31/01/2019 | Partially AE (2/3 key elements) |
| | Integrated Participatory Development and Management of the Irrigation Sector Programme (IPDMIP) | 13/02/2017 | 31/03/2023 | Non-AE |
| | Rural Empowerment and Agriculture Development Scaling-up Initiative (READSI) | 08/01/2018 | 08/01/2023 | Non-AE |
| Kiribati | Outer Islands Food and Water Project (OIFWP) | 03/09/2014 | 30/09/2019 | Partially AE (2/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Lao People's Democratic Republic | Southern Laos Food and Nutrition Security and Market Linkages Programme (FNML) | 13/09/2013 | 30/09/2020 | AE-based |
| | Northern Smallholder Livestock Commercialization Rural Financial Services Programme (NSLCP) | 14/03/2017 | 31/03/2022 | Partially AE (2/3 key elements) |
| | Strategic Support for Food Security and Nutrition - GAFSP funds (SSFSNP - GAFSP) | 28/04/2016 | 30/06/2022 | AE-based |
| Maldives | Fisheries and Agricultural Diversification Programme (FADIP) | 15/09/2009 | 31/03/2018 | Non-AE |
| | Mariculture Enterprise Development Project (MEDeP) | 09/01/2013 | 30/09/2019 | Non-AE |
| Mongolia | Project for Market and Pasture Management Development (PMPMD) | 26/08/2011 | 30/09/2021 | Partially AE (2/3 key elements) |
| Myanmar | Fostering Agricultural Revitalisation in Myanmar (FARM) | 22/10/2014 | 31/12/2020 | Non-AE |
| Nepal | Poverty Alleviation Fund II (PAF II) | 31/07/2008 | 31/12/2018 | Non-AE |
| | High-Value Agriculture in Hill and Mountain Areas Programme (HVAP) | 05/07/2010 | 30/09/2018 | Non-AE |
| | Improved Seed for Farmers Programme (Kisankalagi Unnat Biu-Bijan Karyakram) | 02/12/2012 | 31/12/2019 | Non-AE |
| | Adaptation for Smallholders in Hilly Areas (ASHA) | 26/02/2015 | 31/03/2021 | Partially AE (3/3 key elements) |
| | Samriddhi - Rural Enterprises and Remittances (RER) | 10/12/2015 | 31/12/2022 | Non-AE |
| Pakistan | Southern Punjab Poverty Alleviation Programme (SPPAP) | 30/09/2011 | 30/09/2022 | Partially AE (2/3 key elements) |
| | Gwadar-Lasbela Livelihoods Support Project (GLLSP) | 31/01/2013 | 30/09/2019 | Non-AE |
| | Economic Transformation Initiative - Gilgit Baltistan (ETI) | 16/09/2015 | 30/09/2022 | Non-AE |
| | National Poverty Graduation Programme (NPGP) | 14/11/2017 | 31/12/2023 | Non-AE |
| Papua New Guinea | Productive Partnerships in Agriculture Programme (Papua New Guinea - PPAP) | 14/09/2010 | 31/12/2019 | Non-AE |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Philippines | Second Cordillera Highland Agricultural Resource Management (CHARMP II) | 14/11/2008 | 31/12/2020 | AE-based |
| | Integrated Natural Resources and Environmental Management Project (INREMP) | 12/04/2013 | 30/06/2021 | AE-based |
| | Convergence on Value Chain Enhancement for Rural Growth and Empowerment (ConVERGE) | 26/10/2015 | 31/12/2021 | Partially AE (2/3 key elements) |
| | Fisheries, Coastal Resources and Livelihood | 26/10/2015 | 31/12/2020 | Non-AE |
| Solomon Islands | Rural Development Programme - Phase II | 07/05/2015 | 30/06/2020 | Non-AE |
| Sri Lanka | Smallholder Tea and Rubber Revitalization (STARR) | 26/04/2016 | 30/06/2022 | Non-AE |
| | Smallholder Agribusiness Partnerships Programme (SAPP) | 26/06/2017 | 30/06/2023 | Non-AE |
| Tonga | Tonga Rural Innovation - Phase II (TRIP II) | 23/02/2018 | 31/03/2023 | Partially AE (3/3 key elements) |
| Viet Nam | Sustainable Rural Development for the Poor in Ha Tinh and Quang Binh Provinces (SRDP) | 27/11/2013 | 31/12/2018 | Partially AE (3/3 key elements) |
| | Commodity-oriented Poverty Reduction Programme in Ha Giang Province (CPRP) | 30/03/2015 | 31/03/2020 | Partially AE (3/3 key elements) |
| | Project for Adaption to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh Provinces (AMD) | 28/03/2014 | 31/03/2020 | AE-based |
| | Commercial Smallholder Support in Bac Kan and Cao Bang (CSSP) | 07/08/2017 | 30/09/2023 | Partially AE (2/3 key elements) |
| **EAST AND SOUTHERN AFRICA** | | | | |
| Angola | Artisanal Fisheries and Aquaculture Project (AFAP) | 26/08/2015 | 30/09/2021 | Partially AE (3/3 key elements) |
| Botswana | Agricultural Services Support Project (ASSP) | 15/05/2018 | 30/06/2022 | Partially AE (2/3 key elements) |
| Burundi | Agricultural Intensification and Value-enhancing Support Project (PAIVA-B) | 21/02/2012 | 31/03/2018 | Partially AE (3/3 key elements) |
| | Value Chain Development Programme (PRODEFI) | 21/07/2009 | 30/09/2019 | Non-AE |
| | Value Chain Development Programme Phase II (PRODEFI II) | 07/05/2010 | 31/12/2020 | Non-AE |
| | National Programme for Food Security and Rural Development in Imbo and Moso (PNSADR-IM) | 03/11/2015 | 31/12/2021 | Non-AE |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Comoros | Family Farming Productivity and Resilience Support Project (PREFER) | 19/09/2014 | 30/09/2020 | Partially AE (3/3 key elements) |
| Eritrea | National Agriculture Project (NAP) | 29/12/2017 | 31/12/2022 | Partially AE (3/3 key elements) |
| | Fisheries Resources Management Programme (FRMP) | 14/12/2012 | 31/12/2020 | Partially AE (3/3 key elements) |
| Eswatini | Smallholder Market-led Production Project (SMLPP) | 06/12/2016 | 31/12/2023 | Non-AE |
| Ethiopia | Community-based Integrated Natural Resources Management (CBINReMP) | 16/02/2016 | 31/03/2022 | AE-based |
| | Rural Financial Intermediation Programme II (RUFIP II) | 17/03/2010 | 30/09/2018 | Non-AE |
| | Pastoral Community Development III (PCDP III) | 12/06/2012 | 31/12/2019 | Non-AE |
| Kenya | Smallholder Dairy Commercialization Programme (SDCP) | 25/04/2014 | 08/07/2019 | Partially AE (2/3 key elements) |
| | Programme for Rural Outreach of Financial Innovations and Technologies (PROFIT) | 12/07/2006 | 30/09/2019 | Non-AE |
| | Upper Tana Catchment Natural Resource Management Project (UTaNRMP) | 22/12/2010 | 30/06/2019 | AE-based |
| | Kenya Cereal Enhancement Programme Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL) | 23/05/2012 | 31/12/2022 | Non-AE |
| Lesotho | Smallholder Agriculture Development Project (SADP) | 26/08/2015 | 30/09/2022 | Partially AE (2/3 key elements) |
| | Wool and Mohair Promotion (WAMPP) | 19/12/2011 | 31/03/2020 | Non-AE |
| Madagascar | Support Programme for Rural Microenterprise Poles and Regional Economies (PROSPERER) | 17/06/2015 | 30/06/2022 | Non-AE |
| | Support to Farmers' Professional Organizations and Agricultural Services (AROPA) | 28/04/2008 | 31/12/2021 | Non-AE |
| | Vocational Training and Agricultural Productivity Improvement Programme (FORMAPROD) | 13/01/2009 | 31/03/2019 | Partially AE (3/3 key elements) |
| | Project to Support Development in the Menabe and Melaky Regions - Phase II (AD2M Phase II) | 08/05/2013 | 30/06/2023 | Partially AE (2/3 key elements) |
| Malawi | Sustainable Agricultural Production Programme (SAPP) | 30/12/2015 | 31/12/2022 | AE-based |
| | Programme for Rural Irrigation Development (PRIDE) | 24/01/2012 | 31/03/2023 | AE-based |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Mozambique | Rural Markets Promotion Programme (PROMER) | 20/12/2016 | 31/12/2023 | Non-AE |
| | Artisanal Fisheries Promotion Project (PROPESCA) | 26/04/2009 | 30/06/2021 | Non-AE |
| | Pro-Poor Value Chain Development in the Maputo and Limpopo Corridors (PROSUL) | 24/03/2011 | 30/06/2019 | Partially AE (3/3 key elements) |
| Rwanda | Climate-Resilient Post-Harvest and Agribusiness Support Project (PASP) | 03/10/2012 | 30/06/2020 | Partially AE (2/3 key elements) |
| | Project for Rural Income through Exports (PRICE) | 28/03/2014 | 31/03/2020 | Partially AE (3/3 key elements) |
| | Rwanda Dairy Development Project (RDDP) | 20/12/2011 | 30/06/2020 | Partially AE (3/3 key elements) |
| Seychelles | Competitive Local Innovations for Small-scale Agriculture Project (CLISSA) | 19/12/2016 | 31/12/2022 | Non-AE |
| United Republic of Tanzania | Marketing Infrastructure, Value Addition and Rural Finance Support Programme (MIVARF) | 14/11/2013 | 31/12/2018 | Non-AE |
| Uganda | Agricultural Technology and Agribusiness Advisory Services Programme (ATAAS) | 25/02/2011 | 31/03/2020 | Partially AE (3/3 key elements) |
| | Vegetable Oil Development Project 2 (VODP2) | 09/11/2011 | 31/12/2018 | Non-AE |
| | Project for Financial Inclusion in Rural Areas (PROFIRA) | 21/10/2010 | 31/12/2019 | Non-AE |
| | Programme for the Restoration of Livelihoods in the Northern Region (PRELNOR) | 24/11/2014 | 31/12/2021 | Partially AE (3/3 key elements) |
| Zambia | Smallholder Productivity Promotion Programme (S3P) | 05/08/2015 | 30/09/2022 | Partially AE (3/3 key elements) |
| | Rural Finance Expansion Programme (RUFEP) | 09/12/2011 | 31/12/2019 | Non-AE |
| | Enhanced Smallholder Livestock Investment Programme (E-SLIP) | 22/07/2014 | 30/09/2022 | Partially AE (2/3 key elements) |
| Zimbabwe | Smallholder Irrigation Revitalization Programme (SIRP) | 11/05/2015 | 30/06/2022 | Partially AE (3/3 key elements) |
| **LATIN AMERICA AND THE CARIBBEAN** | | | | |
| Argentina | Inclusive Rural Development Programme (PRODERI) | 07/12/2011 | 31/12/2019 | Non-AE |
| | Programme for Economic Insertion of Family Producers of Northern Argentina (PROCANOR) | 13/03/2017 | 31/03/2022 | Non-AE |
| | Goat Value Chain Development Programme (PRODECCA) | 21/04/2017 | 30/06/2023 | Partially AE (2/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Bolivia (Plurinational State of) | Economic Inclusion Programme for Families and Rural Communities in the Territory of Plurinational State of Bolivia (ACCESOS) | 21/08/2013 | 30/09/2019 | Partially AE (2/3 key elements) |
| | Integral Strengthening Programme for the Camelid Value Chain in the Bolivian High Plateau (PRO-CAMELIDOS) | 11/04/2016 | 30/06/2022 | Partially AE (2/3 key elements) |
| Brazil | Semi-arid Sustainable Development in the State of Piau (Viva o Semiarido) | 09/04/2013 | 30/06/2021 | AE-based |
| | Rural Business for Small Producers (Dom Tavora) | 30/08/2013 | 31/03/2021 | AE-based |
| | Productive Development and Capacity-Building Project (Paulo Freire) | 27/06/2013 | 31/12/2021 | AE-based |
| | Rural Sustainable Development in the Semi-arid Region of Bahia - Pro-semiarid Project | 20/08/2014 | 30/03/2022 | AE-based |
| | Policy Coordination and Dialogue for Reducing Poverty and Inequalities in Semi-Arid North-east Brazil (PDHC) | 22/08/2014 | 31/03/2022 | AE-based |
| | Cariri and Serid Sustainable Development (PROCASE-Paraiba) | 17/10/2012 | 31/12/2020 | AE-based |
| Colombia | Building Rural Entrepreneurial Capacities Programme: Trust and Opportunity (TOP) | 13/12/2012 | 31/12/2020 | Partially AE (3/3 key elements) |
| Cuba | Cooperative Rural Development Project in the Oriental Region (PRODECOR) | 15/07/2014 | 31/03/2021 | Non-AE |
| Dominican Republic | Rural Economic Development in the Central and Eastern Provinces (PRORURAL) | 04/09/2012 | 30/09/2018 | Partially AE (3/3 key elements) |
| Ecuador | Buen Vivir in Rural Territories Programme | 30/05/2012 | 30/06/2021 | AE-based |
| | Strengthen Rural Actors in the Popular and Solidary Economy (FAREPS) | 05/09/2017 | 30/06/2021 | Partially AE (2/3 key elements) |
| | Catalysing Inclusive Value Chain Partnerships (DINAMINGA) | 29/12/2017 | 31/12/2022 | Non-AE |
| El Salvador | Rural Territorial Competitiveness Programme (Amanecer Rural) | 01/06/2012 | 31/12/2018 | AE-based |
| Grenada | Market Access and Rural Enterprise Development Programme (MAREP) | 30/03/2011 | 31/03/2018 | Partially AE (3/3 key elements) |
| Guatemala | Sustainable Rural Development Programme for the Northern Region (PRODENORTE) | 27/01/2012 | 30/09/2019 | Partially AE (3/3 key elements) |
| Guyana | Hinterland Environmentally Sustainable Agricultural Development (HEAD) | 21/03/2017 | 31/03/2023 | Partially AE (2/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Haiti | Small Irrigation and Market Access Development in the Nippes and Goavienne Region (PPI III) | 24/10/2012 | 30/06/2019 | Partially AE (3/3 key elements) |
| | Agricultural and Agroforestry Technological Innovation Program (PITAG) | 02/08/2018 | 30/09/2023 | Partially AE (3/3 key elements) |
| Honduras | Sustainable Rural Development Programme for the Southern Region (Emprende Sur) | 01/02/2011 | 31/03/2019 | Non-AE |
| | Project for Competitiveness and Sustainable Development in the South-Western Border Region (PRO-LENCA) | 03/03/2014 | 31/03/2022 | Partially AE (3/3 key elements) |
| Mexico | Sustainable Development Project for Communities in Semiarid Areas (Semiarid-Mixteca) | 29/11/2012 | 31/12/2020 | Non-AE |
| | Rural Productive Inclusion (PROINPRO) | 21/06/2016 | 11/07/2018 | Non-AE |
| | Social Economy: Territory and Inclusion Project | 28/05/2018 | 30/06/2023 | Non-AE |
| Nicaragua | Adapting to Markets and Climate Change (NICADAPTA) | 01/07/2014 | 30/09/2020 | Partially AE (3/3 key elements) |
| | Nicaraguan Dry Corridor Rural Family Sustainable Development (NICAVIDA) | 15/02/2017 | 31/03/2023 | Partially AE (3/3 key elements) |
| Paraguay | Inclusion of Family Farming in Value Chains (PPI) | 26/02/2013 | 31/03/2018 | Non-AE |
| | Project to Improve Indigenous and Family Farming in Value Chains in the Eastern Region-PPI Phase II | 29/11/2018 | 31/12/2023 | Non-AE |
| Peru | Strengthening Local Development in the Highlands and High Rainforest Areas (Sierra y Selva) | 20/02/2013 | 30/06/2019 | Partially AE (3/3 key elements) |
| | Public Services Improvement for Sustainable Territorial Development in the Apurimac, Ene, and Mantaro River Basins (ProTerritorios) | 21/10/2016 | 31/12/2022 | Partially AE (3/3 key elements) |
| Uruguay | Rural Inclusion Pilot Project (PPIR) | 23/07/2014 | 30/09/2019 | Non-AE |
| **NEAR EAST, NORTH AFRICA AND EUROPE** | | | | |
| Armenia | Infrastructure and Rural Finance Support Programme (IRFSP) | 16/07/2015 | 30/09/2021 | Partially AE (2/3 key elements) |
| Azerbaijan | Integrated Rural Development Project (IRDP) | 28/06/2011 | 31/12/2019 | Non-AE |
| Bosnia and Herzegovina | Rural Business Development Project (RBDP) | 26/03/2014 | 31/03/2019 | Partially AE (2/3 key elements) |
| | Rural Competitiveness Development Programme (RCDP) | 16/03/2017 | 31/03/2022 | Non-AE |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Djibouti | Programme to Reduce Vulnerability in Coastal Fishing Areas (PRAREV-PECHE) | 01/08/2014 | 30/09/2020 | Non-AE |
| Egypt | On-farm Irrigation Development in Oldlands (OFIDO) | 16/02/2010 | 20/09/2019 | Non-AE |
| | Promotion of Rural Incomes through Market Enhancement (PRIME) | | 30/06/2020 | Non-AE |
| | Sustainable Agriculture Investments and Livelihoods (SAIL) | 15/06/2015 | 30/06/2023 | Partially AE (3/3 key elements) |
| Georgia | Agriculture Modernization, Market Access and Resilience (AMMAR) | 28/05/2015 | 31/10/2020 | Partially AE (3/3 key elements) |
| Jordan | Rural Economic Growth and Employment (REGEP) | 25/03/2015 | 31/03/2021 | Non-AE |
| | Small Ruminants Investment and Graduating Households in Transition (SIGHT) | 07/11/2017 | 31/12/2023 | Partially AE (3/3 key elements) |
| Kyrgyzstan | Livestock and Market Development Programme (LMDP) | 17/07/2013 | 30/09/2019 | Non-AE |
| | Livestock and Market Development Programme II (LMDP II) | 06/08/2014 | 30/09/2019 | Partially AE (2/3 key elements) |
| | Access to Markets Project (ATMP) | 05/06/2018 | 30/06/2023 | Partially AE (2/3 key elements) |
| Lebanon | Hilly Areas Sustainable Agriculture Development (HASAD) | 19/04/2012 | 30/06/2019 | Non-AE |
| Montenegro | Rural Clustering and Transformation Project (RCTP) | 12/05/2017 | 30/06/2023 | Partially AE (2/3 key elements) |
| Morocco | Agricultural Value Chain Development Programme in the Mountain Zones of Taza Province (PDFAZMT) | 13/09/2011 | 30/06/2020 | Partially AE (3/3 key elements) |
| | Agricultural Value Chain Development Project in the Mountain Zones of Al-Haouz Province (PDFAZMH) | 21/09/2012 | 30/09/2019 | Partially AE (2/3 key elements) |
| | Rural Development Programme in the Mountain Zones - Phase I (PDRZM) | 23/02/2015 | 31/03/2020 | Partially AE (3/3 key elements) |
| Republic of Moldova | Inclusive Rural Economic and Climate Resilience Programme (IRECR) | 25/08/2014 | 30/09/2020 | Partially AE (3/3 key elements) |
| | Rural Resilience Project (RRP) | 14/08/2017 | 30/09/2023 | Partially AE (3/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Sudan | Butana Integrated Rural Development (BIRDP) | 07/07/2008 | 30/09/2019 | AE-based |
| | Livestock Marketing and Resilience Programme (LMRP) | 31/03/2015 | 31/03/2022 | Partially AE (3/3 key elements) |
| | Supporting Small-scale Traditional Rainfed Producers in Sinnar State (SUSTAIN) | 24/02/2012 | 31/03/2018 | AE-based |
| | Seed Development Project (SDP) | 24/02/2012 | 31/03/2018 | Non-AE |
| Syrian Arab Republic | Integrated Livestock Development Project (ILDP) | 22/12/2011 | 31/12/2019 | Partially AE (3/3 key elements) |
| Tajikistan | Livestock and Pasture Development Project (LPDP) | 05/08/2011 | 30/09/2018 | Non-AE |
| | Livestock and Pasture Development Project II (LPDP II) | 03/02/2016 | 31/03/2021 | Partially AE (3/3 key elements) |
| Tunisia | Agropastoral Development and Local Initiatives Promotion Programme for the South-East - Phase II (PRODESUD II) | 28/03/2014 | 31/03/2020 | Partially AE (2/3 key elements) |
| | Agropastoral Value Chains Project in the Governorate of Médenine (PRODEFIL) | 19/06/2015 | 30/06/2021 | Partially AE (3/3 key elements) |
| | Siliana Territorial Development Value Chain Promotion Project (PROFITS-Siliana) | 13/06/2017 | 30/06/2023 | Partially AE (3/3 key elements) |
| Turkey | Murat River Watershed Rehabilitation Project (MRWRP) | 15/02/2013 | 31/03/2022 | Non-AE |
| | Goksu Taseli Watershed Development Project (GTWDP) | 26/05/2016 | 30/06/2023 | Non-AE |
| | Uplands Rural Development Programme (URDP) | 05/03/2018 | 31/03/2023 | Non-AE |
| Uzbekistan | Horticultural Support Project (HSP) | 17/12/2013 | 31/12/2019 | Non-AE |
| | Dairy Value Chains Development Program (DVCDP) | 07/03/2017 | 31/03/2023 | Partially AE (2/3 key elements) |
| **WEST AND CENTRAL AFRICA** | | | | |
| Benin | Market Gardening Development Support Project (PADMAR) | 05/10/2016 | 31/12/2023 | Partially AE (2/3 key elements) |
| | Adapted Rural Financial Services Development Project (PAPSFRA) | 22/05/2014 | 30/06/2022 | Non-AE |
| Burkina Faso | Participatory Natural Resource Management and Rural Development in the North, Centre-North and East Regions | 30/08/2013 | 30/09/2022 | Partially AE (3/3 key elements) |
| Cabo Verde | Rural Socio-economic Opportunities Programme (POSER) | 11/02/2013 | 31/03/2022 | Partially AE (2/3 key elements) |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Cameroon | Youth Agropastoral Entrepreneurship Promotion Programme (AEP-Youth) | 12/02/2015 | 31/03/2021 | Non-AE |
| Chad | Improve the Resilience of Agricultural Systems in Chad (PARSAT) | 17/02/2015 | 31/03/2022 | AE-based |
| Congo | Agricultural Value Chains Support Development Programme (PADEF) | 03/07/2013 | 30/09/2018 | Partially AE (2/3 key elements) |
| | Inland Fisheries and Aquaculture Project (PD-PAC) | 29/07/2016 | 31/03/2022 | Partially AE (3/3 key elements) |
| Côte D'Ivoire | Support to Agricultural Production and Marketing Project (PROPACOM) | 16/03/2012 | 30/06/2018 | Non-AE |
| | Support to Agricultural Production and Marketing - Western Expansion (PROPACOM/WNW) | 21/11/2014 | 31/12/2020 | Partially AE (3/3 key elements) |
| Democratic Republic of the Congo | Integrated Agricultural Rehabilitation Programme in the Maniema Province (PIRAM) | 16/12/2010 | 31/01/2020 | Non-AE |
| | Kinshasa Food Supply Centres Support Programme | 09/11/2012 | 31/10/2021 | AE-based |
| Gambia (The) | National Agricultural Land and Water Management Development (NEMA) | 20/12/2012 | 30/06/2020 | AE-based |
| Ghana | Rural Enterprises Programme (REP) | 12/01/2012 | 31/03/2022 | Non-AE |
| | Ghana Agricultural Sector Investment Programme (GASIP) | 18/05/2015 | 30/06/2021 | Partially AE (3/3 key elements) |
| Guinea | National Programme to Support Agricultural Value Chain Actors - Lower Guinea and Faranah Expansion (PNAAFA - LGF expansion) | 18/12/2013 | 31/12/2019 | Non-AE |
| Guinea-Bissau | Economic Development for the Southern Regions (PADES) | 07/08/2015 | 30/09/2021 | Partially AE (2/3 key elements) |
| Liberia | Rural Community Finance Programme (RCFP) | 25/10/2017 | 30/11/2021 | Non-AE |
| | Tree Crops Extension (TCEP) | 08/06/2017 | 30/06/2023 | Non-AE |
| Mali | Rural Microfinance Programme (RMP) | 21/07/2010 | 30/09/2018 | Non-AE |
| | Fostering Agricultural Productivity Project (PAPAM) | 13/10/2011 | 31/07/2018 | Partially AE (3/3 key elements) |
| | Agricultural Development: Rural Youth Vocational Training, Employment and Entrepreneurship Support Project (FIER) | 20/08/2014 | 30/09/2022 | Non-AE |
| Mauritania | Poverty Reduction in Aftout South and Karakoro - Phase II (PASK II) | 12/06/2012 | 30/06/2019 | AE-based |

| Country | Project title | Entry into force date | Completion date | Project type |
|---|---|---|---|---|
| Niger | Food Security and Development Support Project in the Maradi Region (PASADEM) | 12/03/2012 | 31/03/2018 | Partially AE (3/3 key elements) |
| | Ruwanmu Small-Scale Irrigation Project (RUWANMU) | 19/02/2013 | 30/06/2018 | Partially AE (3/3 key elements) |
| | Family Farming Development Programme in Maradi, Tahoua and Zinder Regions (PRODAF) | 21/09/2015 | 30/09/2023 | AE-based |
| Nigeria | Value Chain Development Programme (VCDP) | 14/10/2013 | 31/12/2022 | Non-AE |
| | Climate Change Adaptation and Agribusiness Support Programme in the Savannah Belt (CASP) | 25/03/2015 | 31/03/2021 | Partially AE (3/3 key elements) |
| Sao Tome and Principe | Smallholder Commercial Agriculture (PAPAC) | 29/09/2014 | 31/12/2019 | Partially AE (2/3 key elements) |
| Senegal | Agricultural Development and Rural Entrepreneurship Programme (PADAER) | 12/10/2011 | 30/06/2019 | Non-AE |
| | Agricultural Value Chains Support Project-Extension (PAFA - E) | 19/06/2014 | 30/06/2020 | Non-AE |
| Sierra Leone | Smallholder Commercialization Programme (SCP) | 29/07/2011 | 30/09/2019 | Partially AE (2/3 key elements) |
| | Rural Finance and Community Improvement Programme (RFCIP II) | 26/06/2013 | 30/06/2022 | Non-AE |
| Togo | National Programme for the Promotion of Rural Entrepreneurship (PNPER) | 23/05/2014 | 30/06/2020 | Partially AE (2/3 key elements) |

IFAD
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