Document:	EB 2020/130/R.8
Agenda:	5(b)
Date:	5 August 2020
Distribution:	Public
Original:	English

E

Investing in rural people

Corporate-level Evaluation on IFAD's Support to Innovations for Inclusive and Sustainable Smallholder Agriculture

Note to Executive Board representatives

Focal points:

Technical questions:

Fabrizio Felloni
Interim Officer-in-Charge
Independent Office of Evaluation
Tel.: +39 06 5459 2361
e-mail: f.felloni@ifad.org

Kouessi Maximin Kodjo
Lead Evaluation Officer
Tel.: +39 06 5459 2249
e-mail: k.kodjo@ifad.org

Dispatch of documentation:

Deirdre Mc Grenra
Chief
Institutional Governance and Member Relations
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

Executive Board — 130th Session
Rome, 8-11 September 2020

For: **Review**

Contents

Acknowledgements iii

Overview iii

I. Background iii

II. Findings on IFAD's Strategies and Corporate Processes in Support of Innovations vi

III. Findings on Performance of IFAD-supported Innovation Processes vii

IV. Findings on Inclusiveness ix

V. Findings on Natural Resource Management and Climate Change ix

VI. Findings on Sustainability x

VII. Findings on Scaling Up x

VIII. Conclusions x

IX. Recommendations xi

Appendix
Main Report - IFAD's support to innovations for inclusive and sustainable smallholder agriculture. Corporate-level Evaluation.

Acknowledgements

This corporate-level evaluation started with the overall strategic guidance of Oscar A. Garcia, former Director, Independent Office of Evaluation of IFAD (IOE), and was finalized under the strategic guidance of Fabrizio Felloni, Interim Officer-in-Charge, IOE. It was conducted under the responsibility of Kouessi Maximin Kodjo, Lead Evaluation Officer, IOE, with technical contributions from senior consultants: Anne B. Floquet, Pamela D. White and Peter B. Hazell.

Evaluation research analysts supported the desk review, data analyses (quantitative and qualitative) and country case studies: Renate Roels, Emanuele Zucchini, Antonio Cesare, Kossivi Balema and Margarita Borzelli Gonzales. Abu Hayat Md. Saiful Islam provided technical support, as a local consultant, for the conduct of a country case study. Valentina di Marco Conte, IOE consultant, contributed to reviewing draft reports. The administrative support was provided by Laura Morgia and Manuela Gallitto. The report benefited from a peer review conducted within IOE and from the comments of two independent advisers: Jan Brouwers, Wageningen Center for Development Innovation and Valerien Pede, International Rice Research Institute.

IOE thanks IFAD Management and staff for their input and comments, and in particular those staff members who supported the country case studies and who led a self-assessment exercise.

Finally, IOE would like to convey appreciation to the governments and development partners in many countries for supporting the implementation of case studies.

Overview

I. Background

1. **Introduction.** At its 125th session, the Executive Board approved the conduct of a corporate-level evaluation (CLE) on IFAD's support to innovation for inclusive and sustainable smallholder agriculture by the Independent Office of Evaluation (IOE).

2. **The objectives of the CLE were to:**

   (i) Assess IFAD's efforts (through processes, instruments and tools) to promote agricultural innovations (hereafter "innovations") that have contributed to addressing rural development challenges through its operations;
   (ii) Assess IFAD's contribution to the dissemination and scaling up of successful sustainable and climate-resilient pro-poor innovations that reach diverse groups of smallholder farmers; and
   (iii) Propose recommendations to improve IFAD's approach and performance in promoting agricultural innovations for rural transformation.

3. **Importance of innovations to IFAD.** In alignment with IFAD's Strategic Framework 2016-2025, innovations are critical for achieving IFAD's mandate of investing in rural people and enabling inclusive and sustainable transformation in rural areas. They are also needed to enhance IFAD's role in helping countries achieve Sustainable Development Goals (SDGs) 1 and 2. Overall, innovations are essential for strengthening and improving the quality of IFAD's country programmes and supporting the development of smallholder agriculture and contributing to inclusive and sustainable rural transformation.

4. **Definition of innovation.** IFAD's Innovation Strategy (2007) defines innovation as "a process that adds value or solves a problem in new ways". As IFAD is a specialized United Nations agency as well as an international financial institution, this CLE has adopted a development-based definition of innovation as "a new way of acting – practice, approach/method, process, product or rule – brought or implemented for the first time, considering the context, timeframe and stakeholders, with the purpose of improving performance and/or addressing challenges". In line with this, inclusive and sustainable innovations are agricultural innovations that are accessible to and suitable for a diversity of farmers (in terms of gender, socio-economic grouping and geographical coverage) as well as being economically, socially and environmentally appropriate. These innovations can be easily applied and replicated by a wide range of smallholder farmers and help them overcome the challenges they face.

5. **Importance of agricultural innovation systems.** System approaches to innovation have been prominently applied to smallholder agriculture over the last two decades.[1] The system approach suggests some key elements to take into account in assessing innovation support: (i) the innovation-related elements interlinked in dynamic processes; (ii) the actors contributing to these processes and the interactions among them; (iii) the linkages between the objectives (i.e. results hierarchy); and (iv) the supporting institutional framework. Thus, the CLE adopted a system approach to assess IFAD's support to innovations for smallholder agriculture.

6. **Innovations are intended to improve the performance of agrifood systems.** The latter include three aspects:[2] the agricultural production and value chain component, the socio-economic pillar or component and the natural pillar or component. IFAD's strategic objectives (SOs) (2016-2025) relate to these three

[1] See World Bank (2012); Capacity Development for Agricultural Innovation Systems (2015); and The Economics of Ecosystems and Biodiversity (2018).
[2] The Economics of Ecosystems and Biodiversity (2018).

aspects. Taking into account IFAD's operating context, the CLE identified an additional component, the governance pillar, which includes the driving forces for effective functioning of the entire agrifood system.

7. **Key features of IFAD's innovation agenda.** IFAD's support to innovation is implemented through its loans, grants and non-lending instruments. With the IFAD V Plan of Action (2000-2002), the topic gained significant interest. As an illustration, IFAD's Strategic Framework for 2002-2005 highlighted the need to identify successful innovations, understand why they were successful, and analyse the opportunities and related constraints.

8. The IFAD Initiative for Mainstreaming Innovation (IMI) in 2004 contributed to the rise in the systematic usage of the concept and fostering the adoption of innovation as a central and cross-cutting theme within the organization. IFAD's Innovation Strategy followed in 2007 to provide strategic insights on the topic. With the adoption of the Strategic Framework 2007-2010, innovation became, together with learning and scaling up, one of IFAD's principles of engagement.

9. In 2010, the CLE on IFAD's capacity to promote innovation and scaling up found that although IFAD had a stand-alone strategy for innovation, insufficient resources and attention were allocated for that purpose. The 2014 CLE on IFAD's Policy for Grant Financing concluded that IFAD had missed the opportunity to leverage the grant programme in a strategic manner, in particular to support innovations. The Revised Policy for Grant Financing was approved in 2015 to address some 2014 CLE recommendations.

10. In 2016, the Strategic Framework 2016-2025 acknowledged innovation as one of the critical dimensions for IFAD's agenda to work better. In 2018-2019, IFAD witnessed major changes in its business model, including the creation of the Change, Delivery and Innovation Unit (CDI), which launched IFAD's first innovation challenge in 2019.

11. **Scope of the CLE.** In line with the IFAD Evaluation Policy and the IOE Evaluation Manual (2015), the CLE covers the main performance criteria of relevance, effectiveness, efficiency and impact, as well as other themes such as sustainability, scaling up, inclusiveness, environment and climate change. An evaluation matrix was prepared by the CLE team, which includes overarching questions, main questions and subsidiary questions. The overarching questions are:
    (i) To what extent (how and why) have corporate instruments, tools and approaches been successful in promoting agricultural innovations within IFAD's country programmes?
    (ii) To what extent (how and why) have IFAD's operations promoted agricultural innovations that: (i) have responded to smallholder farmers' needs and demands; (ii) were targeted and inclusive?
    (iii) How did those innovations lead to positive outcomes, and were scaled up for sustainable and resilient development of smallholder agriculture?

12. Previous CLEs on innovation (2002 and 2010) assessed mainly corporate strategies, policies and processes. The current CLE, while covering these aspects, considering the period 2009 to 2019, broadened the scope by assessing development effectiveness aspects (operational results and contribution to change) in relation to IFAD-supported innovations. The Innovation Strategy (2007) has served as a reference strategic document for the review of corporate processes. To better streamline the assessment, after discussions with headquarters and field staff, a theory of change depicting IFAD's support to agricultural innovations has been reconstructed (see figure 2, main report). The CLE also reviewed indicators pertaining to innovation support used by some international financial institutions (IFIs) and the Rome-based agencies (RBAs) and used them for benchmarking.

13. **CLE data sources.** The CLE developed two databases: the first on loan investment projects and the second on grants, including respectively 508 loan projects and 240 large grants implemented over the evaluated period. Following the desk review of innovation-related information contained in investment project design documents, about 100 projects were selected for their relevance to the topic and the fact that they reflected the diversity of innovations promoted through IFAD-supported projects. The list of selected projects was validated in consultation with IFAD's regional divisions, with 20 countries selected for the case studies, 12 of which were visited by the CLE team (see table A). The countries selected were drawn from all IFAD regions.

Table A
Case study countries

	Asia and the Pacific Division	*East and Southern Africa Division*	*Latin America and the Caribbean Division*	*North East, North Africa and Europe Division*	*West and Central Africa Division*
Countries visited by the CLE team	Bangladesh Indonesia Philippines	Ethiopia Malawi Rwanda	El Salvador Peru	Kyrgyzstan Republic of Moldova	Cameroon Senegal
2019 CSPE countries	Nepal	Madagascar	Ecuador	Sudan	Sierra Leone
Only desk reviews	---	---	Uruguay	Tunisia	Burkina Faso

Source: CLE.

14. The CLE also used information gathered: (i) by IFAD Management and presented during a self-assessment workshop; and (ii) through the conduct of an electronic survey that targeted IFAD staff (headquarters and field), government stakeholders, managers of IFAD-funded projects and partners that had benefited from and/or implemented an IFAD-supported grant.

15. **CLE analyses.** Data were analysed to generate quantitative and qualitative trends. The CLE team applied a system approach and thus developed an analytical grid based on the agrifood system components (see para. 5). The grid includes four components or macro domains (agricultural production and value chain [APVC], socio-economic pillar [SEP], natural pillar [NP] and governance pillar [GP]); and 12 subcomponents or specific domains, as presented below (with examples of case study innovations).

Table B
CLE analytical framework

Macro domains	*Specific domains*	*Examples of innovations (and case study countries)*
Agricultural production and value chain	Production	System of rice intensification (Rwanda, Senegal, Malawi)
	Processing	Seaweed farming solar driers for seaweed (Philippines)
	Marketing	Value chain market oriented approach (Kyrgyzstan, Indonesia, Senegal, Rwanda, Nepal, etc.)
	Consumption	Home gardens for nutrition (Ethiopia)
Socio-economic pillars	Human capital	Youth incubation approach (Cameroon)
	Social capital	Community networks (Sudan)
	Economic capital	Rural financial services/products (El Salvador, Madagascar, Republic of Moldova, Sierra Leone, etc.)
Natural pillars	Natural resource management	Land consolidation approach (Tunisia)
	Environment and climate change	Climate-resilient infrastructures (Bangladesh)
Governance pillars	Policy	Policy lab in the Ministry of Planning (Indonesia)
	Regulation	Land regulatory framework (Madagascar)
	Project implementation procedures and approaches	Participatory approach (Burkina Faso, Ecuador, Indonesia, Peru, Philippines, Tunisia, etc.)

Source: CLE.

II. Findings on IFAD's Strategies and Corporate Processes in Support of Innovations

16. **Programme of loans and grants (PoLG).** Considering the agrifood system components (macro domains), loan investment projects have mainly supported, over the evaluated period, innovations related to the socio-economic pillar, followed by the governance pillar, respectively 60 per cent and 44 per cent of projects.[3] Innovations in the APVC and the natural pillars have received less support, respectively 31 per cent and 16 per cent of projects. Projects including the latter two categories of innovations have been increasing over the past 6-7 years, clearly reflecting IFAD's SO1 and SO2. Looking at the specific domains, the top six types of innovations supported relate to economic capital, project implementation process and approach, social capital, production, human capital and marketing. Overall, the trend is similar to that of the grant programme.

17. Analyses showed that loan investment projects support mostly innovations at the dissemination stage, followed by scaling up and testing/piloting. The majority of grant-financed projects support innovations at the testing/piloting stage, followed by scaling up and dissemination. This result clearly demonstrates the importance of grant windows to identify novel innovations (in key specific domains) to address smallholder agriculture challenges.

18. **Strategy and processes.** The Innovation Strategy (2007) set out the conceptual framework for innovation and scaling up. It provided pathways for promoting innovations and strengthening innovative capabilities and approaches in IFAD's operations. However, the strategy included no specific objective for IFAD's innovation agenda, no operational plan was developed and no specific budget was allocated until 2019 (see below). The lack of an operational plan (and subsequent update) in support of the 2007 Innovation Strategy weakened its effectiveness. Thus, evolving development trends (e.g. the system approach) could not be integrated into IFAD's approach to innovations, as implemented by other organizations (e.g. World Bank and the Food and Agriculture Organization of the United Nations). No action was taken to develop guidelines, including adopting an agreed operational definition, to help staff in approaching innovations systematically and holistically in IFAD's operations.

19. **Allocation of resources.** IFAD's financing instruments (loans and grants) remain the main source of support to innovations. The CLE estimates that an average of 3-3.5 per cent of PoLG funding goes to directly supporting the promotion of innovations through the grant programme. Other funding mechanisms exist (e.g. Adaptation for Smallholder Agriculture Programme Trust Fund and the Agribusiness Capital Fund) but none is exclusively dedicated to supporting innovative ideas or solutions. The launch of the innovation challenge in 2019 was the first special funding initiative since the IMI (2004).

20. With the exception of the CDI unit, which coordinates work on innovation, it is extremely difficult to obtain an exact estimate of the number of IFAD staff dedicated to innovation because operational staff (such as country programme managers, programme officers and technical advisers) also contribute to innovation-related processes. IFAD staff responses to the electronic survey indicated insufficient availability of incentives to promote innovations. Nonetheless, it is worth mentioning that the changes implemented in 2018 and 2019 in the IFAD business model provided positive signs of the incorporation of effective innovative approaches.

[3] Each project can include several types of innovations.

21. **E-survey results.** Staff responses to the electronic survey clearly underscored the insufficient availability of guidelines and incentives to innovate. There is tension between the results focus of loan-supported projects and the identification of genuinely novel solutions, which can be risky and hamper project effectiveness.

22. **Benchmark comparison.** Based on the benchmark indicators developed by the CLE, the IFAD model of innovation support is one of the two top-scoring models among IFIs and the RBAs. Compared to the World Bank (the other top-scoring model), IFAD's shortcoming is the lack of specific guidelines to support its innovation agenda.

III. Findings on Performance of IFAD-supported Innovation Processes

23. **Relevance of innovation processes.** The IFAD innovation process starts with the planning and design of country strategic opportunities programmes and projects; the approach applied at this stage is moderately relevant, as it is ad hoc and unsystematic due to the lack of a framework. During implementation, IFAD's approach to the innovation process is relevant and conducive, leading to the identification of adaptive innovations in evolving contexts despite the lack of a dedicated framework. At the project completion stage, the innovation process is incomplete due to insufficient analyses and documentation of results achieved by the promoted innovations. Overall, the case studies revealed that despite the lack of framework to steer the innovation processes, IFAD has realized a range of innovations. These have been mostly relevant (to their context and to smallholder farmers) but are scattered and stand-alone models.

24. **Effectiveness of IFAD-supported innovations.** Overall, the effectiveness of IFAD-supported innovations has been satisfactory**.** Based on evidence from the case studies, innovations within the specific domains of natural resource management (NRM) and human and social capital were assessed as very effective. NRM innovations are described below. The satisfactory performance of innovations in human and social capital is indicative of IFAD's efforts to bring about notable change in strengthening the capacity of farmers, their organizations and rural institutions. Examples are: the rural talent platform in Peru, peer-to-peer training in the Republic of Moldova, the mentoring approach of individual households in Ethiopia, innovative training in Bangladesh (for human capital), community networks in Sudan, rural dialogue groups in El Salvador and land rights management in Malawi (for social capital). Cases of less successful innovations were found for economic capital aligned with challenges to sustaining access to rural finance for smallholder farmers; for example in establishing a guarantee fund in the Republic of Moldova and setting up facilitation funds for access to medium-term rural credit in Cameroon.

25. Innovations within the governance pillar have been effective in general: 59 per cent were assessed as very satisfactory or satisfactory (the land regulatory framework in Madagascar and innovations for improving the participation of beneficiaries in several countries); 33 per cent as moderately satisfactory; and 8 per cent as lower. This good performance of governance innovations indicates the importance given to enabling factors in IFAD operations. With regard to APVC innovations, effectiveness was mixed (54 per cent very effective or effective, 32 per cent moderately and 14 per cent lower). Less success was observed for innovations in the specific domain of marketing and access to markets (e.g. the market and information system in Ethiopia), while production-related innovations were mostly effective or very effective (74 per cent of cases). The latter innovations were mainly productivity enhancement technologies such as higher yielding or more resistant crops, certification of seeds, improved cropping techniques (for better management of soil nutrients and water), irrigation techniques, improved animal husbandry practices and access to veterinary services.

26. **Transformative innovations.** Evidence has revealed that the effectiveness of stand-alone innovations is enhanced when they are implemented as a bundle, highlighting the need to combine or package innovations from different domains (e.g. innovations in APVC plus SEP and GP, or in NP plus SEP and GP) in order to give them a transformative dimension. In fact, an innovation does not need to be radical to be transformative. Transformative innovations are those that lift poor farmers above a threshold from where they cannot easily fall back after a shock. This is possible using a package of innovations that can tackle simultaneously multiple challenges faced by smallholder farmers. Unfortunately, very few examples of bundled innovations were identified within the case study evidence. Some examples are: the Association for the Intensification of Agricultural Production in Senegal, the irrigation schemes linked with users' organizations in Rwanda, and the public-private-producer partnership with Mars Incorporated in Indonesia. Unfortunately, the bundling approach has not been a focus of IFAD-supported innovation processes over the period reviewed.

27. **Effectiveness of non-lending activities in supporting innovations.** Evidence from the case studies suggests that knowledge management can increase the effectiveness of innovations. For example, in the Philippines, the IFAD team has been very active in facilitating lesson sharing via workshops with a wide range of stakeholders, YouTube videos and publication of a book on innovations. But overall, knowledge on innovations is not collected and shared systematically or consistently. At present, innovation knowledge and information are dispersed due to a plethora of channels and information-overload. Monitoring and evaluation systems are inadequate to capture data and information specifically related to innovations and assess their contribution to investment project performance.

28. With regard to partnerships, little attention has been given in country programmes to the capability of loan-supported project partners to scout for effective innovations and to the strengthening of synergies between stakeholders of agricultural innovation systems at national level. Similarly, policy engagement activities have been insufficiently focused on improving national frameworks to achieve greater government commitment to IFAD-supported innovation processes at all stages. Overall, mixed results have been observed with non-lending activities in supporting agricultural innovation processes.

29. **Efficiency of IFAD-supported innovations.** There is insufficient availability of project monitoring and financial data to prove any relationship between innovations and project efficiency. Case studies show that project costs per beneficiary have been reduced in some cases through social capital innovations that enhance the participatory involvement of local communities (in Malawi, Ethiopia, Kyrgyzstan and Senegal). Evidence indicates that adaptive innovations during the life of a project often play an important role in preserving overall efficiency.

30. **Contribution of innovations to the impact on rural poverty.** With few negative or unintended impacts, the performance of innovations according to impact domains has been positive overall, although it is difficult to prove the causality. Many production-oriented innovations (mentioned above) have made important contributions to increasing agricultural productivity among beneficiary farmers. Productivity gains have in turn often contributed to improved food security, and household incomes and assets, whereas the results depend on other factors like market access and enabling governance factors.

31. In terms of capacity and rural institutions, innovations linked to social capital (e.g. land rights management and rural networks), human capital (e.g. training approaches) and implementation processes and approaches (e.g. participatory approaches) contributed to strengthening the capacity of farmers' organizations and enhancing rural institutions. Positive impacts increase when the two types of innovations (socio-economic aspects and implementation process and approaches)

are combined, confirming the need for bundling innovations for transformative results. Failures in achieving impact are usually linked to difficulties with access to finance, poor targeting or excessively complex innovations for local organizations.

IV. Findings on Inclusiveness

32. **Gender and women's empowerment.** Few innovations specifically targeted women, but many were useful in addressing the challenges they faced. Overall performance has therefore been satisfactory. Loan projects were less likely to introduce innovations targeting women, while grants offered a more flexible way to address gender equality and women's empowerment. The innovations focusing on women were too scattered in general, and not bundled, with the exception of the Gender Action Learning System methodology. Innovation bundles including influencing access to resources, capacity-building and social measures are necessary to achieve meaningful impact for women.

33. Case studies show that innovations in the socio-economic domain (e.g. microinsurance in rural Peru, rocket stoves for cooking in Malawi and time-saving equipment for women in El Salvador) and in the production domain (e.g domestication and production of mud crabs in Bangladesh) were the most influential for women, the latter likely because many women are actively involved in production activities. Context is critical, as gender considerations vary considerably between countries. For this reason, gender-linked innovations have varying effects in different settings. A bundle of innovations is therefore necessary to ensure good impact for women.

34. **Innovations for youth.** IFAD-supported innovations to promote young people's enterprises are very recent and evidence on results is limited. ICT are an area considered to be of particular interest to youth, and related technologies can keep them involved in agriculture. The case studies show that the specific domains of operational practices and approaches, human and social capital (e.g. the youth network in El Salvador, the youth incubation approach in Cameroon and hackathons in Peru to create technological solutions) were successful in enabling young people to develop innovative solutions. Innovations linking youth to economic capital (e.g. rural finance) and markets were less successful, and thus the overall effectiveness was moderate.

35. **Innovations for indigenous peoples and poor groups.** Few innovations have targeted indigenous peoples and the very poor, but these were effective overall. Such innovations were easier to introduce within grant projects than loans. Evidence shows that innovations at the household level or at an individual level were more successful. Some countries (e.g. the Philippines) have introduced highly innovative ideas for working with indigenous peoples or very poor groups. For instance, household mentoring has been effective as a mechanism for social inclusion and a graduation model for ultra-poor households. Among indigenous peoples, innovations such as the covenant approach to natural resource management, the usage of participatory 3D mapping tools to identify indigenous lands, and strengthening indigenous land ownership were assessed as relevant and effective.

V. Findings on Natural Resource Management and Climate Change

36. **Natural resource management.** Despite the low number of specific NRM-related innovations, IFAD has supported sustainable innovative agricultural production practices (e.g. soil and water conservation, small-scale irrigation, agroforestry, intensive farm and pond systems). Recently, several projects have been developing win-win solutions for the management of marine and inland waters, developing systems that sustainably manage biodiversity, restore habitats and allow for greater harvests. For example, the innovative bay-wide alliance management

approach in the Philippines brought together several bayside councils and community actors to protect and co-manage a defined coastal area. Most NRM innovations supported by IFAD were transferred from other settings, adjusted and then disseminated in loan projects, and were effective overall.

37. **Climate change.** Few innovations specialized in climate change (CC) issues (adaptation not mitigation), as the topic is very recent. Countries are at different stages of internalizing CC threats and developing coping strategies. Valuable innovative experiences can be found in all categories, which can be transferred and pilot-tested elsewhere. For instance, some projects (e.g. in Bangladesh) tried to capture the phenomena related to CC by innovating in information system tools at different levels. Other projects have put in place innovative protective measures in storm- and flood-prone areas (e.g. Bangladesh and El Salvador). CC adaptation is also sought through innovations related to improved seed varieties that address water scarcity (Kyrgyzstan, Republic of Moldova and Tunisia). The analysed innovations are considered very relevant in responding to adaptation challenges of CC.

VI. Findings on Sustainability

38. **The sustainability of innovations is influenced by their degree of novelty, coupled with their level of success.** An unsuccessful innovation is unlikely to be sustainable. However, an innovation may be highly innovative, but not successful in practice. Compliance with both aspects increases sustainability. The novelty of innovations decreases over time as they become normal good practice, reflecting in many cases the successful uptake of the innovation. Other key aspects for sustainability are the institutional and financial frameworks, such as the availability of ongoing finance, and the institutional embedding of the innovation with relevant actors. Overall, the sustainability results of innovations were mixed. Innovations in the domain of social capital showed greater sustainability, while those that were dependent on financial elements were the least sustainable. Financial access is often the problem for the sustainability of innovations, in particular for value chain innovations.

VII. Findings on Scaling Up

39. **In terms of scaling up, case studies show mixed results.** Innovations within the economic capital, production, implementation process and approach domains were more likely to be scaled up than those in other domains. Consequently, governments and other funding partners are more inclined to support those innovations when successful. Innovations are also more likely to be scaled up if they are in bundles (e.g. the Association for the Intensification of Agricultural Production in Senegal and the irrigation schemes linked with users' organizations in Rwanda), probably due to their transformative potential. A key determinant for effective scaling up is to identify pathways for scaling at the project planning stage, while ensuring a good social fit supported by a stable political context and consistent long-term planning and perspectives. Failure to scale up innovations is often linked to poor social fit, as well as the lack of focus on geographic and cultural differences between regions.

VIII. Conclusions

40. In summary, the 2007 Innovation Strategy has been a key milestone of IFAD's innovation agenda but its relevance was moderate. Although, it suggested pathways for IFAD's innovation agenda, it did not include specific objectives and thus, no operational framework was developed. The allocation of dedicated resources to innovation had to wait until 2019, despite the launch of the Initiative for Mainstreaming Innovation of 2004. Nonetheless, the CLE found that IFAD's model for innovation support was one of the best among the RBAs and IFIs.

41. Innovation processes have been assessed as moderately relevant at the planning, design and completion stages, while very relevant and effective during the implementation stage. At all stages, the lack of minimum guidance or framework to steer the processes and to apply a systematic approach to innovations has been underscored as a weakness. Moreover, non-lending activities contributing to the effectiveness of innovation processes showed shortcomings in terms of knowledge-sharing, capability of national stakeholders and commitment of resources by governments.

42. Nonetheless, IFAD has been successful in promoting a range of stand-alone innovations that have been effective and are likely to have contributed to project impact. However, most of those innovations were not transformative. Findings confirmed that grants were important for developing and testing genuinely novel solutions, while loans have supported the transfer and uptake of proven (less risky) innovations already developed elsewhere. A key finding of the CLE is the need to bundle or package innovations addressing the diverse challenges of the agrifood system in order to give them a transformative dimension. Unfortunately, this approach has not been a focus of IFAD-supported innovation processes.

43. Over the period reviewed, IFAD supported innovations addressing other thematic areas. With regard to the sustainability and scaling up of innovations, results achieved were mixed. It appears that the likelihood of scaling up increases when innovations are bundled with transformative features. Overall performance was satisfactory with regard to innovations addressing NRM and adaptation to CC, because numerous production-related innovations contributed to addressing challenges related to these issues.

44. Satisfactory performance was also attained for gender equality and women's empowerment, while innovations related to youth promotion were moderately satisfactory due to difficulties in sustaining young people's access to financial inputs and services. Finally, in terms of indigenous and marginalized groups, good results have been achieved due to innovative ideas for working with indigenous peoples and targeting the very poor introduced in some countries with IFAD's support.

IX. Recommendations

45. The recommendations seek to revamp IFAD's innovation agenda and to enhance its performance in order to bring about effective, sustainable and resilient transformation in rural areas. They are aligned with recent United Nations system guidance, namely the strategy, partnership, architecture, culture and evaluation (SPACE) model (presented in table A9, annex IV) developed within the framework of the United Nations Innovation Network to help United Nations organizations accelerate their innovation impact.

46. **Recommendation 1: IFAD should set clear corporate/strategic goals for its innovation agenda, and develop and implement an operational framework**, **aligned with its 2016-2025 Strategic Framework and the 2030 Agenda for Sustainable Development.** The framework should provide an appropriate innovation definition in line with IFAD's operational context, include specific objectives, priority results areas, guiding principles and actions over a limited period of time (similar to the knowledge management theme).

47. **Recommendation 2: IFAD should improve the operating model that supports its innovation processes.** Guidelines should be developed to provide direction on methodologies (along the project cycle) with the aim of:
(i) incorporating innovations as key outputs that lead to higher-level results; and
(ii) adopting a holistic system approach to innovations. The guidelines should suggest tools and/or frameworks for monitoring and evaluating innovation

processes (linked with existing tools), as well as for assessing their contribution to project outcomes and impacts.

48. **Recommendation 3: IFAD should dedicate greater attention to bundles of innovations that are transformative: the more transformative innovations are, the more sustainable and amenable to scaling up they will be.** Guidance should be provided on key methodological steps that favour the identification at the planning stage of innovations that can work in synergy and be clustered or bundled at the implementation stage, leading to packages with transformative features. Guidelines or frameworks suggested in the previous recommendation should allow for the measuring of results achieved through transformative innovations.

49. **Recommendation 4: IFAD should enhance the innovation culture within its business model to steadily and effectively support its innovation agenda.** This should be accomplished through an ongoing implementation of specific funding initiatives (like the innovation challenge) to elicit innovation appetite and encourage risk-taking initiatives associated with genuinely novel solutions and approaches addressing important smallholder agriculture challenges. It is also important to: (i) strengthen internal capabilities (with adequate numbers of staff and skills) to facilitate the agenda's implementation; and (ii) support emerging innovation champions across the organization by promoting incentive mechanisms (e.g. financial or non-financial rewards).

50. **Recommendation 5: IFAD should increase funding and operational partnerships that support its innovation agenda.** Strategic co-funding opportunities should be boosted with partners (e.g. bilateral partnerships with governments and multilateral with other IFIs) that share similar innovation goals. The aim should be to enhance operational synergies for piloting, uptake, disseminating and scaling up of innovations, especially those addressing issues pertaining to inclusiveness, natural resource management and adaptation to climate change. IFAD's grant programme should be better leveraged for the development of effective innovations addressing smallholder agriculture challenges. Therefore, priority and flexibility should be given to grant proposals that plan on: (i) strengthening the capacity of national stakeholders involved in IFAD-supported innovation processes; (ii) scouting for novel solutions; and (iii) enhancing the effectiveness of partnerships and synergies at national and regional levels.

51. **Recommendation 6: IFAD should streamline and limit the number of knowledge management tools for accessing and sharing innovation-related information.** One main platform should be used to promote IFAD-supported innovations and disseminate monitoring and evaluating findings on innovation results and lessons. Knowledge management events should be used to periodically launch and promote the platform. Communication activities (including social media and internal website alerts) should be used to generate and fuel enthusiasm for innovations among IFAD staff and other stakeholders and sustain engagement in IFAD-supported innovation activities.

Contents

Abbreviations and Acronyms

I. Background 4
A. Introduction 4
B. Conceptual framework 5
C. IFAD's business model in relation to innovations 9
D. Methodology 14

II. IFAD's strategies and corporate processes in support of innovations 21
A. Analysis of IFAD's portfolio aligned with support to innovations 21
B. Review of IFAD's strategies and operational processes in support to innovations 25
C. Dedication of resources to support innovations 27
D. Non-lending activities in support of innovations 29
E. Stakeholders' opinions on IFAD's innovation business model 32
F. Benchmarking against other organisations' models 34

III. Performance of IFAD's support to innovations 38
A. IFAD's supported innovation processes in motion 38
B. Effectiveness of IFAD supported innovations 44
C. Contribution of innovations to project efficiency 55
D. Contribution to impact of IFAD supported innovations 57

IV. IFAD supported innovations for inclusiveness 65
A. Contribution of supported innovations to Gender Equality and Women's Empowerment 65
B. Contribution of innovations to youth promotion 69
C. Innovations for marginalised groups and the very poor 72

V. Innovation contribution to NRM and adaptation to climate change 75
A. IFAD supported innovations affecting NRM 75
B. IFAD supported innovations for adaptation to CC 78

VI. Sustainability and scaling up of IFAD supported innovations 81
A. Sustainability 81
B. Scaling-up of IFAD supported innovations 83

VII. Conclusions and recommendations 88
A. Conclusions 88
B. Recommendations 90

Annexes
I. Excerpts of CLE (2010) and ES (2019) 93
II. Senior independent adviser's report 95
III. Evaluation matrix 98
IV. Additional tables to chapters 102
V. E-survey results 110
VI. Detailed results of IFAD portfolio analysis 118
VII. Listing of case studies innovations 128
VIII. Benchmark information of IFAD comparators 135
IX. List of key persons met 139
X. Bibliography 161

Abbreviations and acronyms

4Ps	Public-private-producers partnership
AfDB	African Development Bank
APR	Asia and Pacific Region
APVC	Agricultural Production and Value Chain
ASAP	Adaptation for Smallholder Agriculture Programme
ADB	Asian Development Bank
AVANTI	Advancing Knowledge for Agricultural Impact
BALI	Business Action Learning for Innovation
CAM	Market access centres
CC	Climate change
CDAIS	Capacity Development for Agricultural Innovation Systems
CDI	Change, Delivery and Innovation Unit
CGIARs	Consultative Group for International Agricultural Research
CIP	International Potato Center
CLE	Corporate level evaluation
COSOP	Country Strategic Opportunities Programme
CPM	Country Programme Manager
CSPE	Country Strategy and Programme Evaluation
DSF	Debt Sustainability Framework
EB	Executive Board
ES	Executive Strategy
ESA	Eastern and Southern Africa
ESR	Evaluation Synthesis Report
FAO	Food and Agriculture Organization
FBS	Farmer Business Schools
FFS	Farmer Field Schools
FOs	Farmer Organisations
GALS	Gender Action Learning System
GDA	Grassroots organisations
GEF	Global Environment Facility
HHMs	Household methodologies
HQ	Headquarter
ICRAF	World Agroforestry Centre
ICT	Information and Communication Technologies
IDB	Inter-American Development Bank
IEE	Independent External Evaluation
IFI	International financial institution
IMI	Initiative for Mainstreaming Innovations
INJUVE	National Institute of Youth
IOE	Independent Office of Evaluation
IPAF	Indigenous Peoples Assistance Facility
IPM	Integrated Pest Management
KM	Knowledge management
LAC	Latin American and the Caribbean Division

LCS	Labour Constructing Societies
LMSC	Local management and supervision committee
M&E	Monitoring and evaluation
MERCOSUR	Southern Common Market
NEC	Central implementation unit
NEN	Near East, North Africa & Europe
NGO	Non-governmental organisations
NRM	Natural Resources Management
ORMS	Operational Results Management System
PCR	Project Completion Report
PDR	Project Design report
PKSF	Palli Karma-Sahayak Foundation
PMI	Sustainable Production, Markets and Institutions Division
PNPM Agriculture	National Programme for Community Empowerment in Rural Areas
PoLG	Programme on Loans and Grants
RBAs	Rome-based Agencies
RB-COSOPs	Results-Based Country Strategic Opportunities Programme
ROPPA	Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest
SDG	Sustainable Development Goals
SECAP	IFAD's Social Environmental and Climate Assessment Procedures
SIPA	Society for the intensification of agricultural production
SME	Small and Medium Enterprise
SSTC	South–South Triangular Cooperation
TEEB	The Economics of Ecosystems and Biodiversity
ToC	Theory of Change
UN	United Nations
UNDP	United Nations Development Programme
VC	Value Chain
WCA	Western and Central Africa
WFP	World Food Programme
WUA	Water User Associations

IFAD's support to innovations for inclusive and sustainable smallholder agriculture

Corporate-level Evaluation

X. Background

A. Introduction

1. During its 125th Session (of December 2018), the Executive Board (EB) of IFAD approved the conduct, by the Independent Office of Evaluation (IOE), of a corporate level evaluation (CLE) on IFAD's support to innovation for inclusive and sustainable smallholder agriculture.[4] The evaluation was undertaken following the revised IFAD policy (2011) and aligned with guidelines of the second edition of IOE Evaluation Manual (2015).

2. The overall objectives of the CLE were to:

   (i) Assess IFAD's efforts (through approaches, instruments and tools) to promote agricultural innovations (referred simply as innovations in the report), which contribute to effectively address rural development challenges, through supported operations in recipient countries;
   (ii) Assess IFAD's contribution for the dissemination and scaling up of successful pro-poor innovations, sustainable and climate resilient, that reach diverse groups of smallholder farmers;
   (iii) Identify options as well as recommendations for improving IFAD's approach and performance in promoting successful agricultural innovations for rural poverty reduction in recipient countries.

3. **Innovation and the Leaving No-One behind Agenda.** With the 2030 Agenda – of Sustainable Development Goals (SDGs) - the importance of innovations is clearly emphasised. SDG9 explicitly relates to innovation: promote inclusive and sustainable industrialisation and foster innovations. SDG2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture – calls for agricultural innovations. Indeed, without agricultural innovations, some SDG2 indicators will not be achieved.[5] Smallholder farmers are facing numerous challenges that are complex and multifaceted with regard to: economic resilience, food security and nutrition, sustainable management of natural resources, secure and sustainable access to inputs and other production resources, as well as adaptation to climate change. In order to overcome these challenges, agricultural innovations are paramount. These should be adapted, suitable and viable, considering the social, technical, economic and environmental contexts in which they are applied.

4. **Importance of innovations to IFAD.** The role of agricultural innovations is paramount for IFAD to fulfil its mandate.[6] In fact, the IFAD Strategic Framework (2016-2025) stipulates that, with the mandate of investing in rural people and enabling inclusive and sustainable transformation in rural areas, specifically by supporting the development of smallholder agriculture, innovations are essential for IFAD to strengthen and improve the quality of its country programmes. Consequently, innovation and scaling-up are among the key engagement principles of the organisation (in addition to targeting, empowerment, gender equality, and learning). Innovations will contribute to achieve greater impact and enhance IFAD's

[4] IFAD's 2019 Results-based Programme of Work and Regular and Capital Budgets, the IOE Results-based Work Programme and Budget for 2019 and Indicative Plan for 2020-2021. EB 2018/125/R.4, p.28.
[5] Examples of indicators 2.2, 2.3 and 2.4 of the The Sustainable Development Goals (SDGs). United Nations, sustainabledevelopment.un.org.
[6] IFAD was established as an international financial institution in 1977 to mobilize resources to invest in development opportunities for poor rural people. The Agreement establishing the Funds mentioned the need to design and implement projects and programmes aiming at increasing and/or improving agricultural food systems and strengthening rural development policies and institutions, especially considering the rural poor populations.

role in helping countries to fulfil their priorities relative to the 2030 Agenda. As such, **IFAD plays a critical role in achieving SDG-2 targets –** with its focus on smallholder agriculture (productivity, incomes from farm and non-farm activities, etc.), and on smallholder agricultural systems that are resilient **– as well as other SDGs**.[7]

5. IFAD acknowledged this critical role of innovation for its operations, and this explains the development and approval in 2007 of an explicit and stand-alone strategy: the Innovation Strategy (2007).[8] The CLE (2010) on IFAD's capacity to promote innovation and scaling up, stated that **concerted efforts had been made to incorporate innovation into the Fund's corporate documents since the mid-1990s.** The report of the Consultation of IFAD-11 Resources Replenishment (2018) stated that IFAD aims to make a significant, effective and efficient contribution to SDG1 and SDG2 and the broader 2030 Agenda in rural areas. This can be done through a concerted effort of: (i) increased resource mobilisation by diversifying the resource base, while ensuring that Member States' core contributions remain the foundation of the Fund's financial strategy; (ii) effective allocation of resources to those that need them most and can use them effectively; (iii) fine-tuning processes for resource utilisation, with more agile programme delivery and implementation; and (iv) **embracing a culture of results and innovation across the organisation, which will help transform resources into development results,** in a way that maximises the impact of each dollar invested in the lives of rural poor people.

6. The CLE (2010) was carried out only two years after the Innovation Strategy (2007) was approved, and thus, could not assess the results it produced.[9] Therefore, the current CLE has assessed progress made by IFAD in supporting the promotion of agricultural innovations through the implementation of the 2007 Innovation Strategy, as well as results achieved and underlying explanations.

7. **Structure of the report.** The report includes seven chapters. This first chapter provides the conceptual and empirical background as well as the methodological framework and limitations. Chapter II includes the analyses of IFAD's programme of loans and grants; the review of strategies, corporate policies and documents; as well as the benchmark assessment results. Chapter III provides the assessment at operational level of the performance of IFAD's supported innovation processes and promoted innovations, in terms of relevance, effectiveness, efficiency and contribution to impacts. Chapter IV relates to the assessment of innovations to address inclusiveness (gender, youths and marginalised groups), while chapters V and VI treat respectively the issues related to IFAD-supported innovations aligned with (i) natural resources management and adaptation to climate change; and (ii) sustainability and scaling up. The last chapter presents the conclusions and recommendations.

B. Conceptual framework

Definitions

8. A broad range of definitions is provided by the literature for agricultural innovations, from academician to practitioner angles, passing through business (private) company and development organisation perspectives. Within IFAD, the Initiative for

[7] SDG1: End poverty in all its forms everywhere and SDG2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. IFAD also contributes to SDG5 (gender equality), 8 (decent work and economic growth), 10 (reduced inequalities), 13 (climate action) and 15 (life on land).
[8] See the review of other organisations approaches in Chapter 2.
[9] Carried out in 2009 and published in 2010. See Annex I for excerpts of conclusions and recommendations. Also an Evaluation Synthesis (ES) was conducted in 2019 on Technical Innovations for Rural Poverty Reduction, to prepare the current CLE.

Mainstreaming Innovations (IMI), developed and implemented from 2005 to 2011[10], contributed to the rise of a systematic usage of an innovation concept, which became a central and crosscutting theme within the organisation. Following the IMI, IFAD's Innovation Strategy was developed in 2007 to provide strategic insights on the topic. The Innovation Strategy (2007) defines an innovation as "**a process that adds value or solves a problem in new ways**"[11]; and identifies three features to qualify as an innovation: (i) when it is new to its context of application; (ii) useful and cost effective in relation to a goal; and, (iii) able to "stick" after pilot testing. This definition, which relates to processes, seems very broad.

9. IFAD is a specialised UN agency, as well as an International Financial Institution (IFI), exclusively dedicated to support rural poverty reduction. Consequently, a developmental approach to innovation matters for IFAD. This latter approach considers innovations in terms of **something that is new within a context, with the aim and ability of improving an existing situation, aligned with development objectives**. Other UN agencies and IFIs have developed something similar (for instance, World Bank, 2012; Food and Agriculture Organization - FAO, 2018).

10. Considering this developmental approach and IFAD's innovation strategy definition, the CLE developed and applied an operational definition of innovation as follows: ***A new way of acting – practice, approach / method, process, product, or rule – brought or implemented for the first time, considering the context, timeframe and stakeholders, with the purpose of improving performance and / or addressing challenge(s)***.[12] This definition entails some considerations. An innovation may be considered as such in one context, while not in another one; and the novelty feature will evolve over time and become nil after a while. The strength of an innovation depends on its capability to address successfully the challenge(s) for which it was introduced, or to improve performance, especially as far as smallholder agriculture is concerned.[13]

11. **Inclusive and sustainable innovations.** According to IFAD's Rural Development Report (2016), inclusive innovations entail that they are "amenable to adoption by a wide range of farmers of both genders and in different localities, and are affordable and easily accessible, ideally through well-functioning markets".[14] Therefore, inclusive and sustainable innovations are agricultural innovations that are accessible to and suitable for a diversity of farmers (in terms of gender, socioeconomic group and geographical coverage), as well as economically, socially and environmentally suitable. They can be easily applied and replicated by a diversity of smallholder farmers and contribute to overcome challenges they are facing.

System approach to agricultural innovations

12. System approaches to analyse agricultural innovation emerged toward the end of 1980s. Röling developed the agricultural knowledge and information system, as a network of organisations and people who are linked through commercial, professional

[10] According to the document EB 2015/116/INF.4, the main phase of the Initiative for Mainstreaming Innovation (IMI) was approved by the Executive Board in December 2004 (EB 2004/83/R.2). During its main phase, 66 projects were approved and implemented through seven rounds of competitive bidding during the period 2005-2008, and a final round conducted in 2011.
[11] IFAD Innovation Strategy, 2007. p.4.
[12] This definition is from the CLE team and applied in the report. It is corroborated by staff responses to the e-survey (109# respondent) that highlighted key elements to include for defining innovation in IFAD's context. They are: (i) Creative / new way to deliver better and quicker results (72%); Useful and/or cost effective practice or approach (49%); (iii) Existing practice or approach but applied in a new context (43%)%); and (iv) Genuinely newly created practice / approach.
[13] For FAO (2018), agricultural innovation is defined as the process of bringing new or existing products, processes or ways of organisation, into use or application for the first time, in a specific context; the aim being to increase effectiveness, competitiveness, resilience to shocks or environmental sustainability. Ultimately, it will contribute to food security and nutrition, economic development or sustainable natural resource management. This definition (more recent to the one in the IFAD Innovation Strategy) relates to products, processes and other aspects. It emphasises improving performance.
[14] IFAD Rural Development Report 2016, p.279.

or social aspects. Thus, the agricultural innovation system is a holistic approach that considers agricultural innovations within a system, which includes various interlinked elements (Berdegué, 2005).

13. IFAD (2006)[15] described an organisational approach to innovations. Innovation should be addressed in terms of a system, made up of different interacting and interlinked elements within a dynamic process, not as a linear input-output process. These elements include the innovations and their related processes, the actors involved in the innovation processes and interactions among them, as well as norms and rules that allow the functioning of the system. **Three interlinked dimensions are essential to have successful pro-poor innovation systems: the institutional (e.g. rules, policies); the partnership (e.g. network); and (iii) the empowerment (farmers' capacity and organisation)**. Institutions are critical to address social and economic challenges, including access to resources, for reducing risks, as well as improving the participation of poor people in innovation systems. Partnerships bring together stakeholders with different resources, knowledge and experience, to join efforts for the effectiveness of innovation systems. Empowerment contributes to strengthening farmers' organisations, especially those of the rural poor and marginalised groups, to enable them to participate in the innovation system and access its benefits more equitably and sustainably.

14. The World Bank (2012) defines an innovation system as "A network of organisations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organisation into economic use, together with the institutions and policies that affect their behaviour and performance".[16] The Capacity Development for Agricultural Innovation Systems (CDAIS) (2017) applies a comparable definition, however, emphases capacity development dimensions: individual, organisational, inter-organisational and enabling environment.[17] **Important considerations for innovation systems are: the actors (individuals and organisations) involved, their interactions, practices and behaviour, as well as the institutional and policy context**. The Economics of Ecosystems and Biodiversity (TEEB, 2018) suggests applying a systems approach for innovations, in order to understand the relationships across multiple sectors, dimensions and perspectives, and to ensure holism and avoid reductionist ways of thinking.

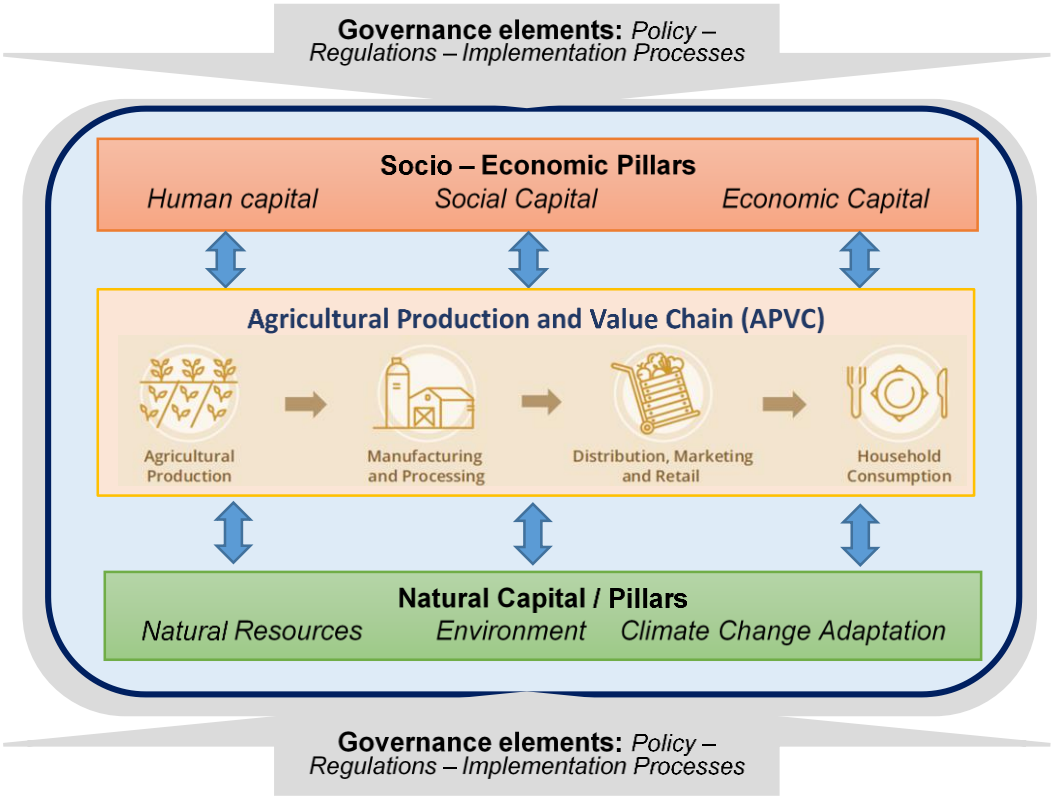
15. In short, **the system approach to agricultural innovations suggests key elements to be taken into account**, while assessing IFAD's support to innovations for smallholder agriculture: (i) innovations and related processes; (ii) the actors contributing to these processes; (iii) the relationships and interactions among actors**,** linkage between objectives (results hierarchy); and (iv) the institutional framework. It is also important to identify the main components, drivers and relationships that influence the functioning of the system, when analysing the agri-food systems (TEEB, 2018).

16. The scope of IFAD's work covers various aspects of the agri-food system, as reflected in its three strategic objectives (SOs) 2016-2025: SO1: Increase poor rural people's productive capacities; SO2: Increase poor rural people's benefits from market participation; and SO3: Strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. Components of the agri-food system are highlighted in Figure-1, adapted from TEEB (2018)[18].

[15] IFAD, 2006. Innovations challenges for the rural poor. Issue paper for the Governing Council – Twenty-ninth Session.
[16] World Bank, 2012. Agricultural Innovation Systems: an investment sourcebook. The World Bank.
[17] CDAIS (2017): An agricultural innovation system is a network of actors or organizations, and individuals, together with supporting institutions and policies in the agricultural and related sectors that brings existing or new products, processes, and forms of organization into social and economic use. FAO (2017) Mid-term Evaluation of the Project "Capacity Development for Agricultural Innovation Systems" (CDAIS). FAO code: GCP/GLO/626/EC
[18] TEEB (2018). TEEB for Agriculture & Food: Scientific and Economic Foundations. Geneva: UN Environment. There are other models describing agri food systems. The TEEB model was chosen as it unpacks the system (macro) into sub-systems (meso or specific), which encompass in turn detailed elements, thus enabling to analyse the system by stages.

17. The main agri-food system component is the agricultural production and value chain (APVC) system, clearly reflected through IFAD's SO1 and SO2. The two other system components, the socioeconomic pillars (SEP) and the natural pillars (NP) are influential on the functioning of the APVC. Both are in turn also affected by the APVC, establishing linkages and interactions between and among them. Aspects related to SEP and NP are well reflected in the IFAD's SO3.

Figure 1
Scheme of agri-food system components for which innovations can be of great importance



Source: Adapted from TEEB (2018), Elements of agri-eco-food system.

18. An overarching component is illustrated and referred as governance pillars (GP)[19], which include aspects pertaining to policy, regulations and implementation procedures or practices. They constitute driving forces for the effective functioning of the entire agri-food system, in facilitating an enabling environment (in the form of policy, funding, implementation support or a mixture of these) for the main agri-food components. The importance of the GP is significant in view of IFAD's context of operations.

19. Aligned with the CLE definition, innovations are meant to address challenges, which can relate to one or more aspects of agri-food system components. Innovations are then identified and categorised in the report aligned with these components (also called macro-domains) and related sub-components (also called specific domains). These include:

- **Governance elements or pillar (GP)**, which are overarching aspects: Strategies and policies; Regulations and standards; and Implementation processes and approaches.
- **Agricultural production and value chain (APVC)** component: Production (techniques and practices for cropping, husbandry, fishery, forestry, etc.); Processing (storage, transformation / processing and manufacturing methods

[19] The term is used in the context of this CLE to entail the overarching framework and factors that affect the main components of the agri-food systems.

and practices); Access to markets (distribution, marketing and sale mechanisms); Household consumption (technologies for improving household consumption, qualitatively and quantitatively).

- **Socio-economic component or pillar (SEP):** human capital (knowledge, skills and capabilities of individuals actors, including youths, and women); Social capital (rural organisations and institutions, social rules, norms, networks and partnerships); Economic capital (inputs, equipment, assets and finance).
- **Natural component or pillar (NP):** Natural resources management – NRM (e.g. resources or supports for ensuring sustainable production); Environment (related elements / issues), and Climate change (mitigation/adaptation approaches).

20. In general, an innovation will be influential in one or more sub-components. For instance, the introduction of a new cropping method affects production aspects of the APVC, while it may also be influential on other aspects, such as post-production, human capital or NRM, etc. Similarly, an innovation introduced within the APCV to improve access to markets by smallholder farmers is likely to also have an effect on social or economic capital. However, the CLE used the sub-system that is primarily affected (in line with the related challenge) as the main criterion to categorise the innovations.

C. IFAD's business model in relation to innovations

Milestones of IFAD's innovation agenda

21. Stages of IFAD's innovation agenda are presented in Table 1. The topic became particularly prominent with the IFAD-5 Action Plan (2000-2002),[20] which recommended evaluating IFAD's capacity to promote innovation with its partners.[21] IFAD-5 Action plan stated that: "As an innovator in the development of effective rural poverty-eradication instruments, models and know-how at the grass-roots level, IFAD seeks new and effective ways to address the constraints faced by its beneficiaries in a diversity of local contexts."[22] The IFAD's Strategic Framework for 2002-2005 pointed out the need for the Fund to identify successful innovations, understand why they were successful, and analyse opportunities and constraints related to these; and then to disseminate subsequent knowledge and lessons learned, for replication and dissemination across regions, when applicable.

22. The CLE (2002) concluded that while the promotion of innovative approaches has been central to past IFAD's vision, the institution was lacking a well-defined strategic agenda for innovations to guide and direct its operations. This led to the development and implementation of IMI. The evaluation of IMI conducted in the framework of CLE (2010) concluded that IMI contributed to increase the focus on innovations in the Funds' operations. Nevertheless its intended purpose of driving the organisational changes needed to make IFAD an innovative organisation (at both strategic and operational levels) was not fully achieved.[23]

[20] The Strategic Framework 1998-2000 already identified innovative pilot projects and programmes in agricultural and rural development (agricultural production, microcredit, rural infrastructure, self-help groups, and land tenure) as the Fund's "core business".
[21] The CLE (2002) mentioned that the IFAD V – Plan of Action (2000-2002) recommended that the Fund should develop methodology and evaluate IFAD's capacity as a promoter of replicable innovations in rural poverty reduction. On that basis, the Office of evaluation Evaluation undertook the first CLE on innovation at the end of 2000.
[22] Document EB 2001/74/R.27 p. 1.
[23] The CLE (2010) pointed out that IMI was interpreted as an additional internal funding facility, and faced internal barriers to cultural change in relation to innovation. It concluded that there was not a sufficiently systematic approach to innovations.

Table 1
Milestones of IFAD's innovation agenda

Year / Period	*Milestone / Feature*
2000-2002	IFAD-5 Action plan
2001	Evaluation of IFAD's capacity as a promoter of replicable innovations
2002-2005	IFAD Strategic Framework 2002-2005 *"IFAD now has to become more systematic in identifying, validating and scaling up innovation".* (EB 2001/74/R.36 p.7)
2003	Grant policy contributing to innovation and capacity building Innovation and scaling up started being evaluated (together)
2004	Initiative for mainstreaming innovations IOE Thematic evaluation: Promotion of local knowledge and innovations in Asia and the Pacific region
2005	Independent External Evaluation of IFAD's operations
2007-2010	Strategic Framework 2007-2010. Innovation, learning and scaling up became one engagement principle.
2007	IFAD Innovation Strategy
2009	Revised Policy for Grant Financing
2010	IOE CLE: IFAD's Capacity to Promote Innovation and Scaling up Brookings Working Paper 43: Scaling up the fight against rural poverty. An institutional review of IFAD's approach.
2011	Strategic Framework 2011-2015: Innovation, learning and scaling up kept among the principles of engagement. South-South Cooperation became an inherent dimension of enhanced IFAD 's business model
2014	IOE - CLE: IFAD Policy for Grant Financing
2015	Revised Policy for Grant Financing and Grant Implementation procedures
2016	IFAD Strategic Framework 2016-2025 Enhanced approach to South-South and Triangular Cooperation introduced IFAD's Operational Framework for Scaling Up Results (2016)
2017	IOE Evaluation synthesis (ES): IFAD's support to scaling up of results Scaling up started to be rated separately from innovation
2019	IOE-ES: Technical Innovations for Rural Poverty Reduction Creation of the Change, Delivery and Innovation Unit (CDI) Implementation of IFAD Innovation Challenge

Source: CLE team.

23. The Independent External Evaluation – IEE (2005) of IFAD operations concluded that **"Innovation is a raison d'être for IFAD, but the evidence reveals major shortcomings in IFAD's approach.** There is a lack of clarity in operational practice, a tendency to view it as an end rather than a means, and a lack of attention to both innovation and scaling-up in project objectives."[24] The IEE also considered grants as an essential ingredient that could be used to pilot innovations, which would be scaled up through loans, or support project design, sector and poverty analysis that would inform policy dialogue. **The management responses to evaluation recommendations included a decision to elaborate and implement a strategy to enhance impact of IFAD's projects and programmes**, and hence the 2007 Innovation Strategy was developed and approved.

24. The CLE (2010) on IFAD's Capacity to Promote Innovation and Scaling Up and the Brookings working paper (2010) on IFAD's experiences on scaling up constituted landmarks of IFAD's innovation journey. The CLE (2010) concluded that **although IFAD had a stand-alone strategy for innovation, insufficient resources and attention were allocated for that purpose**.[25] The Brookings working paper (2010) concluded that there was a lack of a systematic and proactive approach to turn IFAD into a scaling up institution. Since these publications, scaling up has been assessed

[24] Document EB 2005/84/R.2/Rev.1, p. II-23.
[25] See excerpts in Annex I.

during supervision missions and at completion of IFAD supported projects, though not rated separately.

25. The CLE on IFAD's policy for grant financing (2014) concluded that IFAD "missed the opportunity to leverage the grants programme in a strategic manner at all levels, partly due to a weak corporate policy environment and insufficient linkages with corporate and country-level priorities" (p.61). This led to the revision of IFAD's policy for grants in 2015, which further enhanced the strategic role of grants to promote agricultural innovations, and to involve the private sector in this process[26]. The IFAD's Strategic Framework 2016-2025 pointed out innovations as one of the critical dimensions for its agenda to work better. In 2017, following the ES on IFAD's support to Scaling up Results, innovation and scaling up ratings in IOE evaluations started being separated. The 2019 ES on Technical Innovation for Poverty Reduction recommended that the current CLE clarifies IFAD's capability to promote transformative innovations.[27]

26. Following changes in IFAD's business model (see chapter II), the CDI Unit was created.[28] **CDI is expected to ensure that organisational reforms are sustained, monitored and strengthened, while also promoting innovation in IFAD's products and approaches**. CDI aims to help IFAD to improve its capacity to produce better results more quickly, and to develop a culture and framework for promoting change.[29] It implemented in 2019 the first IFAD innovation challenge.

Overview of IFAD's instruments that support agricultural innovations

27. The promotion of agricultural innovations within IFAD is implemented through the instruments used by the Fund to discharge its mandate.[30] These are specifically loan projects, grants programmes and non-financial instruments. According to Policies and Criteria for IFAD Financing (2018), IFAD provides financing through loans, grants and a debt sustainability mechanism.[31]

28. Loan projects are appropriate for promoting and replicating already tested, reasonably safe innovations, in order to minimise risks both for the borrowing countries and for IFAD as a financial institution. Nevertheless, they can also be used for piloting innovations. The CLE (2010) revealed that IFAD's **loan projects have had a greater focus on social engineering and institutional innovations**, due to the fact that social capital, rural institutions and empowerment are prominent for IFAD, rather than focusing on developing innovative low-cost agricultural technologies. This latter aspect is done through grant-funded projects.

29. **Grants are adequate for testing and adapting innovative solutions and approaches** within specific contexts. The CLE (2014) concluded that: "the corporate grant policy and operational framework can be further tightened to ensure grants better support the objectives of IFAD country programmes and are used for building strategic partnerships. Learning from grant activities can be systematised and used

[26] The 2015 revised policy was complemented by the implementing procedures, which outlines a uniform management flow and the use of electronic platforms for monitoring and record keeping. Unfortunately, these were not in use for a great part of the period covered by the present CLE.
[27] See also Annex I - for excerpts of conclusions and recommendations.
[28] Which coordinated the IFAD self-assessment for the CLE, presented and discussed in July 2019.
[29] For the period 2019-2021, the priority activity areas of the CDI include, among others, introducing and incentivising formal means for innovation. See https://intranet.ifad.org/cdi#tab-1 consulted on 30 January 2020.
[30] The Fund will provide loans to developing Member States on highly concessional, blended and ordinary terms for approved projects and programmes. Grants may be provided to: (i) developing Member States; (ii) intergovernmental organizations in which such Member States participate; and (iii) other entities, which the Executive Board determines to be eligible pursuant to article 8 of the Agreement. Grants are provided in accordance with a Policy for Grants Financing established by the Executive Board. Financing under the debt sustainability mechanism is provided to eligible Member States in the form of grants, usually combined with a loan on highly concessional terms, in accordance with arrangements for implementation of a debt sustainability framework at the Fund established by the Executive Board.
[31] Reviewed in depth in chapter II.

more routinely to inform IFAD-funded loan investment projects and programmes and policy dialogue efforts."[32]

30. **Non-lending activities.** They play a pivotal role in the innovation process and in creating an enabling environment for their wider replication and scaling up. They are partnerships, knowledge management (KM) and policy dialogue. **Partnerships** are "at the core of IFAD corporate priorities for scaling up, knowledge generation and learning, and policy engagement and influence"[33]. Partnerships are also implemented through South–South Triangular Cooperation (SSTC).[34] **KM** contributes to: i) identify innovative solutions (supply); and ii) the replication and scaling up of successful innovations (outreach). **Policy engagement** contributes to create an enabling environment for wider replication and scaling up of innovations. In addition, policy dialogue contributes to ensure the buy-in among other development partners, who potentially have the resources and capabilities to replicate and scale up successful innovations identified and applied in IFAD-funded operations.

Theory of change (ToC) of IFAD's support to agricultural innovations

31. The ToC (Figure 2) of IFAD's support to agricultural innovation was reconstructed.[35] Figure 2 reflects the results pathway (in the centre) in line with IFAD's approach to support agricultural innovations, some critical conditions[36] and major stakeholders at different stages, as well as some of the main assumptions. The milestones of the results pathway include: (i) Providing inputs (of IFAD and its partners, including Governments) aligned with IFAD corporate instruments and processes; (ii) Innovation process roll-out (at design and implementation of projects and programmes); (iii) Innovations dissemination and Scaling up (immediate and short term results of innovation processes); and (iv) Achieving and measuring medium and long term outcomes.

32. **Corporate instruments and processes.** IFAD's corporate instruments and processes that support the promotion of agricultural innovations are: the Innovation Strategy (2007), the Programme of Loans and Grants (PoLG) and non-financial instruments. They were briefly described in the previous sub-section, but deeply reviewed in chapter II.

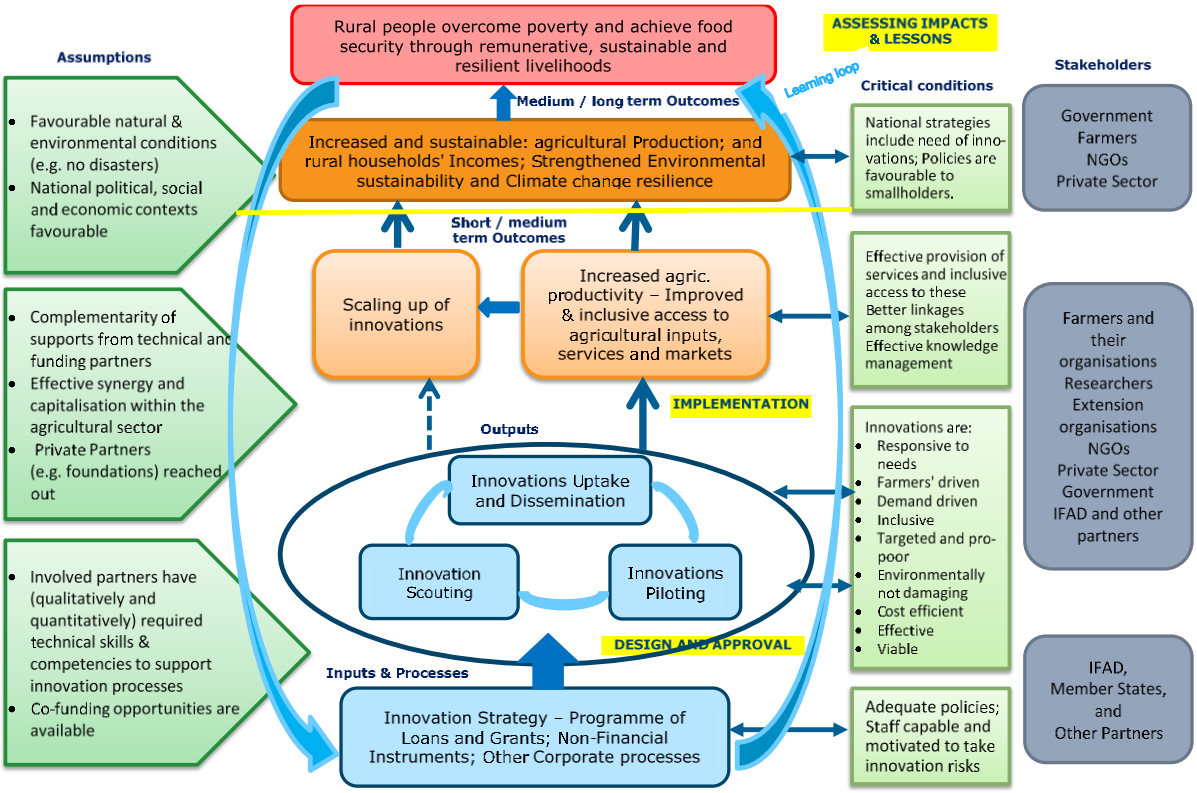
33. **Innovation processes.** The process to identify innovations starts during the planning and design stage, with the identification of challenges to be addressed using innovations or innovative solutions. This entails the identification of specific domains where innovations are needed. During the implementation of projects and programmes (loans and/or grant-supported), innovations can be scouted and piloted. This can lead to their uptake, or to a further search for the right innovation, reflecting an iterative process that involves stakeholders (at national and regional levels), namely: farmers and their organisations, research and extension actors, governmental institutions, NGOs, private sector actors and other funding and technical partners. The scouting of innovations can go through: either the development stage (through fostering research and development activities with IFAD's partners); or the identification by stakeholders of projects and programmes (including beneficiary farmers) of innovations already developed and tested elsewhere. This iterative process may be quick, or takes a longer time, depending on the capability of the innovation system actors to supply effective innovations,

[32] IFAD, 2014. Corporate level evaluation on IFAD's Policy for Grants Financing. p.X.
[33] An ES was conducted in 2017 on IFAD's partnerships.
[34] "The countries of the Global South feature similar climatic and environmental challenges, rural production patterns and sociological characteristics. Rural innovations and solutions developed in the South can be adapted in other countries of the South much more easily and appropriately than those designed in the North and for the North. IFAD should play a key role in capitalizing on this opportunity through SSTC" IFAD, 2017. Report on IFAD's Development Effectiveness, p.19.
[35] Developed at inception, after interactions with key stakeholders at HQ and in the fields; updated after and validated, taking into account empirical considerations and observations.
[36] These conditions, within the control of the system stakeholders, are not in terms of causality. They should happen in parallel or in support of each milestone, to ensure a greater success.

innovative solutions or approaches, within a reasonable timeframe. To that effect, ARRI (2007)[37] argued that most of IFAD's supported innovations are incremental rather than radical, meaning that they generally involve minor improvements (of a practice, approach or strategy) with little risk; while radical innovations entail much greater change and higher risk.[38]

Figure 2

Theory of change of IFAD's support to agricultural innovations (reconstructed)



Source: CLE team.

34. **Dissemination and scaling up.**[39] Innovations that are effective (in addressing intended constraints) can move to the uptake stage, meaning their application by relevant actors. Learning at this stage is critical to disseminate successful innovations, as well as to facilitate their viability within the system, even though their novelty level will decrease over time (see analyses in sections on effectiveness in chapter III). Successful innovations will be replicated and scaled up after a sufficient learning phase.[40] Innovations may also be subject to scaling up, even if they have not gone through a sufficient learning phase, depending on their relevance and effectiveness to the context, needs and stakeholders.

35. **Contribution to outcomes and impacts.**[41] As already discussed, the ultimate purpose of innovations is to contribute improving an existing situation, in terms of performance. Hence, the success of innovations will be measured in terms of their contribution to positive change within the agri-food system, for instance: increased

[37] ARRI 2007 Issues Notes on Innovations.
[38] The innovation process has been deeply analysed under the effectiveness in chapter 3. Sections.
[39] Aspects related to scaling up of innovations are analysed in chapter 6 on sustainability and scaling up.
[40] This should also be analysed in the light of a theory of scaling up. Wigboldus and Brouwers (2016) argue that what started as specific domain-related innovation and scaling process may also affect other domains; or what started as a local process may also affect national processes; and, what appeared to work out well on a small scale (few farmers involved) may work out quite differently at large scale. Wigboldus S, and Brouwers J (2016). Using a Theory of Scaling to guide decision-making. Towards a structured approach to support responsible scaling of innovations in the context of agrifood systems. Wageningen University and Research, Wageningen.
[41] Analyses under the impact sections in chapter III and others chapters.

access to services and production inputs (including financial resources) by smallholder farmers, increased agricultural productivity, increased access to markets, better management of natural resources, etc. Achieving short and medium term outcomes will contribute to longer-term outcomes: sustainable increase of agricultural production; sustainable and inclusive increase of rural households' incomes; strengthened environmental sustainability and climate change resilience; and ultimately to the desired development impacts related to food and nutrition security, as well as rural poverty reduction.[42]

D. Methodology

36. In line with the IFAD Evaluation Policy and IOE Evaluation Manual (2015), corporate aspects were prominently addressed in this evaluation, which covered the three main evaluation criteria of relevance, effectiveness and efficiency. Moreover, as innovations are important for change, considering different components of agri-food systems, additional criteria have been taken into account in the assessment (sustainability, scaling up and impact, as well as inclusiveness, environment and climate change).[43]

37. The CLE had three overarching questions that were further developed into key questions and sub-questions, to prepare the evaluation matrix.[44] The overarching questions were:

    a) To what extent (how and why) have corporate instruments, tools and approaches been successful in promoting agricultural innovations within IFAD's country programs?
    b) To what extent (how and why) have IFAD's operations promoted agricultural innovations that: (i) have responded to smallholder farmers' needs / demand; (ii) were targeted and inclusive?
    c) How did those innovations lead to positive outcomes, and were scaled up for sustainable and resilient development of smallholder agriculture?

38. The 2010 CLE analysed only IFAD's strategies and policies over the period 2002 and 2008. This CLE reviewed IFAD's strategies and policies, as well as operations implemented, from 2009 to 2019 (10 years). The Innovation Strategy (2007) served as a reference strategic document for the review of corporate and operational processes.

Data collection and analysis

39. **Databases.** The CLE reviewed strategies, policies, operational corporate guidelines, developed within the evaluated period, as well as other relevant corporate documents, in order to ascertain their relevance to the promotion of innovations. Projects and grants implemented within the same period were also analysed. Thus, the CLE developed two databases, the first on loan investment projects and the second on grants. Qualitative information was extracted to ascertain the relevance of innovation theme in the loan and grant projects / programme, using related approval documents[45], as well as quantitative data (e.g. approval, entry into force, total cost, disbursements, final cost, original and actual completion dates, closure date, etc.),

[42] IFAD's overarching development goal is "to invest in rural people to enable them to overcome poverty and achieve food security through remunerative, sustainable and resilient livelihoods". This is broken down into three strategic objectives: 1- Increase poor rural people's productive capacities; 2- Increase poor rural people's benefits from market participation; and 3- Strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. IFAD Strategic Framework 2016-2025.
[43] These assessments will be done, mainly by using evidence from previous evaluations completed. The IOE 2015 Evaluation Manual recommends to apply such an approach for CLEs. Data of impact studies conducted for IFAD-10 may also be accessible and used as deemed necessary.
[44] See Annex III.
[45] For projects, the President Design Report (PDR) were used, namely the paragraph on "Knowledge management, innovation and scaling up" that describes the main innovative features that project intends to implement. For grants, because there is no section on innovation in the approval document, it was more cumbersome to ascertain if the grant was intended to promote innovation or not, and if yes, which type.

using the Grants and Investment Projects System and the Operational Results Management System (ORMS). Data were processed and analysed to generate: (i) descriptive statistics; (ii) inferential statistics on the significance of differences between groups; and (iii) correlations and associations. Qualitative analyses were performed through content extraction, coding and mapping.

40. **A preliminary screening** of 508 loan projects[46] implemented within that timeframe, was performed; 230 (45 per cent) were approved before 2009 and 278 (i.e. 55 per cent) approved after 2009. Among projects approved before 2009, 99 per cent were closed by end of 2018, while only 1 per cent are still ongoing. Among projects approved after 2009: 22 per cent were closed by end of 2018, and 76 per cent are still ongoing, while 2 per cent were suspended. In total, 290 projects (57 per cent) are completed and 214 projects (43 per cent) are still ongoing.

41. With regard to grants, a preliminary screening was performed, using a database with information on 678# grants - small (65 per cent) and large (35 per cent) - approved and implemented within the period under review.[47] Due to challenges of availability of documents (approval, design and completion) and consistency of information on small grants, **the desk review was limited to large grants (240#)**.[48] This number includes 93 per cent global and regional grants and 7 per cent country specific grants (CSPG). After the review of design documents, the CLE found that 62 per cent of these large grants (or 149#) were aligned with the promotion of innovations, and were thus further analysed.

42. **Selection of case study projects and countries.** In order to select projects for in depth review, information in documents of projects identified in the previous step were screened for the suitability of innovation theme, as described in their project document. This leads to three levels of suitability of projects: very-, moderately- and fairly- suitable[49] for the CLE. Moreover, the same projects were also screened, following the analytical framework, to identify which sub-components of the agri-food system the promoted innovations are particularly influencing for performance improvement. These two screening results were combined to select projects that are relevant to the CLE topic, and at the same time reflect the diversity of innovations promoted through IFAD supported loan projects. Projects screened as moderately relevant could also be selected, especially for system components that have a relatively low number of projects. This process led to the identification of 109 projects for in-depth review. The CLE team interacted with relevant staff members in IFAD regional divisions (HQ and fields) to improve the selection, leading finally to 100 projects for the case studies, covering twenty countries (listed below). In each country, both loans and grant documentation was reviewed.

43. **Analysis of case study innovations**. The selection of case studies was useful for in-depth assessments, and from these, numerous innovations were identified and/or observed. The CLE team retained only those that comply with the CLE definition of innovation, though the level of compliance varies from one innovation to another. A total of 219 innovations were retained from the 20 case study countries. The CLE team rated each innovation for different aspects: novelty within the context, relevance (to context and stakeholders), effectiveness to address challenges

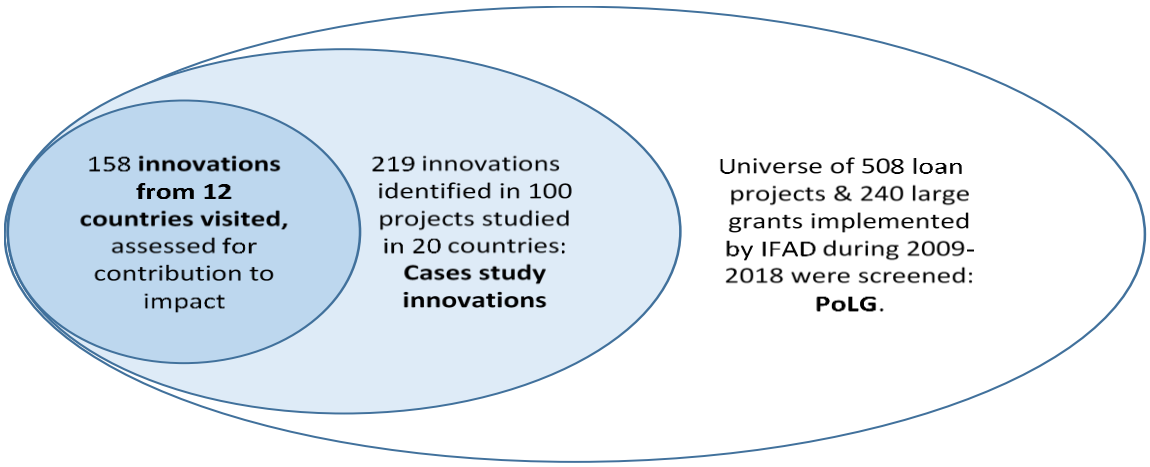
[46] A total of 540# were identified, but the PDRs were missing for 24 projects; for 8 others, the description of innovations were absent in the PDR.
[47] According to the 2015 policy for grants, the President has the authority to approve grants of up to US$500,000 or equivalent, known as small grants; Grants above US$500,000 or up to US$3.5 million or equivalent, are considered as large grants, and subject to approval by the Executive Board. Grant funding includes two windows: Global and regional grants and Country specific grants.
[48] As for loan project documents, grant documents were not systematically accessible until recently from 2017.
[49] Very relevant (green) means that innovative features are very obvious and/or well described in the PDR, including aspects related to scaling up; Moderately relevant (yellow), means that innovative features are more or less obvious, as described in the relevant section of the PDR; Fairly relevant (red): entails that the innovative feature of projects are weak or inexistent, usually in cases of follow-up phases of previous projects, or when the innovation was poorly or not described in the PDR.

identified and the extent to which the innovation contributed to change.[50] Individual evaluators identified and rated the innovations, but the ratings were discussed in the team, in an effort to standardise the results. For impacts, the CLE rated the innovations only from the countries visited; while ratings on issues such as degree of novelty, sustainability and scaling up were given for all case study countries. Sometimes, it was not possible to give a rating for certain aspects, due to lack of information, because the innovation was very new or it was not meant to address certain aspects. Overall, these ratings, tabulated according to the CLE analytical framework – macro domains (4) and specific domains (12) – complemented by simple descriptive analyses, were useful to generate specific and overall trends, cross learning and to highlight specific features.

Data sources and analytical grid

44. **Data sources of analyses.** Analyses carried out in the report were based mainly on two different sources of data. The first source is the PoLG, which cover projects and grants implemented over the evaluated period. They were presented in paragraph 40-41 above, and the CLE drew analytical trends from the project design reports (PDRs) (508#) and grant design documents (240#). Thus, no sampling was done at this level.[51] The second source of data pertains to the case studies, as described in para 42 and 43. At this level, one should distinguish, all cases of innovations (219#) and only country visited, innovations (158#). In the latter case, the CLE team could not appreciate all aspects for all innovations.[52] Figure 3 presents a summary of these data sources.

Figure 3
Summary of the CLE data sources of analyses



Source: CLE.

45. **Analytical grid**. The analytical grid applied for the case studies is based on the system approach presented in Figure 1 and subsequently described. Table 2 shows some examples by specific domains, grouped by macro domains. The analytical framework includes four (4) macro domains (components) and twelve (12) specific domains (sub-components). APVC, SEP and NP macro-domains are directly within the agri-food system, while the GP macro domain includes overarching enabling aspects, which influence the agri-food system.

[50] 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory.
[51] As it was not possible to found a large number of grants completion reports, the analysis was very limited.
[52] Because, some innovations have not been implemented for a sufficient timeframe, to measure their contribution to change; or they do not relate at all to the aspect appreciated (see impact sections).

Table 2
CLE analytical framework

Macro domains	*Specific domains*	*Examples of innovations*
Agricultural Production & Value chain (APVC)	Production	Small-scale irrigation schemes (Ethiopia, Malawi) System of Rice Intensification (Rwanda, Senegal,
	Processing	Technological transformation innovations (Burkina Faso) Seaweed farming solar driers for seaweed (Philippines)
	Marketing	Value chain market oriented approach (Kyrgyzstan, Indonesia, Senegal, Rwanda, Nepal, etc.) Multi-stakeholder Platform (Nepal)
	Consumption	Mola fish in fish ponds for nutrition (Bangladesh) Home gardens for nutrition (Ethiopia)
Socioeconomic pillars (SEP)	Human capital	Youth Incubation approach (Cameroon) Farmer Business Schools (FBS) to develop farm and nonfarm business skills (Malawi)
	Social capital	Rural dialogue groups (El Salvador) Community networks (Sudan)
	Economic capital	Rural financial services / products (Madagascar, Sierra Leone, El Salvador Moldova, etc.) Conditional cash transfer Peru)
Natural pillars (NP)	Natural resources management (NRM) –	Reward for Environmental Services (Peru) Land consolidation approach (Tunisia)
	Environment & Climate change (ECC)	Climate resilient infrastructures (Bangladesh) Weather stations and information services (Sierra Leone)
Governance pillars (GP)	Policy	Policy lab in the Ministry of Planning (Indonesia) Securing land rights (Bangladesh)
	Regulation	Pasture Users Union and committees (Kyrgyzstan) Land regulatory framework (Madagascar)
	Project implementation procedures and approaches (PIPA)	Participatory approach (Burkina Faso, Indonesia, Peru, Philippines, Tunisia, etc.) Rural development tables (Uruguay)

Source: CLE.
The detailed listing of innovations is presented in Annex VII.

Key CLE processes

46. The CLE was undertaken in six phases, as below, which were not strictly sequential. Details related to the main steps are presented.

    a. Inception, whereby the approach paper was drafted, shared, discussed with relevant stakeholders and finalised for its presentation at the EC of June 2019;
    b. Desk review of documentation at HQ, complemented by interviews with Management and staff members;
    c. Management Self-assessment;
    d. In-depth assessments of case studies selected, including field visits, stakeholder interviews (see Annex IX for the list of persons interviewed);
    e. Design and implementation of the e-survey;
    f. Presentation and discussion in-house of emerging findings to gather stakeholders' feedback;
    g. Drafting the CLE report, sharing this with stakeholders and finalise the CLE report, based on comments received; and getting Management's response.
    h. Presenting the conclusions and recommendations at the EC session.

47. **Management self-assessments.** In line with the evaluation policy and past experiences, IFAD management prepared a self-assessment based on selected questions prepared by the CLE team. The self-assessment was presented and discussed during an internal workshop that happened in July 2019. The management

self-assessment documentation was meaningful as used to streamline the data collection on corporate aspects.

48. **In-depth assessments.** The CLE team undertook in-depth data collection and analyses on selected case studies. The assessments included: (i) field missions in twelve countries, complemented by desk reviews; (ii) using opportunities of 2019 IOE Country Strategy and Programme Evaluation (CSPE) missions to collect innovation related data in four countries and (iii) only case studies through desk reviews for three countries (Table 3).

Table 3
Case studies countries

	APR	*ESA*	*LAC*	*NEN*	*WCA*
Visited countries	Bangladesh Indonesia Philippines	Ethiopia Malawi Rwanda	El Salvador Peru	Moldova Kyrgyzstan	Cameroon Senegal
2019 CSPE countries	Nepal	Madagascar	Ecuador	Sudan	Sierra Leone
Only desk reviews	---	---	Uruguay	Tunisia	Burkina Faso

Source: CLE.

49. The field visits have been essential to: refine and validate the ToC; gather field data and evidence to respond to the evaluation questions; validate hypotheses generated through the desk review; and to identify examples of IFAD supported innovations (both successful and less successful) and to describe their process over time. The team applied mainly qualitative data collection methods during the field missions, in particular semi-structured interviews (of diverse range of key informants), simple or focus group discussions with stakeholders of the national innovation systems and direct observations. For each country visited, all IFAD's operations – loan investment projects, grant programmes and non-lending activities – implemented within the timeframe under review, were analysed.

50. **Electronic survey.** An electronic survey was developed and carried out to capture information (knowledge, views and experiences) of IFAD managers and operational staff, as well as staff from government agencies, managers of IFAD-funded projects and other relevant partners such as research centres, NGOs, private sector actors and farmers' associations (the questions were targeted to the relevant groups of respondents). The survey was anonymous and addressed to individual respondents. Three questionnaires were prepared and directed respectively to 1) IFAD's staff; 2) IFAD supported project staff and government actors; and 3) partners of IFAD supported grant programmes. Overall, 449 persons took the survey, and 283 (or 64 per cent) respondents completed all questions. [53]

Constraints and limitations

51. The innovation topic is very broad in terms of contents, scope and methodologies. The stakeholders interviewed held different views of **what constituted a genuine innovation, versus a good practice**. All IFAD-supported projects address, to a certain extent, innovations or innovative features that cover a broad range of rural development interventions. Thus, the CLE team followed a pragmatic approach by collecting innovations described in project documents, reported during interviews with staff and field visits, and filtering them. They were debated within the team in the attempt to differentiate true innovations from good practices. However, there are no objective criteria applicable in all countries or project settings. Thus, this constituted a constraint to the exercise. **At the time of its introduction, the innovation itself may not be novel, but it responded to a constraint in an innovative manner; and this makes the judgement on the novelty**

[53] The survey responses is presented in Annex V.

discussable, and the assessment rather complex. Moreover, to identify IFAD supported innovations, the CLE has to rely on relevant projects documentation and stakeholders' views. In both situations, cases of 'real failure' were not described or presented, even though they may be relevant for learning purpose.

52. One main aspect to consider is the fact that the **innovation-related activities within IFAD's projects and programmes are not clearly delineated**. This barrier makes it burdensome to isolate innovation-related data (e.g. costs, staff workload, contribution to results, etc.). Considering that innovations can be found at all stages of the project implementation process, the lack of availability of specific monitoring and evaluation (M&E) data, as well as indicators on innovation in the results framework, hinder a comprehensive analysis on the topic. **Projects vary widely in the kinds of M&E data collected, and in most cases, the data is insufficient for evaluating project level impacts let alone the impact of individual innovations within them**. Moreover, there were inconsistencies of innovation information in different reports: innovations were stated at design stage and disappeared in supervision reports and/or project completion reports (PCR); innovations were only mentioned in PCRs with poor or no explanation on how they were developed.

53. **The lack of a counterfactual** to compare IFAD's innovations against is an important limitation to the study. It was not possible to understand how innovative investments would have been if IFAD had not been involved; nor to know what opportunities may have been missed. The study had to rely on some qualitative views from partner organisations about how they perceive IFAD's innovations vis-à-vis other agencies and the contributing role of IFAD.

54. **The case study selection was done purposively** to capture the diversity of overall IFAD supported innovations (aligned with the agri-food system macro and specific domains) by IFAD region. The number of innovations analysed by the CLE team in each region may not fully cover the regional diversity. Therefore, **the case studies innovation enabled the CLE to generate trends at overall level in IFAD**, but not to conduct comparisons between IFAD's regions.

55. Finally, the CLE relates to agricultural innovations, and as mentioned, a system approach is required to address it holistically and systematically, aligned with recent methodological trends in approaching the topic. Hence, both upstream and downstream innovative solutions and approaches were considered, as well as overarching aspects, as far as they contribute to improve performance within the agri-food system. **This led to broadening the scope of the CLE, which covered all IOE evaluation criteria.** However, since projects' detailed data are not disaggregated by individual innovations, and also because many innovations seen during the field visits, or described in reports were still at the piloting stage, not all criteria could be assessed to the same depth.

Key points

- The CLE objectives were to assess IFAD's performance in supporting the promotion of innovations that address smallholder agriculture challenges, in inclusive and sustainable manner, as well as the scaling up of successful pro-poor innovations aligned with the rural poverty reduction. These assessments enabled the CLE to draw conclusions and recommendations for improving IFAD's performance. The topic is aligned with the agenda of leaving no one behind, IFAD's corporate mission and strategic objectives.
- The CLE defines the concept of innovation, following a developmental perspective. It also applies a system approach to assess IFAD's support in promoting agricultural innovations, which began in the late 1990s, with the IFAD-5 replenishment. This led to the development and approval of the 2007 Innovation Strategy. The latter served as a reference document for the CLE to review corporate and operational processes.
- IFAD's innovation support is provided through its usual instruments of loans, grants and non-lending tools. The CLE applied qualitative evaluation methods for data collection and analyses, complemented by quantitative analyses. The analytical grid unpacked the agri-food system into three components, in addition to one overarching one.
- Important constraints were related the challenge of qualifying innovations, the broad scope of the study and the non-availability of disaggregated projects' information by individual innovations, as well as the non-availability of specific M&E data.

XI. IFAD's strategies and corporate processes in support of innovations

56. This chapter, which is related to the bottom box in the ToC, starts with the analysis of IFAD PoLG, followed by the review of IFAD's corporate strategies (Innovation Strategy, KM Strategy, IFAD Strategic Framework and others), policies and operational documents, in support of innovation processes. It ends with a brief review of models applied by other organisations to support the promotion of innovations.[54]

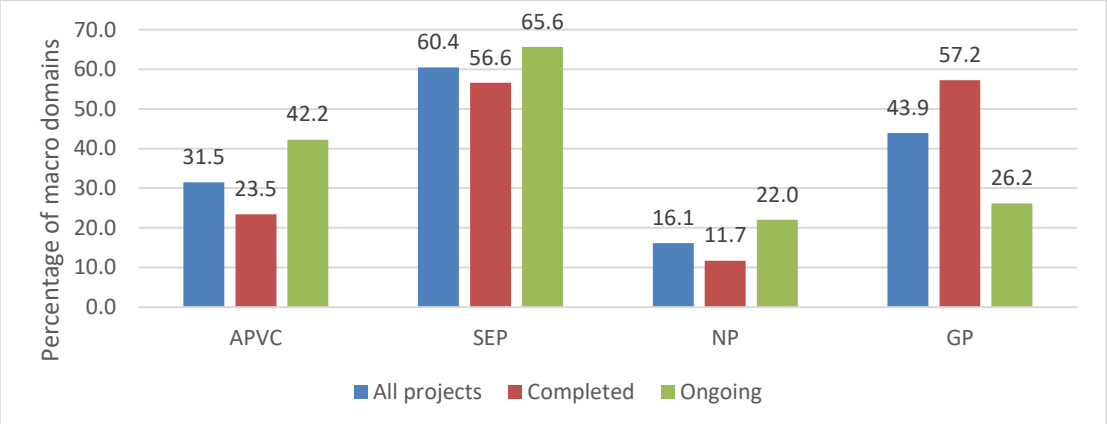
A. Analysis of IFAD's portfolio aligned with support to innovations

57. IFAD's support to agricultural innovations, using financial instruments, starts with the approval process of loans and grants. As previously mentioned, all PDRs include information on innovations,[55] meaning that all loan financed projects over the period under review (2009-2019) addressed in some way the promotion of innovations, therefore all of them were analysed (see methodology section). Similar analytical steps were also carried out with large grant design documents. Innovations promoted through IFAD's support are categorised according to components and sub-components (as per Figure-1) of the agri-food system, identifying which challenges they address.[56]

Overview of innovations in loan investment projects

58. Considering the period under review, IFAD mainly implemented innovations at their dissemination stage (71 per cent of projects), while only 11 per cent of projects are distinctly identified as piloting innovations. About 17 per cent of projects are scaling up innovations. **Considering the macro domains of innovations supported by the loan investment projects**, **the largest number of innovations are within the socioeconomic pillar (SEP), followed by the governing pillar (GP), APVC and natural pillar (NP) with the least innovations** (Figure 4)**.** The same trend is observed for completed projects. When considering ongoing projects, innovations in SEP still come first, but now followed by APVC; and proportion of innovations related to GP and NP are quite comparable.

Figure 4:
Macro domains of Innovations in loan investment projects (2008-2019)



Source: CLE (N=508 projects).
The total per domain is above 100 per cent, because one project supports several type of innovations.

[54] These pertain to the GP of the CLE analytical grid.
[55] Design reports of loan investment projects include a paragraph on "innovative features" that describes aspects of innovation in the project.
[56] Details of Figures and Tables are in Annex VI.

59. There are small differences within the distribution of the four macro-domains across IFAD regions (see Annex VI)[57]. Innovations related to SEP are more implemented in the Asia and the Pacific Region (APR), Near East, North Africa and Europe (NEN) and West and Central Africa (WCA) projects. APVC-related innovations are promoted more frequently in projects in Latin America and the Caribbean (LAC), but they are approximatively at the same proportional level in the other regions. Within NEN, country programs implemented a greater number of projects with innovations linked to GP. Projects addressing NP innovations are greater in NEN, followed by APR, LAC, Eastern and Southern Africa - ESA and WCA.

60. Looking at the specific domains of innovations in all projects, **the top five are by order of importance: economic capital, followed by PIPA, social capital, production and human capital** (Table 4). When considering on-going projects only, this top five remain the same, but with a significant increase of innovations in the specific domain of production, and a significant decrease of the ones in PIPA. Innovations related to regulation and consumption remain the least frequent.

Table 4

Innovations in loan investment projects according to system specific domains

Macro domains	*Specific domains*	*All projects* ***(%)***	*Completed* ***(%)***	*Ongoing* ***(%)***
Agricultural Production & Value chain (APVC)	Production	17.7	12.1	25.2
	Processing	4.3	2.4	6.9
	Marketing	14.8	12.8	17.4
	Consumption	3.2	1.4	5.5
Socioeconomic pillar (SEP)	Human capital	16.9	15.5	18.8
	Social capital	27.2	28.3	25.7
	Economic capital	34.1	30.3	39.0
Natural pillar (NP)	Natural Resources Management (NRM)	7.9	6.2	10.1
	Environment and climate change (ECC)	8.7	5.9	12.4
Governance pillar (GP)	Policies	13.8	19.7	6.0
	Project implementation procedures and approaches (PIPA)	30.3	38.6	19.3
	Regulations	2.2	3.1	0.9

Source: CLE (N=508).
The total per domain is above 100 per cent, because one project may support several categories of innovations.

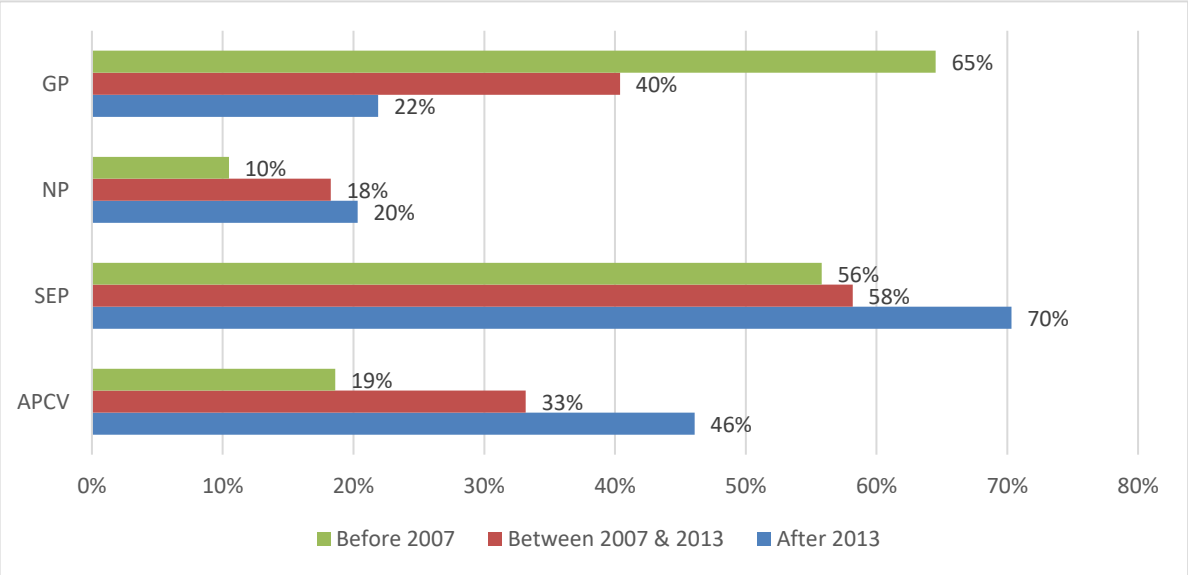
61. The previously noted difference in trends observed between completed and ongoing projects is due to the fact that types of innovations promoted by IFAD and supported by projects have evolved over the evaluation period. Figure 5 shows clearly that **GP related innovations have decreased between 2007 and 2019, while APVC innovations have increased significantly, as well as SEP and NP related innovations.** The increase of innovations pertaining to APVC can be explained by the significant increase of value-chain relevant projects in IFAD portfolio since the IFAD7 replenishment.[58] The rise of innovations related to SEP in IFAD portfolio is the corollary of the increased attention devoted by the Fund to agricultural and rural finance (included in the specific domain of economic capital), which is subject of a specific policy – the Rural Finance Policy (2009) [59] – and reflected in IFAD's strategic frameworks since 2007.[60] A similar explanation is valid for the increase of NP related

[57] Table B2 and Figure B4, Annex VI.
[58] According to the CLE (2019) on Value chain, in terms of numbers of projects approved, the proportion rose from 41.5 per cent in IFAD7 (2007-2009) to 72.3 per cent in IFAD10 (2016-2018). In terms of volumes of loans, country-specific grants and Adaptation for Smallholder Agriculture Programme (ASAP) funds, the increase was from 50 per cent to 81 per cent.
[59] It emphasised demand-driven and innovative approaches with the potential to expand the frontiers of rural finance.
[60] Highlighted by the Evaluation Synthesis (2019) on Inclusive Financial Services for the Rural Poor.

innovations in IFAD supported projects, as the Fund has specific instruments in this domain, namely: the Policy on Environment and Natural Resources Management (2012) and the Social, Environmental and Climate Assessment Procedures (SECAP) (2015). The rise of innovations in other domains has been in detriment of GP related innovations.[61] Obviously, some GP related innovations (especially in PIPA specific domain)observed in the past, have evolved into new forms, as it is the cases of Public-private-producers partnership (4Ps) arrangements, which now accounted for APVC. However, due to increasing attention given to policy engagement activities (see para 82), the decrease trend of policy related innovations may reverse in the future.

Figure 5

Evolution of innovations in IFAD supported project over the evaluation period at approval

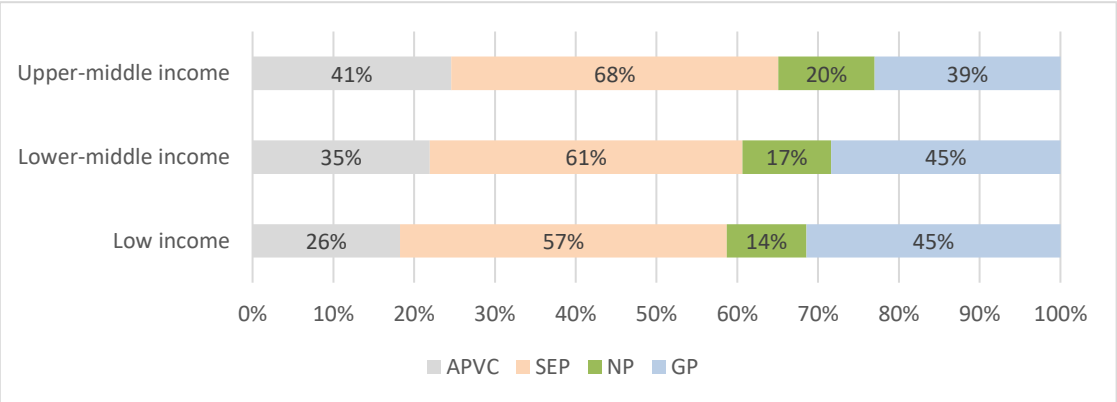


Source: CLE (N=508).
Time periods were delineated based on key milestones of IFAD's innovation agenda: 2007 was the approval year of the IFAD innovation strategy and 2013 was the mid-period of Strategic Framework 2011-2015, the second (after the one of 2007-2010) that highlighted Innovation, Learning and Scaling up among the key IFAD engagement principles.

62. The analyses also showed that **innovations in APVC and NP increase with the growth of the country income level** as reflected in Figure 6. Innovations addressing the GP are mostly implemented in projects of lower income economies.

Figure 6

Distribution of innovation types by country income category



Source: CLE (N=508).

[61] The decrease is confirmed, when comparing the proportion of GP related innovations in completed versus on-going projects. See Table B7, Annex VI.

63. Projects with innovations in NP have on average a higher budget, probably due to co-financing opportunities, while projects with GP innovations have generally smaller budgets. Projects promoting SEP and APVC innovations receive less international financing, whereas projects supporting APVC related innovations attract more private sector investments.[62]

Grant financed programmes

64. As mentioned earlier (in the methodology), the CLE could only review the design documents of large grants (240#), which represent 77 per cent of the total grant funding for the period 2009-2018 (see Table B10, Annex VI). Table 5 presents the distribution of recipients of these large grants (by category). International research organisations (in particular Consultative Groups for International Agricultural Research – CGIARs) are the first beneficiaries, followed by international NGOs (33 per cent), and multilateral partners (12 per cent).[63]

Table 5

Large grants distribution according to categories of recipients

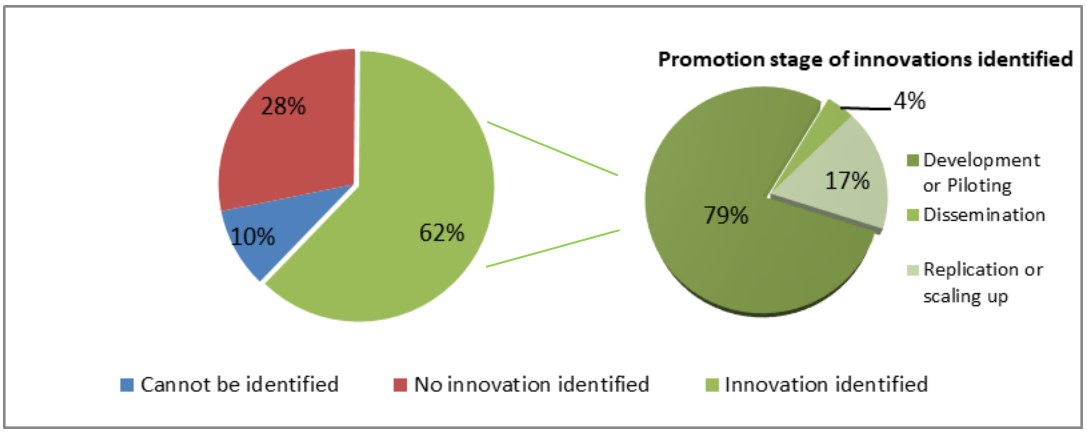
	Research organisations	*NGOs*	*Multi-Lateral organisations*	*Government*	*Private Sector*	*Farmers' organisations*	*Other*
No. Grants	100	78	29	20	7	4	2
% No.	42%	33%	12%	8%	3%	2%	1%
% Funding	41%	32%	11%	9%	4%	2%	1%

Source: CLE (N=240).

65. Figure 7 shows that 62 per cent of these large grants are related to innovations, aligned to IFAD Policy for Grants Financing (2009 and 2015).[64] It also shows that **the majority of grants (79 per cent) are oriented to the development or piloting of innovations, followed by replication or scaling up (17 per cent) and (4 per cent) for dissemination.**

Figure 7

Proportion of innovation in large grants and stage of these innovations



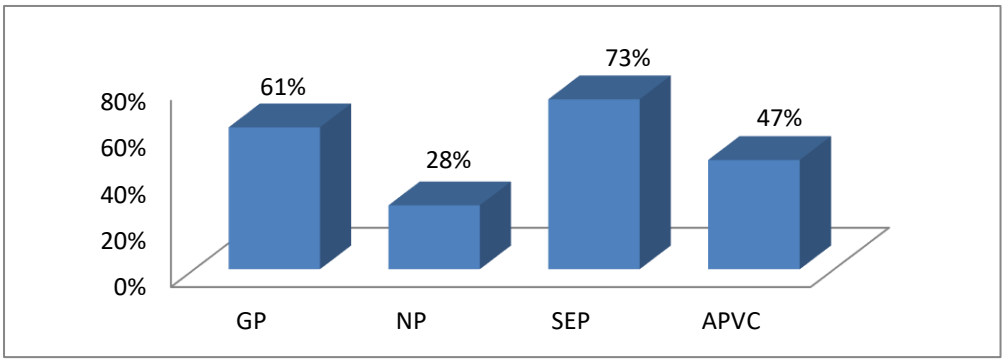
[62] Detailed analyses results are presented in Table B5, Annex VI.
[63] The percentage of funds approved is quite similar to the proportion of grants, because each large grant proposal had a limit of approx. US$1.5 million. According to the IFAD Policy for Grants Financing (2009) Small grant), small grants are up to US$500,000 while large grants are above US$500,000. According to the Policy for Grants Financing (2015). Small), small grants are up to US$500,000, while large grants are above US$500,000 to a maximum of US$3.5 million.
[64] According to the 2009 revised policy, the goal of grants is to promote successful and/or innovative approaches and technologies, together with enabling policies and institutions that will support agricultural and rural development, thereby contributing to the achievement of IFAD's overarching goal. According to the 2015 policy, the objectives of IFAD grant financing are to: (i) promote innovative, pro-poor approaches and technologies with the potential to be scaled up for greater impact; (ii) strengthen partners' institutional and policy capacities; (iii) enhance advocacy and policy engagement; and (iv) generate and share knowledge for development impact. Grants give flexibility in testing new and therefore "risky" ideas and in involving non-government stakeholders. Two types of grants can contribute to innovation: global / regional and country-specific grants. The timeframe is rather short for innovation development: up to 3 years for small grants and 5 years for large grants.

Source: CLE (N=240 large grants in total for the period 2009-2019).

66. Over the period evaluated, **grants projects supported innovations mostly in the macro domain of SEP (73 per cent), followed by GP (61 per cent), APVCs (47 per cent) and NP (28 per cent)**, as shown in Figure 8. A comparable trend was observed for loan investment projects. With regard to SEP innovations, the ones related to social capital come first, followed by human capital. Grant-supported innovations addressing APVC are mainly related to production (methods and techniques), followed by marketing. For the GP macro domain, innovations related to PIPA come first, followed by policy related innovations. When considering the specific domains, innovations related to PIPA come first, followed by production, social and human capital, policy, economic capital, environment, marketing and NRM.[65]

Figure 8

Distribution of innovations in large grants by system macro domain



Source: CLE (N=149 large grants).
Total is not equal to 100% because, as for loans, supported innovations can address several domains

Conclusion on PoLG

67. IFAD's PoLG has mainly supported innovations related to SEP, followed by GP, but this latter category is decreasing significantly. APVC and NP related innovations are increasing, but not as rapidly as for APVC.[66] In fact, innovations related to NP were addressed more often in larger size projects, and this can be explained by the availability of more funding for these types of projects. The analysis confirmed that the majority of loan investment projects support the promotion of innovations at the stage of dissemination, followed by scaling up and development / piloting; while the majority of grant-financed projects support innovations at the stage of development / piloting, followed by scaling up and dissemination. **This clearly reflects the importance of grant windows to identify novel innovations (in key specific domains) to address smallholder agriculture challenges, in order to meet prioritised SDG targets**.[67]

B. Review of IFAD's strategies and operational processes in support to innovations

68. The current CLE examined in detail the Fund's key strategic, policy and other corporate documents[68], starting from the Innovation Strategy of 2007. IFAD has a two-decade history (from the years 2000) of supporting innovation through its strategic frameworks and other policies. **The Innovation Strategy (2007)** was the first document that identified organisational elements that required specific attention – i.e. resources, processes, context and outcomes – to transform the organisation innovation incentives into practice. The goal of the strategy was to mainstream

[65] See Tables B14 and B15, Annex VI. Innovations addressing processing, regulation and consumption are very few.
[66] A trend also identified through the e-survey results.
[67] This is corroborated by the QAG 2020 review of IFAD Grants Programme effectiveness and the way forward, which stated (p. 12): "The IFAD's Grants Programme as a whole remains highly relevant, because it is a unique instrument to test approaches, pilot initiatives, develop innovations, generate knowledge and produce public goods which cannot be financed by more conservative and less risk-friendly loan-funded projects."
[68] They were mentioned in the presentation during the Management's self-assessment workshop on the CLE innovation.

innovation into IFAD processes and practice in a systematic and effective way. Its purpose was to enhance IFAD's capacity to work with partners – including rural poor people and their organisations – to find and promote new and better ways to enable rural poor people to overcome poverty. It identified pathways in order to build IFAD's innovative capabilities and its ability to recognise and understand challenges and opportunities requiring innovative solutions. Learning-by-doing as a main guiding principle was based on specific tools and techniques, such as challenge mapping, scouting process, creative problem/solving and innovative management.

69. The Innovation Strategy (2007) mentioned that its implementation, while involving the entire organisation, would take place through: (i) the organisation's strategic framework, (ii) the results-based country strategic opportunities programmes (RB-COSOPs) and (iii) the non-lending instruments. These pathways are analysed below.

Review of paths suggested by the 2007 innovation strategy

70. **Innovation in IFAD's strategic frameworks.** The successive **IFAD's Strategic Frameworks (2007-2010; 2011-2015; 2016-2025)** [69] identified innovations as one of IFAD engagement principles, but recent frameworks approached the topic with better focus. Indeed, the strategic framework 2011-2015 referred to demand / need driven innovations and highlighted the pivotal role of stakeholders, namely research centres, farmers' organisations as well as private actors for promoting agricultural innovations. The strategic framework 2016-2025 went further in providing some suggestions (presented in Box-1) of how this would occur. **Nevertheless, in all strategic documents, innovations are not considered as a stage within the result hierarchy** (as reflected in the ToC).

Box 1

Emphasis on innovation in IFAD's Strategic Framework 2016-2025

IFAD's agenda on innovation, learning and scaling up aims to support countries to broaden successful models reaching a larger number of people. To effectively do so, IFAD-supported programmes must be structured to:

- Offer opportunities to innovate in a range of ways that respond to the specific challenges faced by programme beneficiaries;
- Build new forms of partnerships with local communities and other development partners that can bring to bear substantial financial resources, new approaches to rural development, and strong technical expertise; and
- Have effective M&E and knowledge management systems in place at programme initiation that allow testing of innovative approaches, measurement of results and impact, and analysis of drivers of success, in order to generate lessons and evidence to shape policies, institutions and practices for expanded impact in terms of rural poverty and hunger reduction.

Source: IFAD's Strategic Framework 2016-2025.

71. **Innovations in RB-COSOPs.** The Innovation Strategy pointed out the need to develop specific guidelines for RB-COSOPs to enable the identification of ideas or thematic areas for innovation for each strategic objective at the country level. The RB-COSOP, introduced in 2006 as an element of IFAD's Action Plan that followed the 2005 IEE, [70] would be the first entry point for identifying potential innovations for country operations, which would then be piloted and disseminated.[71] The review of the RB-COSOP guidelines (2006, 2011, 2016 and 2019) shows that a section

[69] See Table A1, see Annex IV.
[70] Before 2006, they were COSOPs. RB-COSOPs were introduced, following the Paris Declaration of 2005, with the objective to improve the effectiveness and overall performance of IFAD's engagement in countries, putting emphasis on results and performance management.
[71] An important step introduced in the Innovation Strategy entailed identifying potential innovations during RB-COSOP and project processes, piloting to render them functional and embedding rigorous innovation processes into IFAD's core business practices. The Strategy also referred to effective scaling up, as a key measure of successful innovation.

dedicated to innovation description has been consistently prescribed. The main change over the evaluated period, as far as innovation is concerned, relates to the introduction of scaling up (from 2011), and **more and more details (on innovation and scaling up), to include in COSOP documents, although no guidance was provided on how to elaborate these.**[72]

72. **Innovations at project design.** With the Innovation Strategy (2007), innovations became one factor against which the project designs were assessed and therefore, were integrated into the project template and considered by the quality assurance system. The policy on Support and Implementation (2007) and the guidelines on supervision and implementation support (2007) went in the same direction to provide the new operating model of direct supervision, as well as to encourage the emergence of innovative solutions or approaches that take into account national stakeholders and context. The ultimate purpose was to achieve stronger and more sustainable impacts of rural poverty alleviation. The Guideline for Project Design Reports – PDR (2011) prompted the need to address "Innovative features, scaling up, learning and knowledge management" in the PDR in the sections on the project description and implementation arrangements. **Again, no guidance was provided, especially on how to approach the topic holistically and systematically in PDRs.**

IFAD's operational framework for scaling up

73. Scaling up was defined in the 2007 Innovation Strategy as "implementing or enabling the implementation of a practice on a greater scale. IFAD's operational framework for scaling up results developed in 2016 addressed both the innovation and scaling up topics. Innovation being "a core constituent of scaling up", the framework aimed at guiding and stimulating operational approaches rather than being overly prescriptive. Projects are vehicles for innovating, learning and triggering lasting systemic changes. The framework clarified further the scaling up concept in terms of "Expanding, adapting and supporting successful policies, programmes and knowledge, so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way". Thus, the emphasis is placed on scaling up "results" rather than on innovations.[73] The framework identifies **supervisions as an important source of knowledge and innovation, and it encourages South-South exchanges of experience and knowledge sharing as important for innovations and scaling-up.[74]**

C. Dedication of resources to support innovations

74. The Innovation Strategy foresaw financing of innovations through a combination of mechanisms, namely: (i) Programme development financing facility resources;[75] (ii) Grant resources to finance innovation experiments in the field; (iii) Supplementary funds as they become available. The first two points are related to **IFAD financing instruments, which remain the main source for supporting innovations, in addition to partners' co-funding** (multilateral, bilateral, etc.).

75. **Special funding mechanisms** were highlighted by IFAD self-assessment for the CLE, which can support the innovations promotion. They are presented in Box 2. Some of them (e.g. ABC funds, China-IFAD South-South and Triangular Cooperation) are very recent. **Nevertheless, though some of them remain innovative in**

[72] see Table A1 Annex IV.
[73] IFAD-PMD, 2015. IFAD's operational framework for scaling up results, p.1. The definition further stipulated that, "Scaling up results does not mean transforming small IFAD projects into larger projects. Instead, IFAD interventions will focus on how successful local initiatives can sustainably leverage policy changes, additional resources and learning to bring the results to scale.
[74] See more details in Table A1, Annex IV.
[75] The Programme development financing facility was a separate budget from IFAD's administrative budget until 2010, and financed new project / programme development and management of the ongoing project portfolio. It was integrated into the IFAD administrative budget from 2010.

their nature, none was exclusively dedicated to support innovative ideas or solutions, as it was the case with the IMI (2004), which financed 53 projects through competitive bidding for a total of US$ 7.5 million,[76] and the innovation challenge in 2019 (see below).

Box 2

Special funding mechanisms that can support agricultural innovations

a. Adaptation for Smallholder Agriculture Programme (ASAP): multi-donor climate and environmental co-financing of strategies reducing climate related risks. ASAP was launched by IFAD in 2012 to make climate and environmental finance work for smallholder farmers. ASAP provides a new source of co-financing to scale up and integrate climate change adaptation across IFAD's approximately US$1billion per year of new investments.

b. ABC Fund (multi-donor): innovative approach for attracting much needed capital to rural areas in developing countries, with a particular focus on young people; providing loans and equity investments adapted to the needs of rural small and medium enterprises (SMEs), farmers' organisations, agri-entrepreneurs and rural financial institutions. The ABC Fund benefited support from the European Union, the Africa Caribbean Pacific Group of States (ACP), the Government of Luxembourg and the Alliance for a Green Revolution in Africa (AGRA).

c. Financing Facility for Remittances (FFR): Since 2006, IFAD's FFR aims to maximise the impact of remittances on development, and to promote migrants' engagement in their countries of origin. The FFR is successfully increasing the impact of remittances on development by promoting innovative investments and transfer modalities; supporting financially inclusive mechanisms; enhancing competition; empowering migrants and their families through financial education and inclusion; and encouraging migrant investment and entrepreneurship.

d. Indigenous Peoples Assistance Facility. Established at IFAD in 2006, the Indigenous Peoples Assistance Facility (IPAF) aims to strengthen indigenous peoples' communities and their organisations by financing small projects, which foster their self-driven development in the framework of the United Nations Declaration on the Rights of Indigenous Peoples. It is an innovative financial instrument to enable direct partnerships to be built among indigenous peoples' communities, grassroots organisations and NGOs working with indigenous peoples in Africa, Asia and the Pacific, and Latin America and the Caribbean.

e. Other funds / facilities are: The Smallholder and Agri-SME Finance and Investment Network, The China-IFAD SSTC Facility established in February 2018; The Facility for Refugees, Migrants, Forced Displacement and Rural Stability (FARMS); and The Climate and Commodity Hedging to Enable Transformation, etc.

Source: https://www.ifad.org/en/initiatives

76. **PoLG resources to innovations.** Considering loan-supported projects, which also include Debt Sustainability Framework (DSF) grants,[77] the financing of innovations is fully embedded in the project components. It is therefore difficult, even impossible, to apportion loan resources specifically directed to innovations promotion (highlighted by the 2007 Innovation Strategy). Nevertheless, an estimation is possible regarding grant financing. IFAD allocates a maximum of 6.5 per cent of its PoLG to grants, including 1.5 per cent that goes to country specific grants.[78] Based on the CLE finding

[76] The total allocated budget was US$ 12 millions. Seven rounds of competitive bidding were conducted during the period 2005-2008, and a final round in 2011.

[77] Grant funding under the DSF, introduced in 2007, is designed to ensure that development efforts of the poorest countries are not compromised by the re-emergence of unsustainable debt levels. It provides such countries with additional development assistance on terms consistent with achieving and maintaining sustainable levels of debt, thereby supporting debt management at the country level.

[78] According to IFAD's Policy on grants Grant Financing (2015), there are two types of grants - global / regional and national. Global and regional grants are driven by thematic and regional corporate level strategic priorities for partnership, research, policy engagement and capacity building, and innovative responses to rural and agricultural challenges being faced by three or more partner countries. Country-specific grants address the challenge of weak performance by government and other in-country partners by strengthening institutional, implementation and policy capacities, particularly in

(para 61) and in view of the purpose of grants, **the CLE estimates an average of 3-3.5 per cent of the PoLG that supports directly the promotion of innovations through grant programmes.**[79] This proportion is significant considering the size of the Fund and its business model, but the point is how these funding serve adequately and qualitatively the purpose of innovation support. To that effect, the CLE (2014) on grants financing concluded (p.63) "A tendency to fund international agricultural research centres for community mobilisation and routine extension activities that could have been conducted by national agricultural research systems or NGOs and funded through loan based projects".

77. **Dedication of Staff and specific funds.** The IFAD self-assessment for the CLE mentioned dedicated staff that support innovations at corporate level: "two staff positions in the CDI, as well as professional staff in each regional division in PMD and SKD with focus on KM and innovation; the Private Sector Advisory and Implementation Unit (PAI) established in 2019 and US$600,000 allocated for IFAD Innovation Challenge".[80] The latter point, dedication of a specific fund, was the the first time, this had taken place after the IMI (2004), and demonstrates positive signs of commitment to innovation, which should be sustained in view of needs. With regard to the total number of dedicated staff, except for those within the CDI unit that perform coordination work, it is difficult or impossible to have an exact estimation, due to the fact that operational staff (such as Country Programme Manager - CPM, programme officers and technical advisors) also contribute to innovation-related processes.

78. **Change in IFAD business model.** Some major changes were implemented in 2018 and 2019 with great impact on the IFAD business model. They followed the exercise of operational excellence for results[81] and are: (i) the adoption of IFAD's new decentralised model (which increased staff positions in the field from 18 per cent in 2017 to 30 per cent in 2018); (ii) the creation of SSTC and Knowledge Centres on IFAD's map; (iii) the approval of IFAD's Transition Framework in December in 2018; (iv) the adoption of new financing architecture; and (v) the creation of the CDI (previously mentioned). Noteworthy to mention is the IFAD2.0 launched in October 2019 by IFAD's President.[82] This will take some years to yield results.

D. Non-lending activities in support of innovations

79. The 2007 Innovation Strategy referred to KM as a key ingredient of innovation. The integration of innovation and knowledge management in IFAD is required, so that they feed into each other, and thus, the IFAD's Knowledge Management Strategy should complement and link to the Innovation Strategy. The **IFAD's KM Strategy (2007 and 2019)** acknowledged the importance and contribution of KM to support the promotion of innovations, in line with IFAD's effectiveness.[83] However, if linkages between KM and innovations are well established, approaches for promoting

fragile contexts; and innovating in thematic areas, or by using approaches and methodologies that can subsequently be scaled up through IFAD's country programme.

[79] According the CLE (2014) on Grant Financing, other IFIs allocates 1-1.5% of their PoLG to grants. IFAD Annual Report (2018) gives an average of US$3 billion to PoLG for IFAD-10 (2016-2018), entailing US$90 million for the three years or on average, US$ 30 million annually. The CLE could not get clear figures of other IFIs budget allocation to R&D for comparison.

[80] At the implementation, out of fifty proposals, ten were selected (two of which were merged into a single one) and awarded a total of 709'000 USD.

[81] See Document EB 2019/126/R.40.

[82] IFAD 2.0 is a comprehensive approach that will allow IFAD to better support countries in meeting their most pressing food insecurity, rural poverty, climate change and fragility challenges. It builds upon IFAD's evolution towards a country-level programmatic model that supports ongoing efforts to end rural poverty and hunger by 2030 by offering tailored support to countries depending on (i) their stage of development; (ii) the difficulties they face in achieving food security and rural poverty reduction (climate change, fragility, inclusion of marginalized groups, etc.); and (iii) their capacity to obtain resources. Under IFAD 2.0, IFAD's PoLG and the core replenishment resources that fund it will remain the primary means of IFAD engagement with countries, but they will be complemented by additional actions to expand IFAD's overall programme of work and its impacts. IFAD 2.0: The Way Forward. Discussion paper, October 2019.

[83] see Table A1, Annex IV.

innovations from a KM perspective, especially in the context of smallholder agriculture, are insufficiently analysed, and few orientations are provided in the 2019 document.[84] **Unfortunately, the KM Action plan 2016-2018, included no action specifically related to support the innovation culture within IFAD.** Only the action plan of the 2019 KM strategy includes actions, but they are very few.[85] IFAD's Approach to South-South and Triangular Cooperation (2016) also addresses the need for KM of innovations. It refers to the importance of creating incentives for staff to share knowledge, and also to establishing Communities of Practice (CoPs) as a means of bringing together many stakeholders with shared interests to share experiences. While some tools described below could be considered CoPs (for instance, the Rural Solutions portal), in general the CoPs are not yet seen to be very active. This appears to be recognised by IFAD, as they feature more prominently in the 2019 KM strategy.

80. Several non-financial initiatives are available within IFAD, sometimes innovative themselves, especially when newly developed to address specific challenges. These initiatives (presented in Table 6) were highlighted during the self-assessment by management, reflecting the diversity of knowledge sharing and information dissemination tools, partnerships and policy engagement mechanisms within IFAD. **KM tools** (and particularly those online) are intended to improving the visibility and sharing of experiences on innovations at international level through web portals (e.g. the Rural Solutions Portal, or the Platform for Agricultural Risk Management); and gathering monitoring information and data as well as enabling results measurements (e.g. ORMS, Advancing Knowledge for Agricultural Impact - AVANTI).[86] The online platform 'We connect farmers' was launched after the last Farmer Organisations' Forum in IFAD, in order to operate as a CoP to bring together decision makers, IFAD staff, with farmers and farmer organizations. Nonetheless, in addition to the fact that most are not specifically dedicated to innovations support (exception of the Rural Solutions portal), **KM initiatives are numerous (including several platforms) and this plethora is a source of confusion. It does not facilitate easy and systematic access to information on innovations**.[87] Important to mention that IFAD approved in December 2019 a **Strategy on Information and Communication Technologies for Development (ICT4D)**, which Action Area-3 aims at enhancing ICT4D in terms of KM and sharing, and this may lead to more KM innovations in the future.

Table 6

Non-financial initiatives in line with IFAD's support to innovations

Initiative and non-lending instrument	*Features*
Knowledge management	
ORMS	ICT common platform and tools to monitor project progress, results and impact, and feeds lessons;
Rural Solutions portal	Information sharing in a web-based platform; relevant to support information sharing on innovations

[84] In the progress report on the implementation of the IFAD KM strategy and innovation agenda published in May 2011 (EB 2011/102/INF.8), IFAD management acknowledged that, "more work and investment should be channelled into making IFAD's organizational culture more conducive to innovation" (p.7). Actions foreseen to that extent were: establishing a training programme offering courses on innovation management, coaching, and creative problem solving. No report was found that presents the status of implementation of these actions.

[85] Action 1.2.2. "Systematically generate, distil and disseminate knowledge and innovations emerging from grant portfolio and relevant supplementary-funded initiatives" and 3.1.3. "Pilot a competitive fund to promote innovation in IFAD operations and organizational culture". IFAD Knowledge Management Action Plan, 2019-2021.

[86] The IFAD's ORMS supports reporting on projects' outputs and outcomes and is essential to streamline project cycle processes and enhance data analytics. Nevertheless, its relevance to capture specific data on innovations could not be confirmed by the CLE, as work is still in progress.

[87] IFAD self-assessment mentioned "the lack of systematic inventory of innovations".

Initiative and non-lending instrument	*Features*
GeoNode	IFAD geospatial database for earth and geographic information system
Platform for Agricultural Risk Management	Knowledge broker on risk management and capacity development;
Advancing Knowledge for Agricultural Impact (AVANTI)	Initiative that started in early 2018 for a three-year period and proposes the adaptation of an existing tool (CAP-Scan) to the specificities of the rural sector (Ag-Scan) to assess in-country M&E systems and capacities in up to 20 countries across all regions. [88]
We Connect Farmers	A platform to connect farmers and others to each other, and offering ICT applications, training and markets
Partnership	
SSTC	Innovative initiative fostering information exchange among countries on ready to use knowledge, also with a ICT platform;
China-IFAD South-South and Triangular Cooperation Facility	First facility in IFAD dedicated to SSTC; Has financed several innovative projects such as "Promoting Water Conservation and Irrigation Water Use Efficiency in Ethiopia by sharing with Kenya"
Support to Farmers' Organizations in Africa Programme	Initiated by the four regional networks of FOs in sub-Saharan Africa (Eastern Africa Farmers Federation, PROPAC (Plateforme sous-régionale des organisations paysannes d'Afrique centrale), ROPPA (Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest) and SACAU (Southern African Confederation of Agricultural Unions) for the institutional development of their organisations at all levels.
Smallholder and Agri-SME Finance and Investment Network	Concerted, multi-stakeholder network to build financial ecosystems that are effective, sustainable, and inclusive of agri entrepreneurs
Policy engagement	
Sharing experiences on innovative participatory policy approaches to poverty reduction (2015)	Each of the approaches is locally innovative and can be improved by experience sharing

Source: Self-assessment by management.

81. **Partnerships.** The focus on partnerships and on innovation network would help identify local innovators, facilitate the dissemination and "marketing" of these, as well as training of service providers and governments to do the same (Innovation Strategy, 2007). **IFAD has a Strategy on partnership approved in 2012, but it lacks a linkage to innovation.** [89] Partners of IFAD's innovation agenda, as identified by the CLE through the review of grants, encompass: academic institutions, research organisations (especially CGIAR centres), multi-lateral organisations (e.g. of the UN system), inter-governmental organisations, government related institutions, private sector, international and national NGOs, and farmers / producers organisations. Partnerships that support innovation systems occur at global, regional and national levels. One approach to this is the SSTC. **The guideline on SSTC Approach (2016)** introduced new elements to support better mainstreaming of SSTC into country programming, using grant supports for the documentation and sharing of experiences on innovations promoted by IFAD.[90] IFAD also has a **Private Sector Engagement Strategy (2019-2024),** which recognised the importance of partnering with the private sector in terms of expertise, knowledge and financing for innovations and scaling up. Finally, the **2019 ICT4D Strategy** (mentioned above)

[88] The Ag-Scan diagnostics will allow government counterparts to implement targeted improvements to their M&E systems allowing them to better manage for results in the rural sector. The uniqueness of the Ag-Scan initiative is its specificity to the rural sector and for agricultural development providing high potential of scaling-up opportunities. For more information please visit: http://www.avantiagriculture.org/

[89] The ES (2017) on IFAD's partnership concluded that "Partnerships are at the core of IFAD corporate priorities: scaling up, knowledge generation and learning, and policy engagement and influence". p.56.

[90] Several IFAD-supported initiatives have been related to SSTC and were noted by concerned stakeholders. According to the 2016 ES on SSTC, these initiatives revealed the strengths of IFAD in supporting peer learning among rural champions and their allies, and contributed to generating good practices and successes in a number of cases.

also aims at strengthening partnerships through its Action Area-2, to generate innovative ICT solutions for enhanced rural development outreach and impacts.

82. **Policy engagement.** Policy engagement is needed to create an enabling environment for wider replication and scaling up of innovations (Innovation Strategy, 2007). It can happen at global, regional and country levels. A Plan for Country-level Policy Dialogue was elaborated and approved in 2013; but, it lacks to establish a bridge to the innovation support. A guidebook on country-level policy engagement was published in 2017, establishes linkages and gives examples of policy related innovations in countries.[91] **Nevertheless, there is insufficient focus on improving national frameworks for greater support at all stages to IFAD supported innovations processes** (testing/scouting, piloting, up-taking and up-scaling).[92]

E. Stakeholders' opinions on IFAD's innovation business model

83. The e-survey enabled to collect opinions of stakeholders (IFAD staff, in-countries project staff and grant recipients partners) on IFAD business processes supporting innovations. Related results clearly pointed out in line with the innovation support: (i) the importance of IFAD's strategic framework and project design and implementation processes; and (ii) the lack of specific guidelines and incentives for staff. They are presented below.

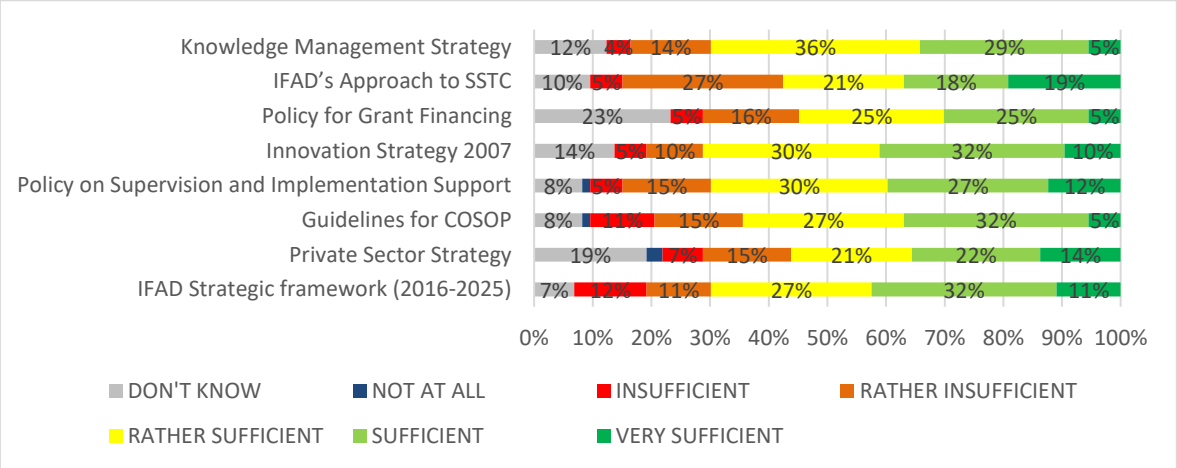
    a. Appropriateness of corporate strategies and documents to support innovation processes (Figure 9). The Innovation Strategy (2007), the Strategic Framework (2016-2025), the Policy on implementation support and the KM Strategy (2007 and 2019) were most mentioned as appropriate, while the SSTC approach, the Private Sector Strategy and the Policy for Grant Financing were less quoted as appropriate. The latter document was highlighted by 23 per cent of respondents as unknown by them. This is surprising as it has been used in IFAD for some time (approvals in 2003, 2009 and 2015) and, as discussed above, grant financing has been one of the main sources, which supported the promotion of innovations in IFAD, after the IMI (2004) and the innovation challenge (2019).

[91] One was also identified by the CLE: the Policy Lab innovation in Indonesia. Under the Integrated Participatory Development and Management of Irrigation Project in Indonesia, a policy-focused knowledge management centre will be established under the Ministry of Planning. A key dimension of its role will be to convene relevant ministries involved in the irrigated agriculture sector, strengthen operational collaboration between them, and promote policy dialogue among them at the national and local level for an improved and more consistent policy and regulatory environment for smallholder irrigated agriculture.

[92] The focus of IFAD's policy engagement has not been on innovation per se. However, it includes to promote the uptake / upscale by governments of (innovative) approaches tested and proven through IFAD-supported projects. However, in view of the CLE ToC, policy engagement should also cover the critical innovation stages of testing/scouting and piloting. The point is governments to provide appropriate financial and other measures; and remove regulatory, institutional obstacles to innovation promotion. See World Bank (2010), Innovation Policy - A Guide for Developing Countries. Washington, DC.

Figure 9

Appropriateness of IFAD's strategies and corporate documents aligned with innovation support

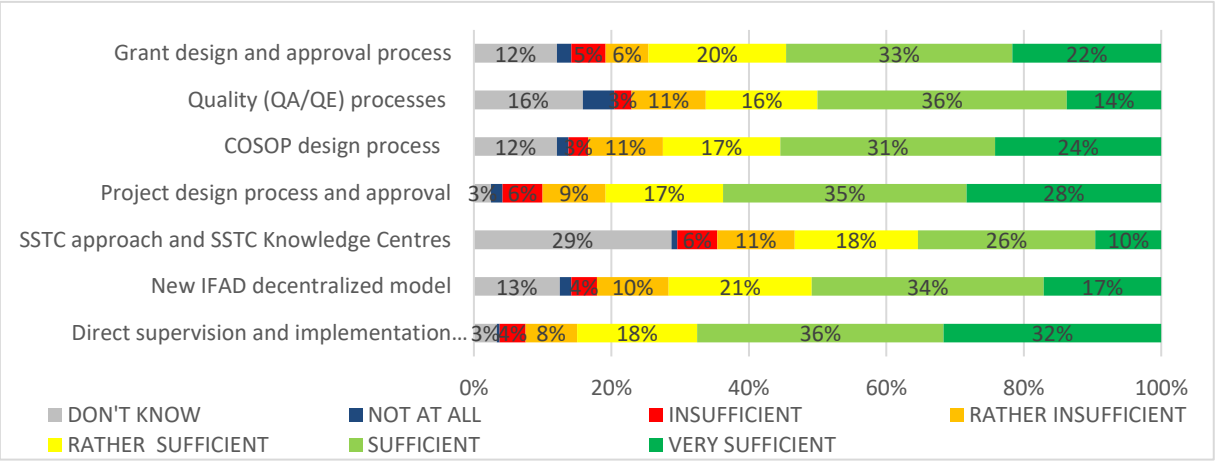


Source: CLE e-survey results (N=73, IFAD staff respondents).

b. Usefulness of IFAD processes to support the promotion of innovations (Figure 10). The direct implementation and supervision support, the process for projects design and approval, as well as grant design and approval processes are most mentioned for as being useful in supporting the promotion of innovations. The quality processes were less quoted, because this is an internal IFAD process; the COSOP design process is slightly better rated, maybe because it happens at a strategic level, and thus, does not involve too many field project staff. The last two are (i) the decentralised model implemented in 2018, which is still very recent and (ii) the SSTC approach and Knowledge centres.

Figure 10

Usefulness of IFAD business processes in terms of supporting innovation promotion



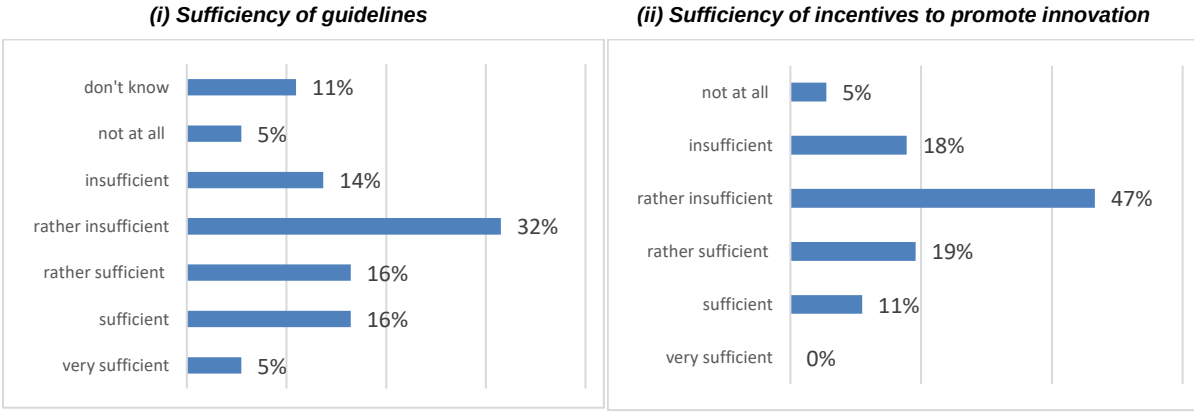
Source: CLE e-survey results (N=240, respondents: project staff and grant recipient partners).

c. Availability of guidelines to support innovation processes (Figure 11-i). Responses clearly reflect a negative opinion on this aspect. **Guidelines to help staff for incorporating and promoting innovations in operations were highlighted insufficient, though IFAD has numerous corporate documents.** Thus, as highlighted in the previous review, the point is rather the lack of guidance specifically related to innovation promotion approaches. The development of guidelines that give a greater attention to systematic approaches and processes, may be seen as a limiting factor to the propensity to innovate. Nevertheless, this assumption is not always the reality, especially in IFAD operating context that entails a diversity of stakeholders and challenges, as well as the scarcity of

resources. Nevertheless, trade-offs should be applied to avoid preventing or discouraging generation of organic ideas.[93]

Figure 11

Opinions on the sufficiency of guidelines and culture in relation to innovation promotion



Source: CLE e-survey results (N=73, IFAD staff respondents).

d. Availability of incentives (Figure 11-ii). In terms of incentives, the negative opinion of staff is even harsher: 70 per cent mentioned insufficient or rather insufficient availability. Indeed, **discussions with IFAD staff during field visits brought out the fact that at times, tensions arose between achieving loan-supported project results and the identification of very genuine innovations, as the latter can be risky and hamper the project effectiveness.** They clearly stated (during field interviews) that, the judgement of their performance is based on projects' results and financial achievements, not on their innovativeness, in terms of genuine innovations introduced. The latter entail taking failure risks, which may jeopardize projects' results and impacts. So, there is less incentive to dedicate time to work on this (further discussed in the effectiveness section).

F. Benchmarking against other organisations' models

84. The CLE reviewed indicators pertaining to the support of innovations, as applicable with other major partners – the World Bank, Asian Development Bank (ADB), and African Development Bank (AfDB), and Inter-American Development Bank (IDB) for IFIs; FAO, and the World Food Programme (WFP) as the Rome-based agencies (RBAs) – for benchmarking purpose. Those indicators are: the application of an explicit organisational innovation definition, the existence of an Innovation Strategy, the acknowledgement of innovation as essential in strategic documents, the availability of specific guidelines, of a dedicated website, of financial resources and a dedicated unit with staff position, and the conduct between 2009 and 2019 of a corporate or thematic evaluation linked to the topic. Table 7 presents the summary, based on detailed information in Annex-VIII.

[93] The UN Innovation toolkit "Scan the Horizon" that helps to address this aspect: https://un-innovation.tools/tools.

Table 7

Indicators for innovations benchmarking with other organisations

Indicators	*Word Bank*	*ADB*	*AfDB*	*IDB*	*FAO*	*WFP*	*IFAD*
Explicit, but specific definition	Y	N	N	Y	Y	Y	Y
Specific innovation Strategy	N	N	N	N	N	N	Y
Inclusion in strategic documents	Y	Y	Y	Y	Y	Y	Y
Specific guidelines available	Y	N	N	Y	Y	N	N
Dedicated website	Y	Y	Y	Y	Y	Y	Y
Dedicated specific funds	Y	Y	Y	Y	Y	Y	Y
Other supporting tool	Y	Y	Y	Y	N	N	Y
Specific unit / team	Y	N	N	Y	Y	Y	Y
Corporate or thematic evaluation conducted	Y	N	N	N	N	N	Y

Source: CLE (See details in Annex VIII) Y=yes, N=no.

85. Table 7 clearly shows that **IFAD's corporate model in supporting innovations ranks at the top with the World Bank**[94] among the benchmarking comparators. None of the organisations has a specific innovation strategy, as seen with IFAD. Compared to the World Bank,[95] IFAD has not developed any specific guideline to support its innovation agenda; and to that extent, FAO has published numerous publications on agricultural innovations and systems,[96] accessible via its dedicated website. In approaching the innovation topic in their strategic document, IFIs' objectives are more related to entrepreneurship development, market access to enhance economic growth for poverty reduction, while RBAs address agricultural innovations in line with the 2030 Agenda, especially SDGs 1 and 2 targets. All reviewed organisations have identified a dedicated fund to support innovations promotion; among RBAs, these evolved or increased mainly after 2015.

86. It is noteworthy to mention the UN Innovation Network, which is an informal collaborative community of UN innovators interested in sharing their expertise and experience with others to promote and advance innovation within the UN System.[97] It spans funds and programmes promoting an approach characterised by three pillars: building an architecture to promote innovation; activating partnerships and building an innovation ecosystem; and creating a culture of innovation. IFAD is a member of this network, which developed several toolkits for the community of practitioners, to help accelerate innovation impacts. It uses the SPACE - Strategy – Partnership – Architecture – Culture – and Evaluation – framework, which represents

[94] Though IFAD and the World Bank have the same number of yes, the difference relates to the scope and volume of funding.
[95] For instance, the World Bank (2010) published the Innovation Policy: A Guide for Developing Countries. World Bank. The document suggests pragmatic approaches to innovation, offering a comprehensive view of innovation policy, in which the government, acting as a gardener, supports the innovators by providing appropriate financial and other measures ("watering the plant"); by removing regulatory, institutional, or competitive obstacles to innovation ("removing the weeds and pests"); and by strengthening the knowledge base through investment in education and research ("fertilizing the soil"). It addresses: (i) the rationales and the main principles of innovation policy;(ii) the basic functions that governments should fulfill to create a climate favorable to innovation: support to innovators, removal of obstacles, strengthening of research and development structures, and adaptation of education and training and elements for evaluating innovation systems and policies; (iii) a strategic framework with pragmatic agendas and stepwise approaches adapted to the context of low- and medium-income countries.
[96] One interesting guideline document is FAO (2015). Enabling the capacity to innovate with a system-wide assessment process. Occasional papers on Innovation in Family Farming, Rome, FAO. The document identifies key areas that influence innovation processes, including stakeholders and their interactions, equality, and policies and trends that can influence the ability to innovate. It also suggests methods and tools that can be used to analyse these areas and tie them all together in an actionable picture.
[97] The UN Innovation Network is open to innovators from all UN Agencies as well as external partners and to date, representatives from 65+ entities in over 100 countries have joined the Network. Go to www.uninnovation.network.

five key areas through which UN organisations can take action to accelerate and scale innovation.[98]

Conclusion on IFAD's strategies, corporate processes and instruments

87. In summary, **the Innovation Strategy (2007) was useful at that time**, as it suggested paths for promoting innovations, strengthening innovation capabilities and incorporating innovations and innovative approaches in IFAD's operations. It has set out the conceptual framework of innovation and scaling up. **However, no specific strategic objective was defined for the innovation agenda, and no operational plan developed after, as well as specific budget allocated until 2019, when the innovation challenge was launched**. Neither, no action was taken to develop appropriate guidelines, including to have an agreed operational definition,[99] which would help staff to adequately support innovations processes in IFAD's operations.

88. Besides this, the strategy has not been updated or revised in order to include evolving methodologies, especially in applying a system approach to innovations.[100] Indeed, the CLE (2010) concluded that "the relevance of the innovation strategy has been moderately satisfactory, and that it did not have a significant impact in steering the Fund towards becoming a more agile organisation in promoting innovations" (p.62). Numerous corporate documents developed after the 2007 Innovation Strategy referred to innovation, but superficially, although this slightly changed since 2016, after the approval of the 2030 agenda.

89. Finally, the **IFAD model of supporting innovations is well positioned among IFIs and RBAs, based on benchmark indicators developed by the CLE**. Changes in the IFAD business model implemented in 2018 and 2019 also provided strong positive signs of an intention to break with 'business as usual', and incorporate innovative approaches. **However, in the absence of specific operational framework and action plan,** [101] **as well as a better dedication of specific resources and incentives, IFAD's innovation agenda may hardly lead to sustainable and resilient transformation in rural areas.**

[98] See more details in Table A9, Annex IV.
[99] The CLE team heard various interpretations or understanding of the Innovation Strategy definitions.
[100] For instance, the Tropical Agriculture Platform (TAP) launched in 2012, has embraced the Agricultural Innovation Systems (AIS) perspective, which recognizes that agricultural innovation is a process involving many different actors and factors and that it can only take off if it meets the demands of its principal users. See http://www.fao.org/in-action/tropical-agriculture-platform/background/en/. Concepts and principles of the TAP Common Framework have been tested as part of CDAIS project, implemented by FAO and Agrinatura with financing of the European Union for the period 2015-mid 2019.
[101] By comparing to the KM topic, the situation is quite different. A Strategy was also approved in 2007, which identified clearly four strategic components: strengthening knowledge-sharing and learning processes; equipping IFAD with a more supportive knowledge-sharing and learning infrastructure; fostering partnerships for broader knowledge-sharing and learning; and promoting a supportive knowledge-sharing and learning culture. After this, there has been: the KM framework (2014-2018), the KM action plan (2016-2018) and the revised KM Strategy in 2019, which includes the action plan (2019-2021).

Key points

- IFAD Innovation Strategy in 2007, as the first corporate document that identified organisational elements that required specific attention, paved the way to build IFAD's innovative capabilities and its ability to identify and implement innovative solutions to address rural development challenges. Pathways suggested to approach the topic through: (i) the organisation strategic framework, (ii) the RB-COSOPs and (iii) the lending and non-lending activities.
- Since 2007, IFAD's strategic and policy documents, as well as operational guidelines, mentioned the innovation topic. However, it has been better addressed in most recent documents, especially after 2015. In fact, after the 2007 Innovation Strategy, IFAD's operational framework for scaling up results (2016) was the next document that explicitly addressed the innovation topic, together with scaling up. Overall, the failure to develop an action plan for the 2007 Innovation Strategy, weakened its follow-up.
- In relation to IFAD's PoLG, all loan investment projects have to include innovations to a certain extent, while grant-financed projects may have innovation objectives. Analyses revealed that innovations promoted through IFAD's support are mostly related to the socioeconomic pillar of the agri-food system, followed by the governing pillar. It appears that loan investment projects support in majority the innovations at the stage of dissemination, while grant financed projects support innovations at the stage of development / piloting.
- Finally, the review of other organisations (IFIs and RBAs) revealed that IFAD compares favourably in supporting innovations

XII. Performance of IFAD's support to innovations

90. Following the ToC, IFAD operations should generate innovations that contribute achieving short and medium terms outcomes, and in turn to impacts. For that, relevant and effective innovations and related processes are critical. This chapter assesses the relevance, effectiveness and contribution to impacts of innovations promoted through IFAD supported operations in recipient countries. As discussed in the methodology sections, the assessment was based on data collected through in-depth country visits and desk reviews, and analysed in accordance to the CLE definition of innovations, and by applying the CLE analytical grid (macro and specific domains). Case study innovations were therefore rated by the CLE team for different aspects: relevance to stakeholders and to the context, success in achieving intended objectives, and contribution to short and medium term outcomes.[102]

A. IFAD's supported innovation processes in motion

91. The relevance assesses the extent to which the interventions are aligned with strategic objectives and stakeholders' needs, while the effectiveness ascertains the extent to which objectives and expected results have been achieved. In line with the ToC, innovation processes within IFAD follows the programming cycle, starts at planning stage, proceeds during the implementation of operations, and leads to results (short and medium term outcomes) at completion. Considering this, it is difficult to clearly delineate the relevance and effectiveness of the innovation process, as supported by IFAD. Thus, the sections below include: (i) the review of innovations supported by IFAD (according to the CLE analytical grid); (ii) the innovation processes at planning and during implementation; and (iii) the extent to which loans and grants are complementary to support innovation processes.

Diversity of IFAD-supported innovations and their importance

92. **The CLE identified a diversity of innovations** promoted through IFAD supported operations. A total of 219 innovations were identified over the 20 case studies countries, most of them being small, free-standing and proven good practices. They were not genuinely innovative, but practices or solutions transferred from elsewhere and locally pilot-tested or adapted to solve problems in different contexts, in order to ensure greater effectiveness of loan supported projects.[103] Most of the innovations address two or more specific domains, however, one has been retained for the analyses, aligned with the main or initial purpose that justified the introduction or implementation of the innovation (Table 8).

[102] Rating was mentioned in the methodology section earlier.

[103] Already a conclusion made by the CLE, 2010. There is a great preference for "safer innovation" rather than "risky innovations", to minimise risks both for the borrowing countries and for IFAD as a financial institution. It appears a tension between innovativeness and achieving results (as mentioned in para 83d).

Table 8
Distribution of case studies Innovations according to macro and specific domains

Macro domains	*Specific domains*	*All projects **(%)***
Agricultural Production and Value Chain (APVC) (31%)	Production	13.2%
	Processing	3.2%
	Marketing	12.8%
	Consumption	1.4%
Socio Economic Pillar (SEP) (26%)	Human capital	6.4%
	Social capital	9.1%
	Economic capital	10.0%
Natural Pillar (NP) (6%)	NRM	4.1%
	ECC	2.3%
Governance Pillar (GP) (37%)	Policies	0.9%
	PIPA	35.2%
	Regulations	1.4%

Source: CLE (case study innovations N=219).
The total per domain is 100 per cent, because one specific domain is assigned to each innovation.

93. Considering the macro domains, the innovations within GP are more numerous, followed by APVC, SEP and NP at the end. Thus, the order identified using the project database (PoLG analysis in the previous chapter) is partially confirmed for innovations related to NP (the lowest per cent) and GP (among the highest per cent). When considering the specific domains, the top six categories are: PIPA, production, marketing, economic capital, social capital and human capital (same order found with the PoLG analysis). This distribution reflects **the relevance of APVC and SEP related innovations to IFAD, as they address challenges of agri-food system components, linked to the SDG1 and SDG2.** PIPA-related innovations, which are enabling factors that affect APVC and SEP, appear also to be very important.[104]

94. **Farmer-driven innovation**. Farmer-driven initiatives and innovations were observed only in limited cases. One example is presented in Box 3. There may be other local innovations taken over and embedded in project innovations: in natural resource management for example, innovative practices may derive from local stakeholders' best practices (farmers, fishers or livestock keepers) but this is not documented. Comprehensive approaches to include producers and their organisations in the decision processes concerning innovation at different project stages are also rare.[105]

Box 3
A farmer driven innovation in Senegal

In Senegal, the productivity of the millet crop in the Sahel region has been decreasing due to climate uncertainties; sowing of dry millet seeds often results in the dispersion of seeds by the wind if the rain comes late. Considering these constraints, young farmers decided to test the method of sowing wet millet, while the ancestral practice was to sow dry millet, before the first rains.

The trial was successful and allowed producers to save time and to focus on other crops such as groundnuts that require intensive work at planting, after the first rains. The innovation is still at a piloting stage.

Source: CLE.

[104] As found with the PoLG analysis, the number of NP related innovations has been increasing in recent years.
[105] There were too few projects in fragile contexts in the CLE database and only one country case study to infer general remarks on innovations in fragile situations. In post conflict situations, it can be expected that the innovation system stakeholders and their linkages are not anymore effective and that innovations identified prior the beginning of the conflict are still only partially relevant. This affects particularly projects planned before the conflict and executed after return to more peaceful conditions. Opportunities and eroded capacities of the beneficiaries should be checked again, but delayed projects are under pressure for prompt implementation.

IFAD supported innovation processes

95. **Identification of innovations in COSOPs.** The innovation identification starts with COSOPs, where specific domains are anticipated, in view of challenges identified to be tackled by the IFAD country programme. COSOPs of case studies countries have been reviewed and a cross analysis of main challenges was conducted, compared to innovations implemented by subsequent projects.[106] It appears that, innovations supported by subsequent projects can be traced back in COSOPs. For instance, the Bangladesh COSOP (2011) highlighted specific areas for innovations – like flood-resilience (e.g. concrete roads and reinforced houses to withstand storms), renewable energy (biogas and solar energy), new marketing channels and institutional arrangements (such as market management committees, usage of ICT), and economic empowerment of women – that have been incorporated in successive projects.

96. However, there are issues. **One issue is the generic formulation of innovation domains,** due to unsystematic analyses of (i) rural development challenges, and (ii) innovation needs. An example that illustrates this situation is the Ethiopia COSOP (2016). It states "IFAD will support innovation through specific technical assistance missions and ongoing implementation support, as well as through knowledge exchange within the context of South-South and Triangular Cooperation" (p.10). This statement does not provide any clarity of domains or areas of innovations. An opposite example is provided by Rwanda COSOP (2007), in which identified innovation domains were very specific, because key agricultural constraints or challenges were explicitly identified and summarised.[107]

97. Another issue pertains to the variability (weak to moderate) of the rationale that underpins the identification of innovation domains in COSOPs, in terms of linkage between anticipated innovations and expected outcomes; **linkage between the project (or local) innovation process and the national innovation system; and how to involve key actors, taking into account their capabilities.** All these points relate to the absence of a system approach to agricultural innovations. Types of innovations are therefore identified according to activities foreseen, rather than as a response to the system key needs or challenges, and do not rely on the identification of leverage points for systemic change.[108.]

98. Overall COSOPs are important for the identification of innovation domains to be supported by IFAD country programmes. However **the lack of a framework for analysing the IFAD-supported innovation system, its constraints, enabling factors and outputs, has weakened the relevance of innovation processes at this stage.**

99. **Identification of innovations at projects' design stage.** The second stage for the identification of innovations is the design stage. With loan-supported projects, the identification process at design leads to better alignment with domains of needs for innovations. As discussed in chapter II, the CLE reviewed 540 PDRs, the description of innovation domains was clear in almost all (or 94 per cent of cases) and this allowed performing the trend analyses presented earlier. The same applies for grant-supported projects, as the CLE reviewed 240 design documents of large grants, enabling the identification of innovation domains in 62 per cent of cases. The main point is how the innovation identification process occurs at the design stage. In

[106] Some COSOP documents of case studies countries were reviewed, in order to capture main challenges described, as well as anticipated categories of innovations to be supported through IFAD programme, as per system sub-components (or specific domain) of focus.
[107] Key agricultural constraints or challenges were explicitly summarised in the Rwanda COSOP as: declining agricultural productivity, land tenure security, poor water management and irrigation, poor support services and poor access to markets. Therefore, opportunities for innovations were identified in areas such as: novel agricultural and environmental practices (e.g. conservation farming, watershed management, crop-livestock integration to increase soil fertility), new forms of water retention for supplementary hillside irrigation, mechanisms for developing market linkages and to improve farmers' access to financial and extension services.
[108] Refer to Meadows DH (2008) Thinking in Systems: A Primer. Chelsea green publishing.

the case of loan-supported projects, innovations already developed and pilot-tested, or implemented in other contexts or countries, are suggested for application or adaptation during the project implementation process. In these cases, the novelty is not genuine in general, and in few cases, grant-supported projects were useful to fill this gap. Experts (national and international, including the IFAD team) tasked for preparing the design reports, following series of consultations and interactions, play a pivotal role at this stage. **Therefore, the innovation process at this level is moderately relevant; again, the issue is the non-application of an analytical framework.**

100. **Identification of innovations during implementation.** The third stage to identify innovations is during the project implementation. In the 12 countries visited by the CLE team, beyond innovations identified in the design documents and applied (as observed during visits), some additional innovations were implemented that had not been planned. In fact, analyses revealed that in 30 per cent of innovation cases, their specific domains were identified during implementation, not at the design stage. This reflects the challenging context of IFAD-supported projects. Even if the project design is supported by solid background analyses, implementation and supervision teams have to take actions to identify innovative solutions to tackle issues that emerge while projects are ongoing. Local teams and experts performing supervision and review missions are the key actors at this stage. **IFAD's approach to implementing projects is conducive to the identification of adaptive innovations in evolving contexts,** and this was confirmed by the majority of national stakeholders interviewed. However, this adaptive approach to innovations is not well reported and documented, nor evaluated.[109]

101. Most respondents interviewed (during the field visits) considered that **innovation ideas in loan-supported projects come mainly from IFAD staff, consultants or project staff, followed by farmers' organisations**.[110] However, these innovations may originate from research organisations or NGOs or other sources.[111] In some countries, there has been a deliberate attempt to support in-country stakeholders to identify innovations. For instance in the Philippines, IFAD supported the Agriculture and Rural Development Knowledge and Policy Platform, where farmers, NGOs, government staff and others come together to present innovations, identify problems and look for solutions. Potentially, this could be a good method to facilitate the identification of adaptive innovations. The e-survey results show that, respondents (62 per cent), project staff and partners, consider the effective linkages with communities and grassroots as one comparative advantage for IFAD. In the same survey, grant recipient partners indicated the importance of their organisations in supplying innovations.[112]

102. **Innovation processes at completion.** All loan investment projects undergo a final review process at completion.[113] Innovation and scaling up are among criteria assessed in PCRs. With regard to innovation, the PCR guidelines suggest to assess

[109] The management self assessment highlighted that innovation is taken explicitly into account at design, but not analysed during supervision missions, which indeed help introduce new ideas and instruments. And at completion, there is no systematic tracking and analysis of the innovation products and processes. To the e-survey question to know where innovation ideas come from in loan investment projects, the three top answers were: IFAD consultants and staff, national project staff and farmers or beneficiary groups (283 respondents).
[110] Confirmed by the e-survey results: to the question to know, where do innovation ideas most frequently come from, IFAD and government respondents (283#) indicated at the top, IFAD consultants and projects staff, followed by farmers' organisations.
[111] The CLE team was unable to trace the origin of the majority of case study innovations, because it was impossible to interact with stakeholders that were involved at the time of their introduction.
[112] Stakeholders interviewed during case study missions found IFAD's comparative advantage to be its strong linkages with grassroots and rural communities and its adaptive approach to address smallholder agriculture challenges. IFAD brings along. Country teams develop skills in identifying solutions, at a very local level, to tackle complex issues in complex environments for particularly vulnerable groups, and to involve communities in the implementation (but probably not at design).
[113] Unfortunately, this is not applied for grant supported projects, either small or large.

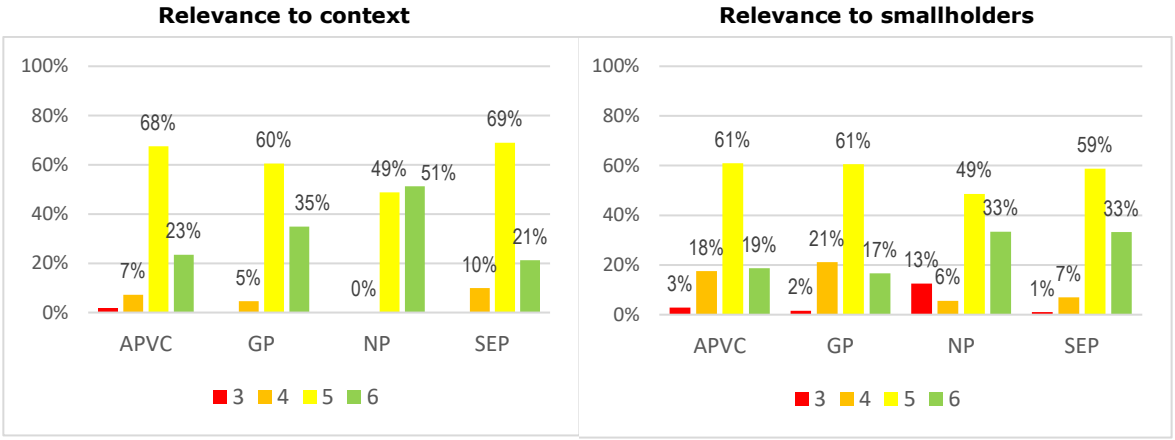
the extent to which IFAD has built innovation into the project design, how well innovative elements (e.g. strategy, approaches, technical solutions, and managerial aspects) were implemented, and what has been the outcomes. PCRs have been one of information sources during in-depth reviews by the CLE team. The main issue found is that, **information on innovations (confounded sometimes with good practices) in PCRs are mainly descriptive, instead of being analytical of processes that generate them**, enabling factors, the key players, their role and interactions among them, as well as the links between promoted innovations (or innovative solutions) and projects' results (outcomes and impacts). [114] In fact, M&E systems do not capture specific data on innovations (see below, non lending subsections). Moreover, studies carried out at completion stage, to document results achieved, do not include the assessment of innovation processes and their contribution to the projects' performance, qualitatively or quantitatively.

Innovations in loans and grants

103. **Loan supported innovations.** Innovations have been rated by the CLE team for their relevance to local context and smallholders' needs.[115] Figure 12 shows **that most innovations depicted in country case studies are relevant or very relevant to their context and smallholders**. Innovations in NP are the most relevant with regard to the context, followed by GP related ones. With regard to the smallholders, innovations in SEP are at the top place, followed by NP. Many innovations are very relevant to both context and smallholders. An interesting example is the Multi-stakeholder Platform (APVC) in Nepal, presented in Box 4.[116]

Figure 12

Relevance of case study innovations according to the local context and smallholders



Source: CLE (N=219 innovations identified by the CLE team).

[114] The management self assessment highlighted that, at completion, there is no systematic tracking and analysis of the innovation products and processes.
[115] Context refers to the local context where the project is implemented. It includes, in general terms, the socio-cultural, technological, environmental and economic contexts or smallholder farmers as described in the project documents and reports. Stakeholders refers to smallholder farmers that can be individuals or groups (including women, youths and marginalised groups) that were targeted by the projects.
[116] Other examples are: the Beel User Groups (NP in Bangladesh further described in the NRM section), participatory planning and M&E (GP in Burkina Faso), the small scale irrigation schemes (APVC in Malawi), and revitalising indigenous leadership (SEP in the Philippines), Youth contractor strategy in inland valley swamps (GP in Sierra Leone).

Box 4

The multi stakeholder platform in Nepal

The multi stakeholder platform was conceived to drive value chain development by firmly placing market as the starting point with a series of interactions. These interactions were designed for selecting, prioritising and shortlisting possible interventions addressing critical bottlenecks in the respective value chain (VC). They also identified business opportunities among VC stakeholders, developed both formal and informal buy-back arrangements between producers (sellers) and agribusinesses/traders (buyers), and also developed contracts between VC actors and service providers. This arrangement has resulted in the ability of the producers to fix the type of commodity to be produced, quality of produce, quantity to be produced and also the price at which the produce will be purchased.

Source: CLE.

104. Examples of innovations that are less relevant to smallholders, but are still relevant to the context, are for instance: (i) the very recent flash flood information system (NP, in Bangladesh), as not yet accessible to illiterate farmers (IT interface in preparation); and (ii) the chain of plant solidarity (APVC, in Madagascar), which is based on the principle of reimbursing rejects of seedlings provided to farmers, however the latter were not keen to follow the reimbursement principle. An example of innovation identified moderately relevant to the context, but highly relevant to smallholders, referred to the improved poultry husbandry practices introduced for women in Senegal, because challenges related to poultry husbandry were not among the top priorities within the context, but very important for the targeted group (women, who are the main players) for the purpose of economic empowerment.

105. **Grant supported innovations.**[117] Grant projects identified have been assessed for the relevance of innovations they supported and their ability to nurture loan investment projects. About 18 innovations among the country-visited cases studies innovations were supported by grants. **The CLE found all innovations promoted by grants to be relevant or very relevant.**[118] It was observed that in-loan grants are specifically designed for the purpose of testing solutions to problems encountered in loan projects so that outputs can be directly up taken, provided enough time is given. Global Environment Facility (GEF) grants in loan projects contributed to the inclusion of 'green' innovations, as seen in Moldova for instance, with innovations improving adaptation to climate change (conservation agriculture; grassland restoration, shelterbelts, water saving irrigation etc.) pilot tested by SMEs. Again, in Moldova, the ASAP grant allowed the loan projects to initiate lending activities combined with matching grants helping young entrepreneurs to invest through credit from banks. In-loan grant innovations tend to be better incorporated in investment projects than standalone grants. An exception is related to the regional grant FoodStart, which has been deliberately tied to loan projects in putting innovation results into use[119].

106. **Innovation in global grants can also be relevant**, as provided by the example of Payment for Environmental Services; a global issue for which a regional grant pilot-tested an innovative partnership relying on co-funding by the private sector (see Box 5).[120] R&D activities directly managed by country project teams (for example with

[117] As mentioned in the methodology sub-section, it is very difficult to collect reports on grants at later project stages and formats are disparate. Most information on grant-based innovation has been collected during country case studies as well as by in-house and e-mail interviews.
[118] They address challenges such as low productivity (crop or animal, or aquaculture) in difficult environments (using breeding programs); poor and unsustainable water management (waters and watersheds); low incomes (business development models); low access to financial services of smallholders and youth (matching grants); erratic effects of climate change (Payment for Environmental Systems).
[119] At a regional level, the grant project FoodStart was designed to link with a project in each country to introduce the innovations developed on roots and tubers in the APR.
[120] The same SmartInvest grant was well embedded and produced positive outcomes in the Philippines, but limited ones in Indonesia, due to a time mismatch between grant and loan. Even in the Philippines, the approach could not be scaled up to the point where PES became a legal instrument. Results from grants are better taken into use if regional and country grants

the help of ASAP or GEF funds when directly managed by IFAD) have a better chance to be immediately included in the loan project propositions but not all teams take advantage of other types of grant results.[121]

Box 5
Grant developing an approach on Payment for Environmental Services

Payment for Environmental Services is a global innovation responding to a global issue. However, the World Agroforestry Centre (ICRAF) reports that this was new in the Philippines when IFAD began its support. ICRAF developed two grants (SmartTreeInvest and Rewards for water services / Payments for environmental services RUPES).

Via the SmartTreeInvest regional grant, for instance, the regional Mindanao Development Authority set up co-investment schemes co-financed by private-sector companies. And with the RUPES grant support over many years by IFAD, PES has become part of the national discourse, with inclusion in major national policy documents (the Philippines Development Plan, the National Strategic Plan, NEDA's documents, and the relevant government climate policies).

A Working Group drafted a national administrative order to institutionalise implementation of payment for ecosystem services (PES) nationally. Congress has filed a law twice already as a result of this work, so there is some traction in the legislative area. The innovation thus can be said to have 'stuck'.

At local level, results have been slow. In 2012, Innovation Platforms working with the RUPES project in Benguet for many years had not received any financial payments, as the financing mechanism had not yet been finalised.

If PES becomes a legal instrument, it will have a significant influence both on global and national climate targets, but should also contribute to the livelihoods of small forest owners and support local level environmental protection.

Source: CLE.

Conclusion on innovation processes

107. In summary, **the innovation process at planning and design stage is moderately relevant; while the adaptive process during the implementation of projects is relevant.** Innovations supported were relevant considering the local contexts and smallholders' needs. COSOPs and PDRs are important stages for identifying specific domains where innovations are needed in order to achieve intended results. Unfortunately, no framework is used to guide the conduct of systematic analyses at design stages, especially in applying a systemic analytical approach, leaving the room to individual or localised approaches. The consequence is that innovations promoted, although relevant in their majority, are scattered and stand alone. **At completion stage, innovation processes are incomplete, due to insufficient analyses and documentation.[122]**

B. Effectiveness of IFAD supported innovations

108. Innovations are effective if they are able to bring useful results (i.e. improving performance) into the agri-food system, but also if they are accessible, responding to needs, and viable, in particular for smallholder agriculture. Therefore, the sections below assess how IFAD supported innovations were aligned with short-term outcome results and critical conditions, as presented in the ToC. The following points are addressed: (i) the extent to which innovations were successful in addressing smallholder agriculture challenges (needs or demands); (ii) the effective

are interwoven: scientific activities conducted at regional level can be translated into ready for use results through country grants.

[121] Other examples of regional grants are not positive either. Malawi is said to be the beneficiary of 5 regional grants but only one could visibly feed its results into a project (conservation agriculture). Rwanda has been benefiting from 7 global and regional grants. Only the one concerning a dairy hub model could be traced again among loan project innovations. Other innovations in development in the grant projects will feed in some way the loan projects, but this is not visible yet.

[122] M&E systems in IFAD-funded projects are not conceived to capture innovations information specifically. Information on "innovative activities" are usually documented, but not in a systematic and thorough manner, as there is no specific requirement on innovation in project supervision reports. Project completion reports include a section and a rating on innovation, but it is often not rich enough as information was not consistently collected and analysed during implementation.

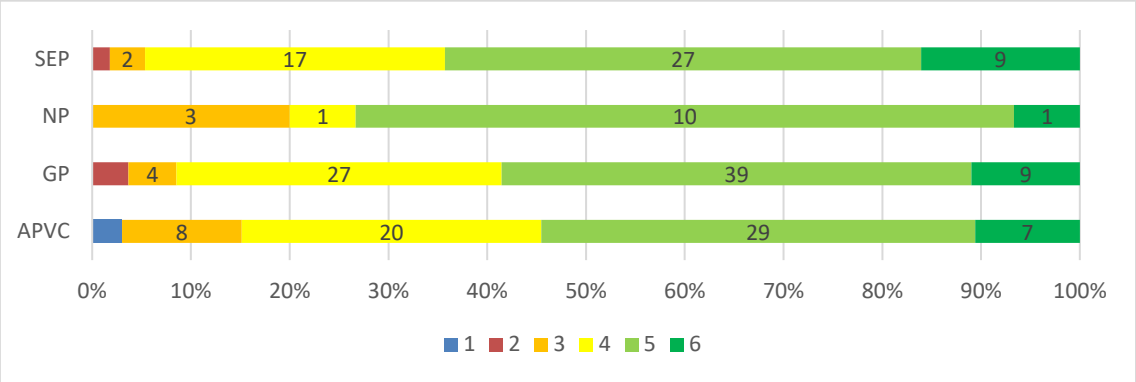
complementarity of grants and loans in supporting innovation processes; (iii) innovations and non-financial instruments; and (iv) transformative innovation features.[123] Not needless to flag that, as for all interventions, the overall context is crucial for the effectiveness of innovation processes. For instance in fragile situations, featured with weak institutions and governance frameworks, classic innovations processes may be less effective, entailing to apply more flexible options of supporting the promotion of innovations.[124]

Effectiveness of innovation in addressing agricultural challenges

109. The CLE rated the case study innovations according to their success level in addressing challenges for which they were introduced. This enabled to identify the effectiveness trends by macro and specific domains.[125] Figure 13 shows the effectiveness ratings of innovations according to system macro domains. Ratings for innovations within the NP domain were highest (but with a small number of innovations) followed by SEP, GP and APVC.[126]

Figure 13

Success level of case studies innovations, by macro domain, rated by the CLE team



Source: CLE (N=219 innovations).

Effectiveness of NP related innovations

110. Innovations in the domain of NRM, environment and climate change may target the generation of information on natural resources (weather, flood, soil, water, etc.) or the development of improved farming practices and procedures for the payment for environmental services these practices provide. Natural resource management is often combined with productivity improvement, targeting more efficient water use, or sustainable harvesting of wild species combined with their domestication. All these innovations have a potential for high effectiveness. Examples and features of these innovations are provided in the related chapter below.

Effectiveness of innovations in the SEP

111. **The effectiveness of innovations related to economic capital was satisfactory in general.**[127] An example is in Ethiopia, establishing Rural Savings and Credit Cooperatives (RUSACCOs). Technical support and wholesale finance to Microfinance Institutions (MFIs) and RUSACCOs allowed them to increase their clientele to more than 30 per cent of the country households and savings and credit associations

[123] Enhancing the focus on transformative innovations has been a major recommendation of the ESR 2019 on technical innovations. Therefore, a sub-section is devoted to that.
[124] The CLE cases studies included only one country (Sudan), which is on the list of IFAD fragile State. This is insufficient to make an inference.
[125] It is noteworthy to recall that innovations can affect several specific domains. But only one domain was retained for the analyses, as discussed in the sub-section on the CLE methodology.
[126] The NP domain got the highest proportion (74%) of ratings (5 and 6) but with a small number of innovations, followed by SEP (64%), GP (58%) and APVC (54%). It is important to recall that most (about 95%) were single and isolated innovations.
[127] 65% very effective or effective, 30% moderately effective and 5% lower. On 22 case studies innovations related to economic capital, 12 were found relevant, while 8 moderately relevant and 2 less relevant.

organised into powerful unions and associations. In addition it supported MFIs and savings and credit associations to develop linkages to the formal financial sector. Another example is provided with the cow health insurance scheme in Rwanda, through which farmers are able to overcome challenges related to veterinary treatment costs, thus reducing significantly the rate of animal mortality.

112. Political and institutional contextual circumstances affect innovation effectiveness and therefore similar innovations may yield different results in different contexts. In Moldova for example, a long-term strategy to involve financial institutions in providing credit to rural small enterprises, first out of IFAD repayment flows, later by adding their own funds, has been ruined by a major fraud in the banking system.[128] The warrantage (storage) credit model has been used in several countries (Cameroon, Ethiopia) with mixed effectiveness.[129] Less successful examples of innovations in this specific domain are related to difficulties to establish financial funds for MFIs, namely guarantee funds in Moldova and facilitation funds in Cameroon.[130]

113. **Innovations related to human capital were effective or very effective.** For instance, the Rural Talents platform in Peru enabled projects provide good extension services, keep skilled people in their home base, and enhance the sense of cultural value (see Box 6). Other interesting examples can be found in several countries, as they enabled beneficiaries to effectively improve their skills and capabilities. Some examples are: Strengthening capacities to use agro-climate information in El Salvador (though not significantly implemented yet); Farmer development of conservation agriculture and peer-to-peer training in Moldova; Mentoring approach of individual household in Ethiopia, Training of women and youth with innovative curricula for developing off-farm activities in Bangladesh; the Youth incubation programme in Cameroon and the Young professionals' programme in Sudan.

Box 6

Rural talents platform in Peru, a successful innovation

The Rural Talents platform in Peru has been used in all the projects since Sierra Sur and is now closely integrated with the community projects. The contracting of local expertise by groups of beneficiaries in fact began in FEAS, which had the principal objective to promote technology transfer. Farmers and vulnerable groups obtained direct access to, and management of, project resources, which was an innovation at that time. They could contract their own technical assistance, thus developing the market for technical assistance services in the mountains. Capacity building was provide to local technicians or 'Yachacchiqs'. This concept has been developed in many of the projects subsequently, gradually improving local capacities. Now a database is established, with assessment of competencies and training. Groups that successfully compete for grant funds must dedicate a proportion of their budget to procuring technical assistance (TA). For instance, livestock producer groups have contracted advisors regarding veterinary advice, infrastructure, feeding and breeding. They remain in touch with a range of local persons with relevant skills (either professionals or locals with recognised competencies). Groups commented on the advantage of getting advice from people who understand local conditions, with the same language and culture, rather than bringing in someone from Lima. This is particularly appreciated by women in the groups. It was also partly developed with support from PROCASUR and CIP. The Government has scaled this up within legislation (in the Family Farming Law, National Strategy for Talent Promotion and Rural Management for Family Farming, called the National School of Rural Talents), and AgroRURAL is giving training and certification.

Source: CLE.

[128] Examples of innovations related to financial services with moderately effective results were found in Ethiopia, Moldova, Peru, El Salvador, the Philippines and Sudan.
[129] Credit is guaranteed in kind by the product stored. The seasonal price fluctuations and the value added by storage is expected to pay for the storage costs. But in fact, unpredictable circumstances and price policies for example may reduce it to zero.
[130] Although the establishment of these funds were delayed, actions were still on-going at the time of the CLE.

114. **Innovations related to social capital were mostly effective**. A good example is the local management and supervision committee (LMSC) in Rwanda. This was a driving engine that ensured the participation of local / community stakeholders in watershed management. Each watershed has a LMSC, the role of which is to define and oversee all priority activities within the watershed through the Watershed Natural Resource Development and Management Plan. Its strength lies in the fact that it includes all major categories of rural stakeholders living within the watershed. This makes it a key community collective decision-making body that takes into account the interests of all stakeholders in the management of a common resource.[131] Only one less successful case was observed in relation to social capital in Bangladesh, with the application of the learning route approach and demand-driven public extension for community interest groups.[132]

Effectiveness of GP related innovations

115. **Innovations related to GP are overall effective, with few exceptions.** The CLE rated 59 per cent of them very effective or effective, 33 per cent moderately effective and 8 per cent lower. Innovations for regulation were assessed effective and they are found in Kyrgyzstan – with the pasture and veterinary systems restructuring – and in Madagascar with the land regulatory framework. These reforms enable positive change in other domains, namely production and social capital. One innovation (out of two) on policy was effective and it pertains to securing land rights for women and men settling on accreted lands in coastal areas of Bangladesh, a policy framework that enabled both wife and husband to become co-owners of a plot, thus affecting positively both social and economic capital.

116. With regard to PIPA innovations (the most numerous), their effectiveness is in general good with a very effective or effective rating in 71 per cent of cases, moderately effective in 26 per cent and less effective in 3 per cent. Good examples relate to innovative implementation practices established to enabling (i) the participation of beneficiaries in the projects' activities, meaning improving human or social capital, in Burkina Faso, El Salvador and the Philippines;[133] (ii) a better access to economic capital in Malawi, Moldova and Uruguay; and (iii) the better management of natural resources and the environment – meaning improving performance within the NP macro domain – in Ethiopia, Moldova, Rwanda and Sudan. One innovative approach was found in Bangladesh pertains to the promotion of R&D activities for agricultural technologies, development, through competitive grants financed by IFAD supported project (co-funded by the World Bank), which resulted in productivity increase.[134]

117. Some innovations were rated as less successful, due to the fact that they were very recent, and still going through learning phase. An example in PIPA is the Knowledge Management Centre established with IFAD support within the Directorate of Water Resources and Irrigation of the Ministry of Planning in Indonesia, in order to take stock of the experiences of innovative management user groups in small irrigation schemes promoted by IFAD projects, and upscale them countrywide. Instruments to enable lessons to be drawn were still lacking at the time of the CLE, as the initiative was recent.[135]

[131] More examples are found in Bangladesh (demand driven public extension for community interest groups), Peru (Mapas Parlantes / Talking or Cultural Maps), Rwanda (Innovations community centres and community competition, rural dialogue groups in El Salvador, land rights management by users association in Malawi, community networks in Sudan, etc.
[132] For the learning route, the initiative, funded through a regional grant, phased out before demonstrating results. For the demand-driven public extension for community interest groups, the initiative evolved to a private service provision.
[133] The community facilitators in Burkina Faso, the youth organisation in El Salvador, the young farmer irrigators in Philippines and the demand driven approach in Farmer Field School in Madagascar.
[134] Further details in Annex IV, Table A3.
[135] Other recent initiatives were: in the specific domains of PIPA, Combining sustainable marine and coastal natural resource management and Support of development of nutrition-sensitive value chains in Indonesia; and in policy, the Policy Lab in the Ministry in charge of Planning in Indonesia.

118. The common effectiveness feature of GP-related innovations is the fact that they enable positive change in another sub-component of the agri-food system, which can be within SEP or AVPC or NPs. **Due to their enabling role, the effectiveness of GP-related innovations matters for IFAD,** and this may explain why IFAD's focus on them has been significant in the past, in particular in low income countries.

Effectiveness of APVC innovations

119. **The effectiveness of APVC related innovations was mixed.** The CLE rated 54 per cent of them very effective or effective, 32 per cent moderately effective and 14 per cent lower. Production and marketing related innovations are the most numerous (see Table 8). The majority (74 per cent) of production-related innovations was effective or very effective; they were mainly agricultural technologies for instance related to: new varieties (more performant or resistant), seeds certification, improved cropping techniques (with better management of soil nutrients and water), irrigation techniques (small scale and drip irrigation), improved animal husbandry practices and access to veterinary services. These innovations are critical for productivity enhancement (see section on impact). One good example is the onion seeds certification in Cameroun described in Box 7. Another example is the chisel ploughing technique introduced in Sudan, which was greatly appreciated and adopted by farmers, and which helped increase crop productivity. Several other examples of production-related successful innovations are found in low income countries.[136] Less successful production innovations were observed with recently introduced initiatives. For instance, in the Philippines, with mud crab fattening and hatching, lobster raising, seaweed harvesting and drying, not yet rated as effective because they were still at an early phase.

Box 7

Onion seed certification in Cameroon

The challenge was the weak productivity and poor competitiveness of onion produced in the Sudano-Sahelian region of Cameroon. Therefore, a great effort was made to purify Goudami seed, which is a local variety, resulting in a variety with a higher yield potential.[137] Thereafter, a network for certified onion seed production was established, comprising of farmer groups. The first certified onion seeds were produced locally by the end of 2016. The professionalization of seed producers was also supported, with more than enough quantity of onion seed produced and distributed to producers, with germination rates exceeding the imported varieties by more than 12 per cent (on average). All these results were achieved thanks to the partnership with the World Vegetable Centre (AVDRC).

Source: CLE.

120. With regard to marketing, innovations were very effective or effective in 43 per cent of cases - identified in middle income countries (Bangladesh, Indonesia, Peru, Philippines, Tunisia) and low income countries (Malawi, Nepal and Rwanda) – moderately effective in 36 per cent and lower in 21 per cent of observed cases. In Peru, the 'concursos' have supported improved market linkages within and across groups and cooperatives. The participatory process of applying for funds and receiving TA has encouraged groups to launch livestock and agriculture businesses, to use improved technologies for more diversified products, and to apply for a recognition of origin of some of the products. In the Philippines, a market-led value chain approach is identifying a product with a good potential market, and linking many Agrarian Reform Beneficiary Organisations (ARBOs) into clusters with one lead (this is the reverse of the normal process of looking at markets for whatever the groups produce). The group ARBOs produce the product, and may do some level of

[136] These include: the introduction of improved aquaculture techniques and rice varieties in Cameroon, the Society for the intensification of agricultural production (SIPA) in Senegal (analysed later as one of the transformative innovation), the system of rice intensification (SRI) in Rwanda and Senegal, the irrigation schemes in Malawi and Rwanda, the drip irrigation system in Senegal, the conservation agriculture and drought tolerant crops in Malawi, etc.
[137] The comparison of yields between 2011 and 2017 indicates an increase of 70.2% for onion producers.

processing, before delivering to the lead ARBO. The lead ARBO then handles all the bulking and processing. They receive the primary intervention from the project, and receive and manage any equipment. There is also a complementary approach. The participating ARBOs and the one lead are not necessarily all producing the same thing - some might be producing fertilizer or growing the product, others focused on processing.

121. Several 4Ps innovative approaches, with moderate success, have been observed in El Salvador, Madagascar, Moldova, and Senegal.[138] A less effective example is the agricultural market information system in Ethiopia, which was unsuccessful, because it was driven by public sector with little engagement of agribusiness sector. It was also implemented just before, and independent to, the launch of Ethiopia's commodity exchange.[139]

122. Processing related innovations were very few (2 per cent of innovations in total), and rated effective in 50 per cent of cases. One good example was observed in Rwanda with the cocoon-processing unit established to produce silk, which also demonstrated the effectiveness of linking farmers to the private sector, even if the initiative is still being piloted. A less effective example pertains to the solar driers for seaweed in the Philippines, as it was still at an early phase at the time of the CLE.

Complementarity of grants and loans in promoting innovations

123. **Grants are effective in supporting the promotion of innovations, when innovation results are timely and adequately transferred to subsequent loan projects.** A good example was found in Bangladesh, where innovations related to fisheries, such as "beel" and house pond management, which have been developed with grants allocated to WorldFish (over a decade), could still be traced in several subsequent loan projects, after they had been disseminated. However, the CLE e-survey results pointed out weaknesses of grants in supporting the promotion of innovations, including: weak synergy, timing issues (either the grant or the loan ends before the other, interfering with the uptake of the innovation), or some innovations requiring a long time to be ready for dissemination, and weaknesses in the reporting, monitoring, evaluation and learning of lessons (see Figure E21, Annex V)[140].

124. **Grants can improve the innovation effectiveness, when they fund a specific aspect of loan-based innovations**, especially in relation to climate change adaptation. In Moldova, grant components came from other donors (United States Agency for International Development then Danish International Development Agency) and could be used for matching grants in the loan programmes and for the first training activities parallel to credit components. Since 2014, climate finance could also be mobilised from GEF and then from the ASAP trust fund directly managed by IFAD. Matching grants encourage youth and poor women as well as other entrepreneurs, farmer groups or municipalities in developing new technologies improving climate resilience. Many training activities and pilot testing of technologies improving climate resilience can now also be supported to complement investments, which are being "greened".

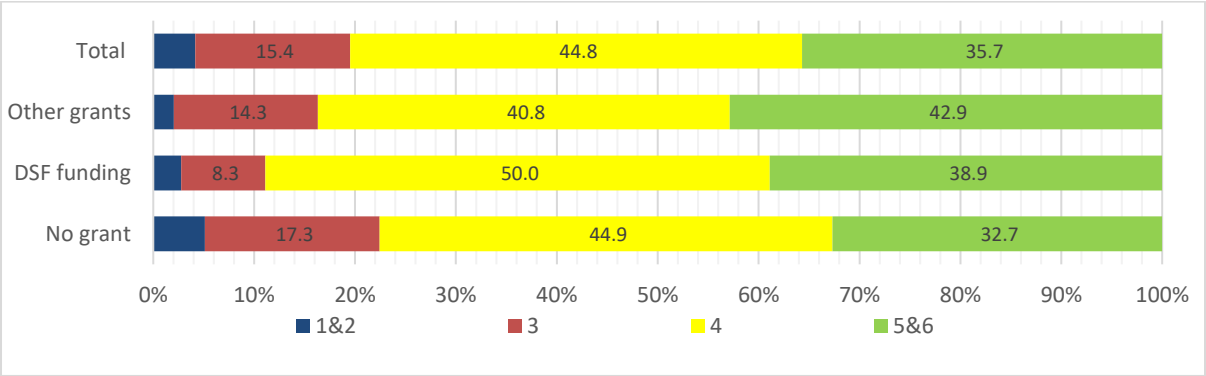
125. The analysis in Figure 14 shows that **the insertion of a grant component in a loan project tends to improve innovativeness**: IOE rated innovations at 5 or 6 in 32.7 per cent of the projects without a grant, 38.9 per cent of projects with a DSF component and 42.9 per cent of projects with a grant (ASAP, GEF, bilateral, etc.). These results show that in-loan grants contribute to increased innovativeness of

[138] And also in countries where very successful innovations have been observed, e.g. Indonesia, El Salvador, Peru, Philippines, and Rwanda.
[139] See http://www.ecx.com.et/Pages/AboutUs.aspx (consulted on 30 January 2020).
Other less successful examples are: the warehouse receipt system in Ethiopia, and the commodity and value chain focus in Malawi.
[140] The IFAD self-assessment also highlighted weaknesses in terms of lack of synergy, lack of systematic approach, and deficiencies in reporting / tracking and lessons learning.

projects. This can be explained by the fact that embedding other grants in loan projects contributes to better incorporation of innovations, in order to address more diversified challenges and achieve expected results. DSF funding component also improves the project propensity to innovate.[141]

Figure 14

IOE ratings of innovations in projects, with and without grant component



Source: CLE database (290 completed projects).

Innovation effectiveness and non-lending aspects

126. **KM at national level. Continuous KM efforts were observed in visited countries to disseminate innovation information through booklets, training materials and other means, with supports of loans and/or grants.** The annual country programme reviews at country level remains an opportunity for national IFAD's stakeholders to identify and share lessons learned, including on innovations. Nevertheless, **because most IFAD country programme lack a specific KM action plan, the integration of innovation aspects is rather ad-hoc and managed case by case, not following a programme-wide approach.** One consequence is the low awareness or recognition of IFAD as a key player of national innovation systems, especially in low income countries, and thus, a weak synergy among key players of national innovation systems. The IFAD self-assessment concluded that despite KM initiatives, there is "a dearth of practical integrated organisational tools, e.g. toolkits for innovation and scaling up" and "lack of discipline in sharing innovations and of more participatory community of practice". [142] However, there are some exceptions, as demonstrated by the Philippines IFAD country programme (Box 8).

[141] Both IOE and PMD ratings show significant correlation coefficients between the criteria of innovations in project and project effectiveness, respectively 0.569 and 0.594.
[142] The IFAD self-assessment for the CLE highlighted weaknesses to that extent. Publicizing project-based innovation across portfolios and regions does not occur in a consistent and complete manner. Ad hoc, project-specific innovations are disconnected, limiting a 'global', systematic approach. Approaches are not really innovative, and if so generally as dispersed smaller-scale initiatives with limited lessons learning and diffusion, and insufficient advocacy in national languages.

Box 8

Sharing lessons within the country programme in the Philippines

The Philippines IFAD team has been very active in facilitating lesson sharing via workshops with a wide range of stakeholders, YouTube videos, and preparation of a book on innovations (IFAD, 2014). IFAD also supports the Agriculture and Rural Development Knowledge and Policy Platform, with a focus on knowledge and learning sharing. Prior to 2014, IFAD ran Knowledge and Learning Marketplaces, showcasing the supported programs and innovations. However, this has now developed into a broader platform, which goes beyond only IFAD work, and deals with policy as well. Projects, government staff, NGOs, CSOs, cooperatives and farmers' organisations participate, all with a focus on helping smallholder producers and rural development. The Platform has an annual Forum, with five thematic areas – climate change and resilience, youth and gender, market empowerment, good governance, asset and land reform. Panels present innovations, good practices and experiences, and there are opportunities for networking. The groups identify common challenges and action points, and make policy recommendations to the government organisations. Farmers also have the opportunity to give feedback. Representatives also meet during the year in the technical working group, originally hosted by IFAD, but now being taken up by the organisations as well (who also provide financing). The participants rate it as a very successful advocacy and knowledge sharing method – giving good opportunities for scaling up innovations. In addition, many of the projects participate in the Knowledge Learning and Management Fair held annually at regional level, with IFAD support, where experiences can be shared internationally.

Source: CLE.

127. **KM at global level.** At global level, the CLE identified numerous existing KM tools and CoPs initiatives to promote the exchange of information and discussion within and across regions. The CLE could not: (i) make a systematic inventory and assessment of their relevance and effectiveness to support IFAD's innovation agenda; and (ii), assess the effectiveness of IFAD's staff involvement in these.[143] For instance, the IFAD Rural Solutions Portal was planned to be a key website that share innovations created by the South-South cooperation team. It has some very good presentations and stories.[144] In practice, however, it is not clear how outsiders find out about the site and insiders find it useful to promote CoPs on innovations. There is no system of prompting with emails, and no clear linking to other financiers' websites, so that it is difficult to assess who are the key actors targeted within the global knowledge system. Interviews with field staff revealed that, there are seemingly insufficient time and incentives to develop and take an active part in CoPs.

128. **Interactions for sharing of lessons** are very critical, as reflected by the learning loop in the ToC. Innovation effectiveness can be improved by linkages between organisations, as well as individuals, involved in innovation creation, transfer, pilot testing, dissemination and upscaling, especially through KM initiatives. In Peru, Bolivia and Ecuador, the International Potato Centre (CIP) won a prize as the best IFAD grant recipient for knowledge management and sharing. CIP provided technical information for APVC development and worked with 56 organisations in total – Government, NGOs, public and private researchers, universities consulting companies, local municipalities and regional governments – creating a network of actors, who can spread information widely. CIP acted as a broker – bringing people together, looking for problems and suggesting solutions. Horizontal knowledge sharing has also been systematically promoted using the "learning route" approach. These cases provide a good example how important is **enhancing linkages among**

[143] The CLE found some websites only by chance, which are supported by IFAD and dedicated to this.
[144] In theory, it should also be sharing the most innovative solutions from projects, but the CLE could not ascertain this fact. The CLE noticed that there is a team working on this, and members can even visit a country to look at the innovation and prepare materials on it, ant this is very great.

actors for a better effectiveness of innovation processes and system, using KM innovative approaches.[145]

129. **Partnerships.** The case studies innovations were supported by projects, which involved different partners.[146] However, looking at the number of project partners only is not sufficient to understand the type and depth of partnerships involved in innovation and upscaling processes. This especially because partners can also be outside the project area and even the country. As discussed (in several sections)[147], **the effectiveness of innovation processes depends on the system stakeholders' initiatives, their capability to scout for, and implement innovations**, as well as the linkages they have developed within IFAD innovation system, and to national, and international systems (beyond IFAD). Partners of IFAD supported innovation processes include extension services (governmental and private), research centres (national and international), multi-lateral partners, private sector, NGOs and farmers' organisations. Government representatives mentioned that, they are not always informed about innovations activities undertaken within the country, financed with IFAD grants. Subsequently, **while IFAD's supported innovation processes rely on project and grant recipients' teams, a linkage should be well established to national innovation systems.**

130. **Monitoring and evaluation (M&E).** The M&E system of projects neither provides information specifically on innovations, nor assesses the causal results pathway, from scouting to pilot-testing at a small scale and then up to scale. In many cases, innovations become more complex and bundled as they evolve over time. Results of IFAD-supported innovation processes (outputs, short- and medium-term outcomes) are not measured during the project progress beyond project timelines, because no specific framework has been suggested for this[148]. **This lack of specific M&E data and information on innovations restricts the possibility to learn lessons (what, how, why, and so what?)**.

Transformative innovations

131. The ES 2019 on technological innovations recommended that the current CLE assess IFAD's capability to support transformative innovations. Promising innovations from the case studies have been analysed by the CLE team for their transformative power.[149] **A transformative innovation can lift poor smallholders out of poverty in a sustainable way in helping them reshape their livelihoods' system in a new way.** Not only practices (e.g. in AVPC domain and NP) have to change, but also assets and rules governing access, entailing also changes in SEP and GP domains. A transformative innovation will bundle single innovations that affect different pillars and enable each other. A few innovations were found by the CLE to include transformative features. Examples are: (i) 4Ps with the MARS Academy & cocoa village clinic approach in Indonesia; (ii) Hillside irrigation schemes in Rwanda; (iii) Society for the intensification of agricultural production (SIPA) in Senegal; and (iv) the Gender Action Learning System (GALS) methodology in RWEE project countries. They are described in Box-9. Those innovations, which are a set or bundles of single innovative solutions, are influential at two or more macro domains, namely APVC or NP in addition to SEP; and also include (directly or indirectly) an enabling GP related innovation.

[145] An additional example related to PROCASUR is presented in Annex IV, Table A2.
[146] Funding partners, including governments.
[147] In the ToC, and in sections on the review of IFAD's innovation agenda and the review of corporate strategies and policy documents.
[148] Discussed earlier in the limitations.
[149] The ES(2019) has defined transformative innovation as highly disruptive, which entails a higher risk and higher rewards, specifically when the target population has never experienced that kind of innovation or were affected by major resource constraints (access to land, labour availability, technical knowledge, specialist support).

Box 9

Innovations with transformative power

4Ps with MARS : the MARS Academy & cocoa village clinic approach in Indonesia

4Ps with MARS through the MARS Academy approach: MARS Cocoa Development Centre and Cocoa Village Centres / provide improved cocoa production training and Cocoa Doctors support cocoa farms. MARS chocolate has indeed contributed to interesting and replicated models. MARS trained "cocoa doctors" for 97 village clinics, which provided cocoa producers with healthy saplings, inputs and advices. These clinics are now a new type of rural institutions. They are transformative because they contributed to solve a major plant health issue impeding cocoa development as well as the limited access of many smallholders to extension and inputs, opening an avenue for intensification in cocoa based farming systems. In this case, the transformative power of the innovation might also result into the emergence of larger farmers purchasing the land of poorer ones and into an increasing social differentiation.

Hillside irrigation scheme and organisation in Rwanda

The scheme was coupled with water users' association. The challenge was the need to ensure an effective management of agricultural production natural resources. The hillside irrigation scheme, entailing mini dam ponds or cisterns for water storage, was therefore applied, with about 2,000 ha targeted. Water User Organisations committees and their members were trained, and management agreements of irrigated perimeters signed with them. Irrigation schemes showed results in addressing challenges of productivity, NRM and climate change adaptation. The users' organisations showed effectiveness in terms of higher social capital and applied regulations. Combining significant improvements in productivity and internal organisation allowed for a significant and reliable increase of productivity and income and ensured maintenance of the investments. The entire process is backed up by committee linked to district authorities, e.g. for watershed management.

Society for the intensification of agricultural production in Senegal

SIPA are Small and Medium Rural Company with about 150 associates that are young men and the women living in rural areas. The innovation targeted youth and also reached significant numbers of women. SIPAs are specialised in modern, intensive, diversified and commercial agricultural production. These SIPAs have been professionalised, and the resulting SMEs have been given access to public private partnerships, financial resources, innovative technologies and capacity building. One main purpose of the SIPA concept was to reduce youth migration, and it has been successful.

GALS methodology

Described in the Inclusiveness chapter.

Source: CLE.

132. **Transformation relates to a significantly better conversion of resources into valuable outputs (in their wide sense).** Incremental single innovations help smallholders improve their situation, but not in a very significant way. As smallholders are trapped in a low asset situation, they cannot mobilise the additional resources required to make use of individual innovations. When innovations are in bundles, they are more likely to become transformative, with higher and more sustainable results for significantly less inputs. Hence, a transformative innovation has to bundle single innovations, some improving productivity as well as post-production and market access issues; and others contributing to socio economic improvement, while protecting and replenishing the NP elements. As such, they can lift smallholders out of the poverty trap in a sustainable way, reducing risks that may affect their upward mobility, securing their asset accumulation and ensuring the diversification of these assets.[150] The 2019 ES on technical innovations differentiate those innovations inducing incremental changes in productivity, assets and health enhancement, from those with a transformative power. Transformative changes were seen with innovations capturing new opportunities and inducing diversification of

[150] The context also may have to be improved, reducing remoteness and improving the physical access to markets for example. With these considerations in mind, the relevance of an innovation package can be assessed through its ability to ignite or leverage radical changes in the farming system of interest, and this again can happen in many ways.

economic activities.[151] The CLE found instead that transformative features of innovations lie with their capabilities to tackle successfully and simultaneously the challenges of multiple specific domains. This can happen effectively with bundles of innovations.

133. **Transformative innovations should be able to lift poor farmers above a threshold where they cannot easily fall back after a shock**.[152] When the asset base is very thin and the context highly risky, new assets accumulated may not be sufficient to protect livelihoods in case of new shocks. For instance, in Bangladesh, labour construction societies have been developed for decades, and are a source of incomes for poor people, by providing labour in road, protection and other community work. With IFAD support, these societies have included women on an equitable basis. Intensive human labour work is now institutionalised in the public infrastructure sector. Outcomes of such work in the Hoars, a region prone to seasonal floods, have been three fold: reduced risks of assets and human lives lost due to flash floods and other erratic events (that affect mostly the ultra-poor); incomes generated used for further small investments (e.g. in livestock); and women's social position de facto improved as they have the same rights to work and earn incomes. However, these achievements are still insufficient to lift the majority of the ultra-poor out of poverty. More radical changes in their productive assets (land and water especially) are required, which can be achieved through both income enhancement and direct resource improvements.

134. **Innovation does not need be radical to be transformative**. Transformative change may also arise gradually. This step by step pathway is illustrated by the duck APVC case in the Bangladesh Hoar flood plains. Over more than a decade, an NGO under the umbrella of a large IFI apex, worked with smallholders and adjusted simple technologies (egg hatching, duckling feeding and housing); internal organisation of the lower parts of the APVC (specialisation of the egg hatchers into input and extension providers as well); and organisation of duck raisers into associations for egg collection, sale in bulk and vet input supply. Combined with savings and credit activities in the groups, and in a context of reliable market demand for duck eggs in Asia, it opened opportunities for smallholders, including landless men and women, to safely increase their duck herds, significantly improve their income and accumulate new assets. In parallel, the context had to be improved, such as the accessibility of the marketplaces. However, radical innovation should not be completely ignored. The CLE team could not find good examples of radical innovations,[153] but country teams expressed ideas, such as using block chains in contractual transactions for example, that may induce radical changes. Changes in women's position in the household, or major changes in land rights are also potentially transformative, through incremental or radical innovations. Here again the lack of system analysis prevents from a creative search for novel and radical solutions within IFAD**. Radical innovations could be pilot-tested through specific funding mechanisms, for instance the innovation challenge funds.**

135. As long as innovations are considered individually, and not in bundles, their influence on the agri-food system will be scattered, and their transformative character will be very limited. Considering the CLE in-depth case studies reviews and field visits, it appears that very little or no attention is given to this feature in IFAD's support agricultural innovations. The few examples found was due to strong individual project staff engagement and government support. This is corroborated by the lack of guidelines related to innovation. These guidelines would be helpful for staff (both

[151] Such innovations require higher investments in resources and knowledge and bring higher risks. The ES assessed that most innovations were of low technical complexity and therefore feasible by most smallholders and low risk; only few (28% of the 416 innovations studied) aimed at diversifying production with new activities requiring new knowledge, could be assessed as inducing a transformative change, but were then accessible to the better-off.
[152] Also entailing not to sell their productive assets to survive or suffer from their total loss.
[153] Aligned with the CLE approach, radical innovations will bring radical change into one or more subcomponents of the agri-food system, which entail some risks for the system stakeholders.

IFAD and projects) to (i) incorporate transformative features, when performing prior analyses of innovation needs at the design stage, and (ii) proper monitor and evaluate these during the implementation and at closure of IFAD's supported operations.

Conclusion on effectiveness

136. In summary, **the effectiveness of IFAD's supported innovations is overall satisfactory.** With regard to agricultural challenges, the effectiveness of innovations was assessed to be satisfactory within the specific domains of NRM and social capital. The good effectiveness of innovations in social capital is indicative of IFAD's efforts to bring about notable changes, through supported operations, in capacity building and rural organisation strengthening for sustainable livelihood improvement. Nevertheless, **innovations within the economic capital sub-domain were less successful, due rural finance related challenges**.[154] The results of GP related innovations have been satisfactory in general, and this indicates the importance given to enabling factors. With regard to APVC innovations, the results are mixed and this can be appreciated in view of their recent rise in IFAD's operations. Less successful cases have been observed, especially in the specific domain of marketing and access to markets. In terms of non-lending activities that support the promotion of agricultural innovations, mixed results have also been observed.

137. **Less effectiveness often happened, when innovations are stand alone; this is reversed, when they are bundled, giving the package a transformative character.** Few transformative innovation packages were found by the CLE. The approach is interesting and effective and deserves greater attention in IFAD-supported innovation processes, particularly when planning for innovation at the design stage.

C. Contribution of innovations to project efficiency

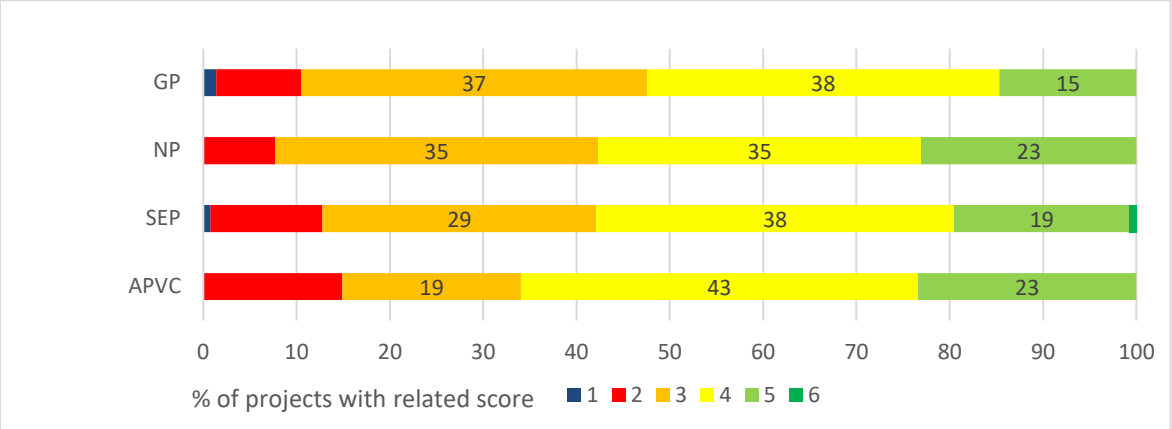
138. Efficiency assesses how economically resources/inputs (funds, expertise, time, etc.) are converted into results. Quantifying the costs and benefits of innovations is challenging, not least because few IFAD projects collect sufficient impact data to quantify their total benefits, let alone to attribute part of the project benefits to individual innovations. Similarly, it is difficult to apportion total project costs to individual innovations from the available project data.

139. Figure 15 compares IOE efficiency ratings of projects for each of the four macro domains.[155] **Projects with APVC innovations have the highest concentration of favourable (4 to 6) efficiency ratings, followed by SEP**, meaning that they were assessed to be more efficient. Similar findings are obtained when using the PCR ratings. An underlying explanation, for APVC innovations, comes from ex-post analyses results found in few PCRs, which reported high internal economic return rates.

[154] Concluding points of the ES (2019) on Rural Finance corroborated this, for instance: "At design stage, many projects envisaged the use of innovative approaches, services or products. However, these were later dropped or, if they were implemented, performed poorly, as shown in the examples of leasing, equity funds and guarantee funds." Doc. EC 2019/105/W.P.3, p.86.
[155] This refers to rating of efficiency criterion in project performance evaluations and project completion report validation.

Figure 15

Distribution of IOE efficiency ratings by innovation macro domains



Source: CLE (N=290 completed projects).

140. Small-scale irrigation projects, for example, are reported to have high ex post economic rates of return (15-22 per cent in Ethiopia and 40 per cent in Malawi), despite their relatively high development costs per hectare. Innovations related to water technologies and water management play key roles in achieving these high returns, as do complementary innovations in crop production.

141. Another measure of efficiency is the average cost per beneficiary in a project, compared to similar projects in the same country or region. This measure is at best indicative for assessing the efficiency of innovations within projects, when project costs cannot be apportioned. Analysis of financial data of the total 508 projects shows no significant differences in the total project cost per beneficiary by innovation macro domain.[156]

142. The CLE identified cases where costs per beneficiary actually increased over subsequent phases of a project (e.g. the pastoral community development projects in Ethiopia), but this may simply reflect changes in other components of the project rather than an increasing cost of individual innovations. One would expect the costs per beneficiary for individual innovations to decline once they are scaled up in later projects by IFAD, governments or other partners. However, these cost savings would only be apparent in the cost data for subsequent projects and would not be captured in the data for the innovating project.

143. **Project costs per beneficiary have also been reduced in some projects through social capital innovations that enhance the participatory involvement of local communities.** In Malawi, for example, large shares of total project budgets have been channelled directly to supporting investments identified and managed by community and village organisations on a participatory basis, and at unit costs that compare favourably with regional averages despite the high initial costs of establishing the required social capital. Pastoral community development models piloted in Ethiopia, Kyrgyzstan and Senegal have also proven to be an efficient way of providing basic services to pastoral communities. In Ethiopia, for example, the unit construction costs for health posts (human and animal) and schools, were about half those incurred in similar NGO led initiatives. Many of these efficiency gains can be attributed to the involvement of beneficiaries in the prioritisation, procurement and supervision of local project investments, which not only improves the relevance of the investments, but also helps keep costs down and reduces the time taken to undertake them.

144. **Innovations in PIPA can also have an incidence on project costs per beneficiary.** In countries that innovated to have a single project management unit

[156] See Table B8, Annex VI.

(e.g. in Rwanda and Moldova) overseeing all of IFAD's projects has led to efficiency gains, in part because it enables a core team of trained and experienced personnel to stay in place, reducing hiring and training problems and providing better coordination and information flows across projects. Supporting government decentralisation policies by implementing projects through local government agencies (e.g. Ethiopia, Malawi, Kyrgyzstan) has the potential to lead to long term efficiencies as their capacities improve, but it can have short term costs for projects. [157]

Conclusion on efficiency

145. The CLE could not conclude on the efficiency of IFAD supported innovations and related processes, due to the lack of specific data. However, the best available evidence lies with few production related innovations, which show good economic rates of return. There is insufficient availability of project monitoring and financial data to substantiate any qualitative claim on the relationship between innovations and the project efficiency. Interactions and synergy with other players of innovation system, through a continuous presence within countries, are important attribute for IFAD to achieve and maintain efficient innovations in projects.

D. Contribution to impact of IFAD supported innovations

146. Within the evaluation framework, the CLE considered the question of 'to what extent (how and why) have agricultural innovations, promoted through IFAD's supported operations, had positive impacts on smallholder farmers, taking into consideration IFAD's impact domains?' The CLE considered the potential impact of innovations in several areas within these domains – agricultural productivity, food security and nutrition, household income and assets, capabilities of the poorest farmers, capacities of farmers' organisations, communities and rural institutions, policies, gender, youth and indigenous groups, and environment and climate change impacts.

147. Assessing the impact of innovations within IFAD projects is challenging because most projects do not collect sufficient data to quantify their effects. Even when quantitative data are available on impacts, such as with the impact assessments of the IFAD Research and Impact Assessment Division and IOE impact evaluations, they are for projects as a whole, while an impact analysis of individual innovations requires attributing a share of those benefits to each innovation. This is sometimes possible when key innovations are a major and identifiable part of a project (e.g. a major component of an irrigation project), but more generally innovations are deeply embedded within projects and there are often several of them, making it near impossible to break out their individual contributions. Thus, in the absence of specific monitoring and impact data on innovations, the contribution analyses to impacts have been done qualitatively, based on in-country innovations, rated for change observed, discussed or reported, following their implementation (see methodology sections above).[158] The assessment is in line with medium and longer terms outcomes in the ToC and related critical conditions.

Production and productivity

148. Evidence on the impacts of innovations on production and productivity can be drawn from country case studies. Figure 16 shows that production-related innovations stand out as having the highest impact for agricultural productivity (4.8 on average), followed by PIPA and economic capital innovations. In production, innovations are related to improved cropping or husbandry practices, technologies and irrigation schemes. The country case studies add support to the findings of the recent

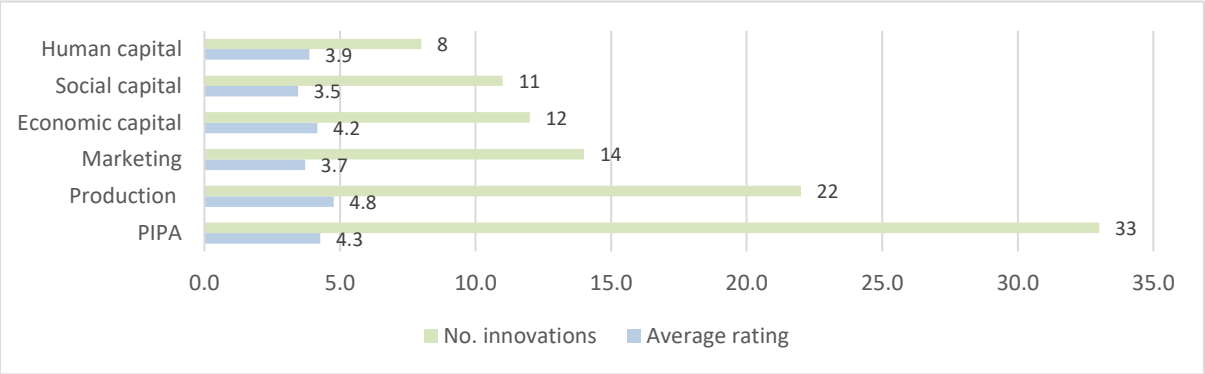
[157] In Malawi, the efficiency of several projects has inevitably been conditioned by the use of decentralized government agencies as implementing agencies and service providers, since their capacities vary and are often limited, especially in some of the poorer areas targeted by IFAD. It can also be difficult to coordinate across government ministries and departments at decentralized levels, and many agencies operate with standardized guidelines that may constrain flexibility and innovation at local levels.

[158] Not all impact aspects could be ascertained for each innovations; either because, innovations have been implemented for a sufficient timeframe, to measure their contribution to change; or they do not relate at all to the aspect appreciated. Therefore, the number of observations (N) varies from one aspect to another.

Evaluation Synthesis Report on Technical Innovations for Rural Poverty Reduction that **many production-oriented innovations contributed to increased agricultural productivity amongst beneficiary farmers.**

Figure 16

Case study innovations rated by the CLE team for their effect on agricultural productivity



Source: CLE (N=115; only the six main specific domains are reflected).

149. The evidence is particularly persuasive for innovations of small-scale irrigation (e.g. in Ethiopia, Malawi, Rwanda, Senegal), better seeds (e.g. Cameroon), improved agricultural practices (e.g. Senegal, Bangladesh, Peru), and post-harvest (e.g. Rwanda, Bangladesh). Productivity gains have also been achieved among pastoralists in Kyrgyzstan and Ethiopia through GP-related innovations in property rights and grazing rights, and by improving access to infrastructure and key inputs like veterinary services. In Kyrgyzstan, innovative improvements in pasture management and veterinary care not only contributed to a steady increase in livestock numbers, but dramatically reduced the transmission of brucellosis to the pastoralists.[159]

150. Another important finding is that **many production-oriented innovations could not have the same level of impact if they were not supported by economic and PIPA innovations.** Implementing in parallel, innovations for improving farmers access to finance (e.g. in Bangladesh, Cameroon and El Salvador) and enhancing farmers' business skills to leverage them to commercial farming (e.g. of the farmer fields schools, adapted in different contexts, in Malawi and Philippines) were decisive to guarantee improvements in productivity and production. Moreover, PIPA innovations (e.g. water users associations, matching grants for production activities, participatory approaches) also contribute to enabling change on production-related aspects. The findings corroborate the earlier discussion pertaining to the bundling of innovations. **Most innovations have highest impact when they are part of a package or bundle, meaning they can be transformative,** because they are influential within different system sub-components.[160]

Food security

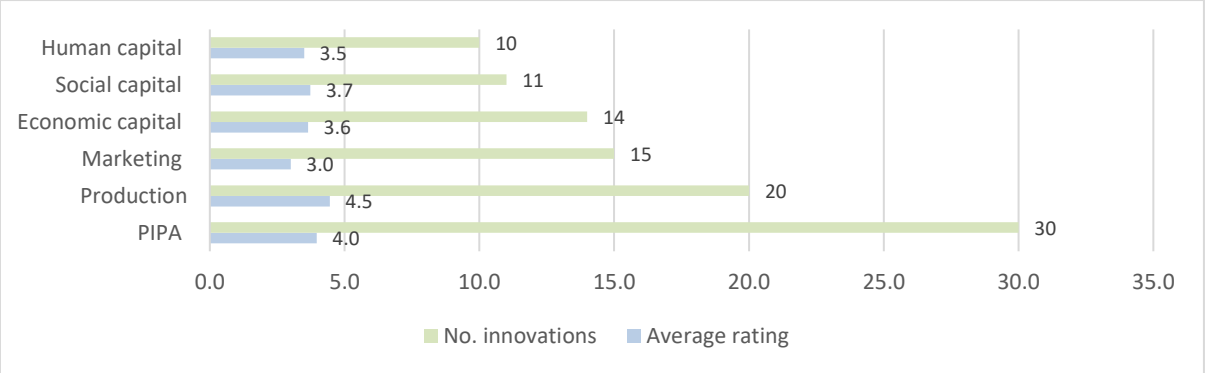
151. Figure 17 shows the ratings for the six main specific domains, with significant number of innovations. **Again, production innovations contributed to greater impacts than the other types, followed by PIPA.** This is not surprising since they also have greatest impact on productivity (as analysed above), thereby helping to expand the available supplies of food locally. Specifically, on nutrition innovations in aquaculture in Bangladesh (to promote complementary mola fish, not for sale but for home consumption, to address malnutrition issues) and on home gardening in Ethiopia

[159] It takes longer for some types of production-related innovations to impact on agricultural productivity and farm incomes than others. This may lead to disappointing results within the reporting period of some projects, and which can only be properly rectified through follow up studies after a project has been completed.
[160] This makes difficult to make attributions to individual innovations. But key indicators on the transformative features could be well measured and the causality assessed.

(demonstration on home vegetable gardens with women) were assessed to have made important contributions on the nutrition status of beneficiary households.[161]

Figure 17

Case study innovations rated for their effect on food security



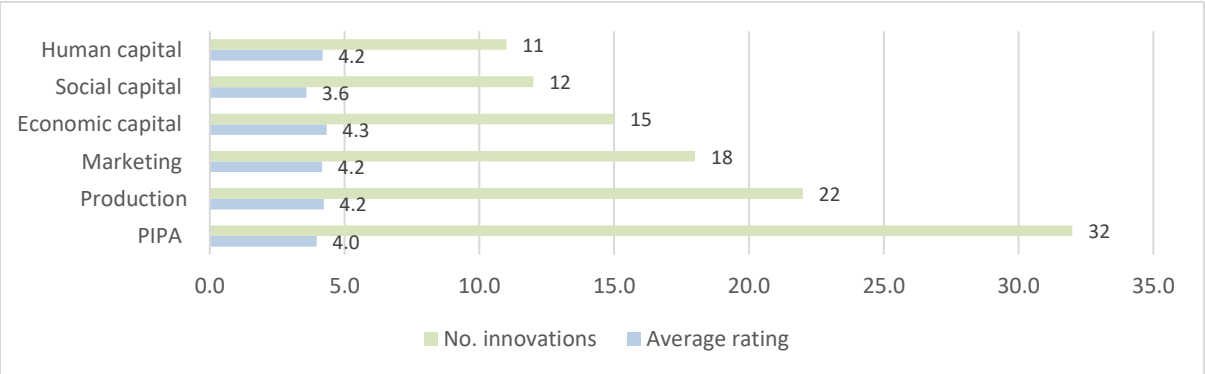
Source: CLE case studies innovations (N=113; only the six main specific domains are reflected).

Income and assets

152. Figure 18 shows the ratings for the six specific domains, with a significant number of case study innovations. Not surprisingly, **economic capital innovations perform better and are closely followed by marketing and production**. The latter two are related to APVC, which confirm the effective linkage between these types of innovations with SEP related ones, and lead to higher impact if combined (i.e. bundling). Thus, greater impacts on household incomes depend on farmers having access to markets or better prices for selling part of their increased production. Indeed analyses (PoLG) shows that APVC related innovations increased significantly between 2013 and 2019 in loan supported projects, and SEP also increased within the same period, illustrating great efforts of the Fund to contribute to improving rural livelihoods (SO1 and SO2 of the Strategic Framework 2016-2025) through supported operations.

Figure 18

Case study innovations rated for their effect on households' income and assets



Source: CLE case studies innovations (N=126; only the six main specific domains are reflected).

153. Since most projects target poor smallholders, one would expect the incomes of poor people to rise when on-farm productivity increases, but the results are mixed, especially for reaching some of the poorest households. One reason is that poorer households typically have little land and hence little opportunity to gain directly from productivity innovations, and must rely more on indirect benefits such as increased employment by better off farmers whose productivity has increased. Another reason is again the market access issue: targeted economic, social and human capital

[161] It should be noted that the nutrition became one of IFAD priority from 2016. See Mainstreaming Nutrition-Sensitive Agriculture at IFAD: Action Plan 2016–2018, Doc EB 2015/116/INF.5.

innovations to the very poor can help boost the indirect benefits of productivity innovations, as well as provide direct benefits of their own. However, since they are often only applicable to a relatively small number of adopters, their impacts may not be very visible in project data without more detailed micro studies to tease them out.

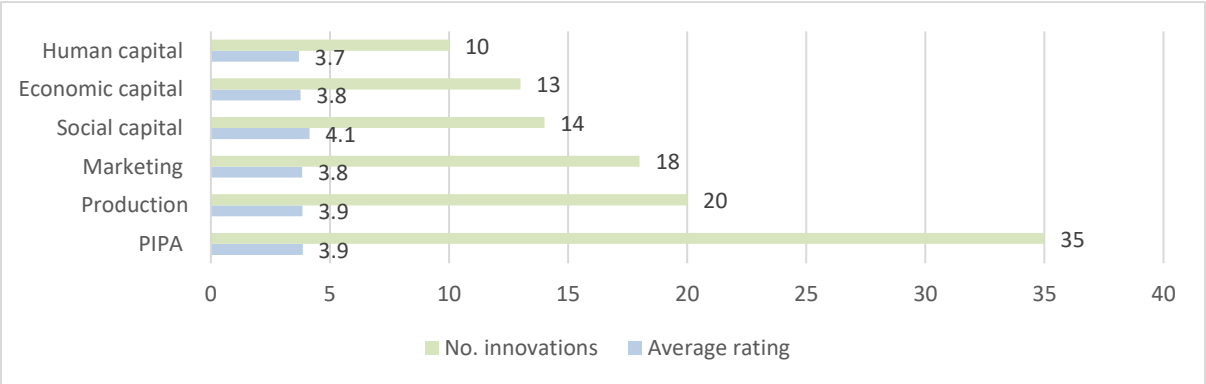
154. There is persuasive evidence that innovations in business training, rural business and microenterprise initiatives, and technical support can help create jobs and raise incomes, especially for women and youth, with examples found from the case studies in Burkina Faso, Cameroon and El Salvador (see youth sections). Household assets may be built up directly through project investments and transfers. For example, innovative community-managed approaches to pass-on-animals (like goats in Malawi and cows in Rwanda) have enabled many poor women to acquire breeding animals that build a valuable asset as well as provide offspring for sale and milk for family consumption. Infrastructure innovations that protect against climate disasters (e.g. submersible roads in Bangladesh, or in Peru, using *concurso* funds to construct water catchment and storage ponds to assist with water availability and recharge) can also help protect assets and facilitate their longer-term accumulation.

Capabilities of farmers' organisations

155. Farmers' organisations are key beneficiaries and partners of IFAD, supporting their members and interacting with government and the private sector. **Social capital innovations contributed to greater impact on capabilities of farmers' organisations, followed by PIPA and production-**related ones (Figure 19). An example of innovation with great impact was found in Indonesia, where community initiatives with membership that crosses gender and religious lines, are supported by NGO village facilitators. In the Philippines, it is likely that FBS, and its later development into the Aquatic Business Schools, have the greatest positive effect as an individual innovation currently, covering many projects and supporting impacts in various ways, including technical, social and institutional impacts.

Figure 19

Case study innovations rated for their effect on farmers' organisations capabilities



Source: CLE case studies innovations (N=126; only the six main specific domains are reflected).

156. The creation and promotion of grassroots organisations (GDA) by PRODESUD in Tunisia has had an impact on social capital and empowerment of local communities. Indeed, GDAs allowed strengthening the position of the population in relation to development agents and policy makers. The training of the GDA members and the recruitment of the technical directors makes it possible to support the GDAs and equip them with a technical and decision-making autonomy. The strengthening of their administrative and financial management capabilities allowed them to negotiate a better programme with the various administrations. Moreover, the acquired resource management knowledge (particularly, pastoral resources) led to a significant change in the perception and use of common resources thanks to the adoption of sustainable participatory management of rangelands.

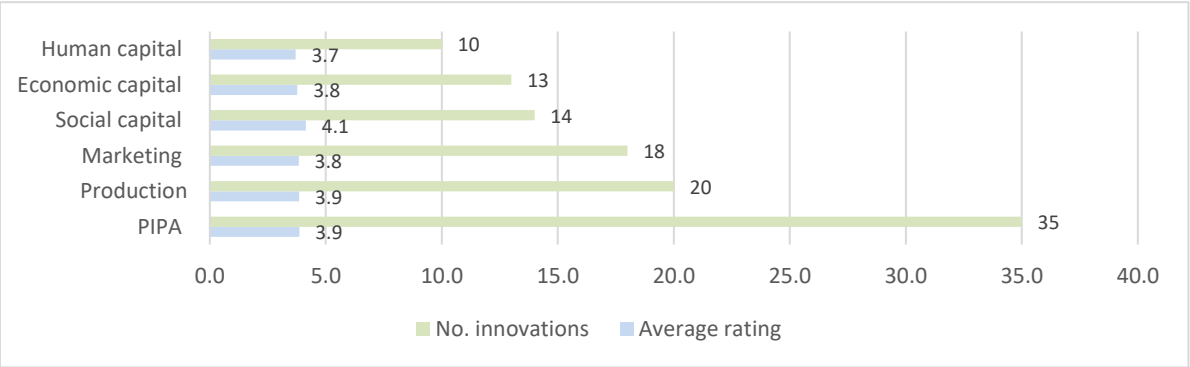
157. In Peru, the innovations in projects linked to operational practices and approaches, and developing human, economic and social capital (such as the competitions concursos), the Local Resource Allocation Committees (CLAR) and rural talents) have had many impacts at community level. These have included a notable impact on the recovery and valuing of intangible assets, mainly knowledge management and cultural assets, such as customs, dances, music and food.[162] In the case of the Indigenous Land Titling in the Philippines, and the strengthening of the indigenous leadership, interviewed stakeholders commented that it had made a big change to the sense of security, ownership and Power of indigenous Peoples. "This is our land and our life. You must consult us to do anything in this community – you must respect us." IPs have been trained and their political importance has increased – they have more confidence and feel that they can preserve their culture.[163]

Rural institutions and policy

158. For rural institutions again, **social capital innovations come first, followed by PIPA and production,** reflecting their importance and linkage (Figure 20). An interesting example was found in Senegal with the National Inter-professional Framework for Agricultural Sectors, which are inter-professional organisations that bring together all professional organisations involved in a commodity value chain, leading to have effective functioning institutions in rural areas, able to attract other development partners and cooperate with them, for a better sustainability.

Figure 20

Case study innovations rated for their effect on rural institutions



Source: CLE case studies innovations (N=123; only the six main specific domains are reflected).

159. In many countries, IFAD used innovative processes to establish or build the capacities of rural institutions (at local or national level) combined with development of national level policy (good examples from Peru and El Salvador are discussed in other sections of this report). In these cases, sustainability is more likely. South-South Technical Cooperation has been very useful, for instance in some middle income countries, at establishing innovative regional discussion bodies. In the Southern Common Market (MERCOSUR) region, dialogue on public policies between governments and participating social organizations was encouraged by IFAD. The work conducted by the IFAD MERCOSUR programme has facilitated the identification public policies for family farming, resulting in the creation in 2004 of the Commission on Family Farming (REAF) and MERCOSUR's Fund for Family Farming (FAF), which are today entirely funded by MERCOSUR governments. REAF's policy dimension is driving investment projects and pipelines – for instance, farmers' insurance against climate events in

[162] There has been significant development of human capital and empowerment of beneficiaries (including women in particular) and promotion of local leadership and management skills. A market has been established for knowledge transferred via local professionals and technical assistants. In addition, the Rural Talents, and related trainings, have considerably boosted knowledge and competencies at local level. The CLAR are developing local organisations, and via the Learning Routes, local individuals and group members are sharing experiences.

[163] It also gives the tribe confidence to plant crops, including longer-term crops such as abaca palm, and thus improves their livelihoods and the local environment. There is also a better understanding among outsiders (such as local government units, government staff, private companies) of the reality of the lives of the IP, and the need to respect them.

PRODERNEA Argentina. Family farmer organisations sit with governments in regular meetings to discuss policy development in various areas such as climate, gender, indigenous peoples and insurance. In particular, the development of 4Ps have shown successes across several regions (see Box 10).

Box 10

Examples of approaches in strengthening institutions

In Rwanda, 4Ps have had a significant positive impact on the livelihoods of the beneficiaries (through reduced post-harvest losses, increased quality of inputs/products, which both lead to increased profits- creation of linkage with PFIs/market partners). A performance-based grant has been used to support cooperative-led business proposals. Also in Rwanda, the Innovation Community Centre, a physical infrastructure, is a technical and organisational framework body that serves as an information, coordination and service delivery platform for farmers which aims to ensure ownership, continuation and sustainability of the achievements of PAPSTA and KWAMP within their spheres of action. The Innovation Community Centre acts within an institutional and farmer-organisation capacity building framework which aims to promote and disseminate community innovations that contribute to the implementation of watershed development and management plans. The Innovation Community Centre was noted by IFAD Management to be a key innovation (Self-Assessment workshop). It falls mainly under the domain of Social Capital.

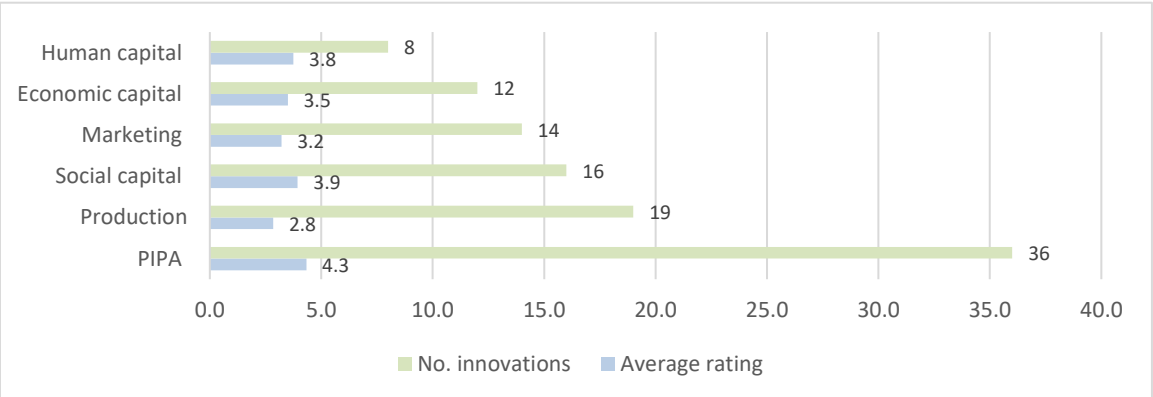
A global grant was provided to the NGO SNV to develop and test 4Ps brokering mechanisms in El Salvador, Mozambique, Senegal, Uganda and Vietnam. This was another example of grants being used to flexibly test innovative approaches together with loan projects. IFAD was able to provide strong technical support, for instance, giving advice on models, and sharing the PPP experiences of IFAD in different countries. There were two workshops with the participating countries, and IFAD also took some private sector representatives, government staff and producers to Rome, where they participated in experience sharing activities, and SNV prepared a manual on the experience.

Source: CLE.

160. For policy impact, not surprisingly, **PIPA innovations come first, followed by social capital** (Figure 21). An innovation found in several countries, but in variable forms, was the single project implementation unit for IFAD projects. Varieties of this concept were applied in Moldova, Rwanda, Peru, El Salvador and Uruguay. This method allowed close coordination and synergy with the ministry, thus improving the ability of using IFAD-supported projects to influence sectoral policy. In Peru, for instance, the central implementation unit (NEC) concept served as a method to decrease bureaucracy and speed up operations. According to one respondent this was "the most fundamental innovation – wouldn't have been possible to implement IFAD projects effectively and efficiently without that".[164]

Figure 21

Case study innovations rated for their effect on rural policy



Source: CLE case studies innovations (N=121; only the six main specific domains are reflected).

[164] Further descriptions are in Table A4, Annex IV.

161. The link to policies for those innovations in the domain of marketing was weaker, although this is understandable, as not all innovations are likely to have an impact across all areas. An example of a successful innovation, yet with virtually no impact on policy, is in Bangladesh. Climate-resilient and connected market facilities and maintaining a Women's corner in markets have had a good impact in several areas, including gender, however they were rated poorly for their impact on government policies.[165]

Negative or unanticipated impacts

162. There were very few negative or unanticipated positive impacts reported during the field visits. An example of unexpected positive impact when the context changed was in Papua, Indonesia, with the National Programme for Community Empowerment in Rural Areas. Following decentralisation, the government realised the value of using local NGOs to help municipalities with planning in the new context. The innovative planning approach was expanded and turned into a national policy, achieving considerable impact.

163. When innovations were replicated and further improved over a series of loan projects (or when loans picked up successful grant-funded innovations in subsequent phases) there was more chance to achieve impact (such as in Peru). Where there were gaps, innovations were unable to flourish. For instance, in Indonesia there was a gap between the READ and READ-SI loan projects, staff moved on and institutional memory on the innovations was lost, inhibiting impact.

164. In some cases, the innovation was too ambitious for the context. For instance, in Madagascar, management standards were set too high for a community organisation. The type of management conferred to the market access centres (CAM) was that of a commercial enterprise, with all the standards and corresponding tools. Those tools provided an excessive degree of bureaucracy that was not adapted to farmers' conditions and ended up being a burden for the farmers involved in collecting and marketing products. Moreover, the effort to make the CAM profitable was not necessarily linked to the interests of the producers. Apart from the price conditions offered by the CAMs, which are certainly advantageous with correct weighing, the CAM membership offered no particular motivation for the producers, compared to the flexibility of the traditional collectors and operators who, despite the disadvantages, maintain an organic and social link with producers.

Conclusion on impacts

165. **Evidences corroborates that IFAD-supported innovations have made satisfactory contributions to impacts**. However, this can only be judged as a high likelihood, based on a qualitative assessment, rather than quantitative. Production-oriented innovations have made important contributions to increasing agricultural productivity amongst beneficiary farmers. Productivity gains have in turn often contributed to improvements in food security, and household incomes and assets, although the results depend on other factors like market access and enabling governance factors. Innovations linked to social and human capital, together with the ones in PIPA, contributed to the development of strong capacities of farmers' organisations and to enhancing rural institutions and policies. **Positive impacts increase, when innovations within a macro domain (e.g. APVC) are complemented or supported by innovations of another macro domains (SEP and/or GP).** This confirms the need for bundling innovations to induce transformative results, unfortunately not much observed during field visits. Failures in achieving impact, usually were linked to difficulties with finance, poor targeting or excessively complex innovations for local organisations. Gaps between projects

[165] An innovation specific on policy relates to the Policy Lab established with IFAD supported project under the Ministry of Planning, which as still being piloted, at the time of the CLE, thus it is too early to draw a conclusion on its impact (see also the effectiveness section.).

sometimes led to loss in momentum, meaning innovations stalled or could not achieve the expected impact.

Key points on performance

- Most COSOPs and PDRs anticipate specific domains where innovations are needed, although not comprehensively and inconsistently. A framework for analysing the agricultural innovation system, its stakeholders, their linkages, outputs, constraints and enabling factors is lacking.
- IFAD-supported innovations in loan projects were found relevant to context and stakeholders in most cases. Innovations developed through grants were found relevant. But they are not systematically put into use by loan projects therefore not always contributing to project effectiveness.
- Many relevant knowledge management activities are conducted. Their effectiveness is constrained by their great number, as not helpful.
- No system approach is taken to assess agricultural innovation ex ante and ex post. The project monitoring is only partly adequate to monitor innovation processes, which extend beyond a single project framework.
- IFAD-supported innovations are in majority successful in addressing challenges of smallholder agriculture. Developing linkages among stakeholders of the agricultural innovation system at work around a project is performed in an ad hoc and incomplete manner.
- A majority of innovations contributed to impacts in the four domains. Innovations related to production, social and human capital have the highest contributions. Innovations to link APVC actors (4P approaches) are more effective when combined with innovations enabling access to financial inputs.
- Few negative impacts were identified. Failures in achieving impact usually were linked to difficulties with finance, poor targeting or excessively complex innovations for local organisations.

XIII. IFAD supported innovations for inclusiveness

166. This chapter relates to the inclusiveness and assesses the contribution of IFAD supported innovations to promote gender and youth, as well as marginalised groups. Analyses covered the support of innovations to gender equality and women's empowerment; innovations that focused on youth and their economic empowerment; and innovations supporting indigenous people or particularly disadvantaged groups.

A. Contribution of supported innovations to Gender Equality and Women's Empowerment

Overall trends of Gender Equality and Women's Empowerment (GEWE)

167. The three main objectives of the IFAD Policy on Gender (IFAD 2012) are: (i) promote economic empowerment to enable rural women and men to have equal opportunity to participate in, and benefit from, profitable economic activities: (ii) enable women and men to have equal voice and influence in rural institutions and organisations; and (iii) achieve a more equitable balance in workloads and in the sharing of economic and social benefits. In the IFAD Strategic Framework 2016-2025, gender equality is identified as one of the five core principles of engagement. However, despite emphasising the need to cultivate mechanisms for knowledge-sharing that help identify key issues, accelerate innovation and the scaling up of best practices – such as learning routes – the Gender Policy does not have a focus on innovation.[166]

168. The Evaluation Synthesis Report on Gender Equality and Women's Empowerment (ESR Gender, 2017) found that interventions that have a clear transformative purpose were found to be more effective for GEWE. Although this was considering interventions in general and not specifically innovations, **it is likely that, as per current CLE finding, bundling GEWE related innovations will lead to transformative change**. The ESR argued that an important transformative purpose is to break traditional gender roles and stereotypes through activities that can range from training, income generation or marketing, to participation in decision-making. This can also be part of social mobilisation and leadership strategies. The ES recommended that potential gender-sensitive innovations for scaling up need to be identified at the design stage and monitored throughout. This is aligned with the CLE finding on transformative innovations.

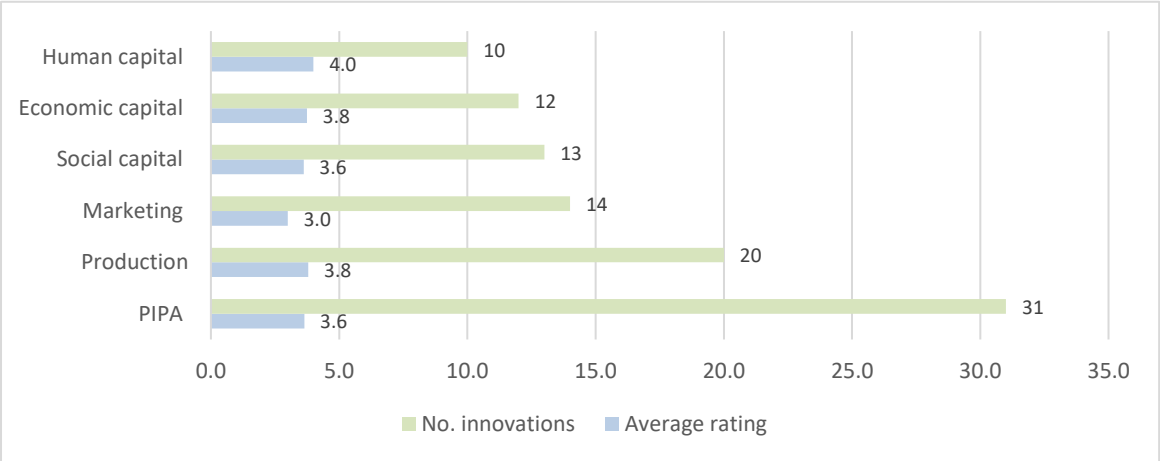
169. The CLE team rated the case study innovations according to their contribution to gender equality and women's empowerment. Results are presented in Figure 22. When considering the six domains with the greatest number of innovations, there is not a big difference in the average score. **SEP innovations come first, followed by production ones, most likely due to the fact that many women are actively involved in production activities.** An example of basic production having a strong impact on women was in Bangladesh, where domestication and production of mud crabs was linked to marketing and getting women involved in the VC. However, the ESR Gender noted that while simple production elements such as home gardens can help enhance women's role in household food production and income generation, they were less likely to be transformative. Previous findings corroborate this, as most of innovations assessed were standalone. In practice, **loan projects were found to be less likely to introduce targeted innovations benefitting women, while grants offer a more flexible way to address gender equality and women's empowerment**. This indicates the difficulties in convincing partner countries of the importance of prioritising gender within loan projects, and in particular, when introducing potentially riskier innovations. For example, in Kyrgyzstan it was noted that innovations introduced in the loan projects were relatively gender-neutral, while

[166] One action area of the policy aimed to continue to cultivate mechanisms for knowledge-sharing that help identify key issues, accelerate innovation and the scaling up of best practices – such as learning routes – and contribute to the evidence base for more effective policies and practices.

the grant activities were focused on activities for women (including public-private partnerships, and processing and marketing of fibres). The FoodSTART+ project grant (IFAD and CIP in four countries of south-east Asia) carried out an assessment of the gender dimensions of roots and tuber crop farming practices, but also had the flexibility go further, to prepare gender checklists and plans to share, as well as being an active participant in the IFAD Philippines network.

Figure 22

CLE rating of case study innovations contribution to gender promotion



Source: CLE case studies innovations (N=113; only the six main specific domains are reflected).

170. **Innovations supporting gender equality and women's empowerment include those that do not specifically target women or gender relations, but from which women have benefitted**, with increased assets or income. There are also some targeted innovations. While innovations might not be planned to target women, in most cases there was effective involvement of women and positive effects on gender equality.[167] There was no evidence of innovations that particularly targeted work with men on gender equality, though they are often involved (such as with the GALS work).

171. Topics regarding gender equality and women's empowerment were identified in the e-survey as being addressed by innovations in IFAD activities.[168] They are discussed in examples below and pertain to: economic empowerment, equality, voice influence and balanced workload.[169] In many countries it was difficult to get adequate gender disaggregated monitoring data, as the activities targeted households, rather than individuals. This is considered to be culturally appropriate but it does tend to mask the involvement of women. Few unintended effects of innovations were reported, other than increased workload.

Innovations promoting economic empowerment

172. Innovations promoting economic empowerment of women. **SEP related innovations contributed to empower women, complemented by PIPA related ones** (similar average rating with social capital). There is a risk that, when introducing new value chains or technologies, women will miss out due to infrastructure or financial

[167] The recent Synthesis study on technical innovations, found that very few technical innovations were targeting gender outcomes. Only 7.9 per cent of the innovations studied reported a positive impact on gender equality and women empowerment, while a small number (0.9 per cent) reported a negative impact. The positive impacts were seen under the topics of home garden development, and cassava and food processing; reduced drudgery in fuel, fodder and water collection; and in very few cases, the introduction of new technology or participation in meetings led to more voice and greater status for women at household and community. One example of a negative impact on women was the introduction of cash crops that increased women's workload. (IFAD, 2019).

[168] See Figure E6, Annex V.

[169] Some partners may be useful to leverage IFAD's work with innovations and gender and bring them to scale. These include UN Women and international and national NGOs. However, this is usually problematic via loans, as governments are loathe to spend outside of government networks (and particularly on other UN agencies).

requirements. In addition, if value chains become successful, there is a risk that men will take over (or that larger enterprises will become involved, with largely male leadership). Typically, rural finance activities such as savings and credit schemes are focused on women, however, these are not necessarily particularly innovative. Examples of more innovative activities in Peru that particularly target women, included introducing rural micro life insurance and financial education, and exploring very new ideas for remote areas, such as electronic transfers and financial services using credit cards. In Bangladesh, the land titling process has placed the woman's name first on joint titles. This has promoted women's economic empowerment and confidence.

Innovations improving equality of voice and influence

173. In Bangladesh, the systematic involvement of destitute women in construction, providing them with training and contracting them for work with the Labour Constructing Societies (LCS), has strengthened both their economic and social status.[170] In addition, linked to the LCS, Women's Market Sections were installed in several community markets, offering permanent shops with favourable rent agreements in a safe environment. Remoteness (permanent and seasonal) is a main issue in Bangladesh and the low involvement of women outside the homestead both restrict the expansion of productive activities. In that context however, the Impact Assessment of IFAD supported Coastal Climate Resilient Infrastructure Project (CCRIP) in Bangladesh (IFAD-Research and Impact Assessment Division, 2019) found that although qualitative results were positive, there was a significant difference in impacts between groups of different women. There was a significant positive effect on women's autonomous income generation and their decision-making involvement for family decisions, agricultural production and sales for some groups, but this was not seen for others. This indicates that the sociocultural constraints on some women participants inhibited their voice, despite project supports.[171]

174. In particular, **IFAD has developed household methodologies (HHMs), as an innovative approach to promote gender equality and livelihoods development** (currently 50 IFAD projects across the five regions apply HHMs in some form, IFAD 2019a). HHMs are participatory approaches used to promote equitable intra-household relations, fair division of labour and shared decision-making processes. HHM refers to two different approaches. GALS methodology and household mentoring have particularly addressed unequal gender relations within the families. The second HHM approach is presented under the Marginalised groups section.

175. The GALS is widely used, since its beginning with a small grant to Oxfam Novib in 2009. It has been promoted as a key tool from IFAD's part within the Rural Women's Economic Empowerment Joint Programme (RWEE). A facilitator works at household level to support the family (all members) to develop a shared vision for their future and analyses their current situation – including gender inequalities – in order to address current constraints (see Box 11). Of the case study countries, the GALS methodology was highlighted in Kyrgyzstan and Rwanda. **The CLE identified GALS among one of the few transformative innovations.**

[170] The ESR Gender noted that it reported to have improved their status within the family, as they received more respect for their opinions and became more involved in discussions and decision-making.
[171] The Impact Assessment found that "some women were forbidden from joining the LCS by their husbands, and that after the work with CCRIP had finished, female members had difficulty in obtaining additional employment, and when they did find work their wages were often lower than men's" (p.46).

Box 11

Gender Action Learning System (GALS): a transformative innovation

The Rural Women's Economic Empowerment programme is implemented as a joint programme (JP) by FAO, UN Women, WFP and IFAD. Within RWEE, IFAD has supported the GALS methodology (which began with an IFAD grant to Oxfam-Novib in Uganda). GALS begins with workshops to train 'change catalysts' or 'champions' at community level – these can be women or men. They then move to household level to facilitate discussions and visioning at individual and household level, and preparation of an action plan. Local NGOs, together with participants, have also modified the GALS methodology to better fit local conditions. GALS challenges cultural norms, but it also must fit with the community. Staff need to engage with the leadership in the community to discuss the changes that might come up, in order to limit any backlash. They can apply two approaches – one for the poorest households, using mentoring, hygiene, etc. – and one for slightly stronger households, to discuss possible business plans. GALS can be difficult to scale up, as it is working very locally. However, some GALS participants speak of transformations in their personal lives, starting a chain towards significant socio-economic and political impacts.

In Kyrgyzstan, women report that as a consequence of using GALS, they have a changed role within the family. They feel empowered and the decision-making within the family has become more balanced, with more respect from their mother-in-law and husband. They are also trusted to go out to work, rather than only staying at home. The women have also been empowered politically. Within the community they have become more active, lobbying the local self-governance office on issues and even standing for election in some cases. In Rwanda, benefits of GALS have been empowerment of women through their increased participation in farmer organisations and activities supported by the Project. The IFAD Office in Guatemala won an award recently for their work with gender, especially with the GALS methodology.[172]

Source: CLE.

176. **The household methodologies (both GALS and more general HHM) were useful SEP innovations in most of the countries studied**, however the disadvantage of the HHMs is the time, staff and budget required to work at household level, rather than at group or community level. This requires the commitment of the IFAD team at country level and the government or NGO stakeholders. In several countries it was apparent that women do not benefit significantly from collective infrastructure grants, such as irrigation small schemes rehabilitation for innovations for climate resilience (for instance, in several projects in Moldova).

Innovations supporting more balanced workload and benefits sharing for women

177. The ESR Gender found that activities or innovations that relieved drudgery contributed to gender impacts, as they free up women's time for income generation or community participation. The CLE fund a few examples of this. The introduction of time-saving equipment for women in El Salvador, such as bicycles and washing machines, within a joint project with UN Women, reduced drudgery for women. The bicycle itself, for instance, isn't innovative. It is the use of the bicycle to address the constraint of lack of time of the woman (thus addressing a human capital issue). In Rwanda, the flexi biogas innovation was appreciated for easing life of women at household level. Cooking with biogas instead of firewood or coal reduced the time spent collecting firewood and reduced the amount of smoke and health damaging particles. This had a beneficial effect on the health status of the households concerned, especially women and children. A double-hob gas cooker was provided as part of the biogas kit. Rocket stoves introduced in Malawi had similar benefits for women and girls.

[172] In Kyrgyzstan, in 2018 the local NGO implementing the GALS methodology has also developed and piloted the Business Action Learning for Innovation (BALI) methodology. BALI is facilitated by the same community champions as GALS. BALI promotes business capacities, management and marketing skills, and financial skills of rural women. It aims to promote women's (and low income men's) business innovations and to diversify them from the typical range of activities considered 'women's business'. They are supported to plan their business and monitor progress, and network with each other. However, this is a very early innovation and it isn't possible yet to say if it will 'stick'.

Context specific issues

178. With regard to the current evaluation, **the influence of innovations on gender equality issues was found to be highly dependent on local culture**. For instance, in Tunisia, social conservatism greatly limited the participation of women and youth in the decision-making processes of the projects. Despite efforts to involve them in income generating activities and training, the results were negligible; and technical innovation did not lead to any fundamental change in gender balance. On the other hand, IFAD innovations have been very positive in some countries. The Philippines is a country with strong gender results in global rankings, yet the consensus is that more work is needed. The Philippines is the only country globally with an IFAD Gender Network, which has been a successful innovation for gender information sharing and learning, and policy engagement. Participants from government, research institutes, projects, IFAD and CSOs meet regularly to share resources and discuss topics. They also have an annual visit to one project, with visitors paying for their own time and travel costs. This responds to the 2012 Gender Policy under Action area 4 (Gender and diversity balance in IFAD), which requires documentation of innovative approaches and lessons learned at programme/project level.

Knowledge management in relation to gender

179. Knowledge sharing in gender is also a successful innovation in Uruguay. Already towards the end of the project, in 2010 the Uruguay Rural Project (PUR) represented the Ministry of Livestock, Agriculture and Fisheries in the Regional Program for Strengthening Gender Equality Policies in MERCOSUR, and an agreement was made to strengthen the social base of the Rural Women's Association of Uruguay. After the conclusion of the Uruguay Rural Project, the Ministry of Livestock, Agriculture and Fisheries continues with these initiatives to support the empowerment of women led by the Uruguay Rural Project.

180. In Senegal a gender-specific innovation is the creation of 'Observatoire Régional Genre de Matam'. The gender observatory has a watchdog and alert role on gender issues in development programs in the region.[173] The advocacy of the Gender Observatory allowed groups of women and young people from deprived areas with high emigration to (i) benefit from drip irrigation systems; (ii) master the techniques; (iii) generate very significant income; and (iv) employ young farmers. The introduction of the drip irrigation system lightens the workload of women and young people, and has proved a good way to channel remittances generated by emigrants.

Conclusion on gender and women's empowerment

181. With regard to gender, **IFAD supported innovations were satisfactory**. Although few innovations specifically targeted women, many were useful to address challenges faced by the latter. **Innovations in SEP domain are critical for GEWE, complemented by PIPA innovations, reflecting once more the importance of the latter as enabling factors.** Innovations focusing on women were scattered in general, with the exception of GALS in the RWEE, a bundle of small innovations, leading to transformative change. Context is critical, as gender considerations vary considerably between countries and for this reason, gender-linked innovations have varying effects in different settings. A bundle of innovations is therefore necessary to ensure good impact for women.

B. Contribution of innovations to youth promotion

Overall trend

182. Youth is a complicated issue to address in many countries. While a large proportion of the population of developing countries are under 25 years old, most young persons don't have access to their own land or resources, and often lack skills. This has led to

[173] The members of the gender observatories are representatives of women, youth, people with disabilities, neighbourhood groups, health workers, school principals, and representatives of technical services, programs and NGOs at the local level.

migration of youth to the cities, searching for work outside of agriculture (which is often burdened with perceptions of being dirty, hard labour or old-fashioned). In practice, it is often the most innovative or entrepreneurial youth who migrate away from farming. In the loan projects in particular, this can limit the involvement of youth.

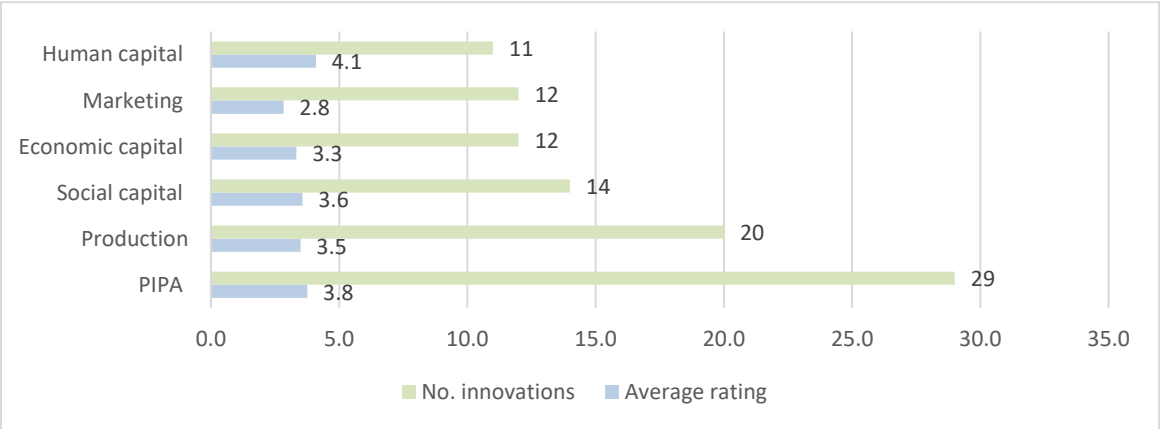
183. IFAD's new Rural Youth Action Plan emphasises the importance of grants and resources for innovation[174] (IFAD, 2019b). However, this plan was not used within the period evaluated. Despite this, attention has been given to incorporating youth in innovations, especially grants. **Some countries have paid more attention to youth, attempting to keep them within agriculture.** For instance, the CLE noted that both loans and grants in El Salvador have given particular attention to youth, particularly with regard to innovations in the area of organisational practices and human and social capital. However, even there a risk exists that youth will migrate outside of the country, searching for income. A similar example was seen in Cameroon (see below).

184. The Evaluation Synthesis Report Rural Youth (2014) noted that IFAD sometimes uses grants as strategic tools to promote innovations for youth. An example was the Global Youth Innovation Network (GYIN), a network led by youth, for youth, that is supported by IFAD with grant funding. The Network arose from the IFAD Governing Council meeting of 2011 and the Global Youth Innovation Workshop-Fair "Youth Entrepreneurs – Agents of Change" which explored how best to support and promote entrepreneurship and innovative ideas of young people in rural areas. This support for the GYIN is an innovative process in itself, along with support for the initiation and continuing work of the organisations PROCASUR and ACUA.

185. The CLE ratings of innovations contribution to youth and indigenous groups were assessed together (Figure 23). Among the top six domains, **innovations in the domains of human capital have the greatest impact, followed by PIPA**. These results are quite similar to the ones with women, illustrating once more the complementarity of PIPA innovations. On the other side, economic capital and marketing (in particular) related innovations performed less, clearly reflecting difficulties of youths to have access to financial inputs and to markets.

Figure 23

CLE rating of case study innovations contribution to youth promotion



Source: CLE case studies innovations (N=111; only the six main specific domains are reflected).

[174] Strategic directions comprise: (i) business development services; (ii) investments in mechanization and the use of modern technologies, including information and communications technology; (iii) vocational and technical training; (iv) actions targeting youth including credit/equity financing for youth-owned enterprises and start-ups, innovative use of migrants' remittances to spur investment in rural youth, agricultural risk management and involving youth as stakeholders in farmers organizations, youth associations and cooperatives; and (v) engagement with governments and youth for conducive policy frameworks.

186. **Insights from the e-survey.** Of the 73 IFAD staff respondents, only 18 per cent considered youth to be among the top three issues, to promote. Of 167 project staff respondents, only 23 per cent rated youth aspects among the top three issues. With regard to the types of innovations supported for youth, IFAD staff and project staff responses were similar. They considered that the most common types of IFAD-supported innovations for youth were increased enterprises for youth, and better capacity building for youth, while multilateral / grant partner responses were a little different.[175]

Innovations addressing the promotion of youths

187. El Salvador was noted for the strong work at institutionalising youth work at policy level. A youth network was supported from 2012, within the loan project PRODEMORO (and later, they were supported by PRODEMOR Central and Amanecer Rural). The projects worked locally to train the youth, building leadership skills, planning, organisations strengthening, and then began to legalise the organisations. The National Institute of Youth (INJUVE) has now been established within government, as a result. The projects also supported the formation of networks in three regions and then formed a national network of rural youth (AREJURES). Interviewed stakeholders were clear that no other financing organisation in El Salvador has given such significant and long term support to youth work than IFAD.

188. **Information and Communication Technologies (ICT) are an area considered to be of particular interest for youth, and related technologies can be useful to keep them involved in agriculture.** ICT can be a tool to link youth to financial support, information sharing or capacity building; or it can be an end in itself. Examples include an innovation involving youth nominated by IFAD management, the Baby Loan platform – an application developed by Malian migrants in France to make small online loans to rural micro-entrepreneurs in Mali (within the Rural Youth Vocational Training, Employment and Entrepreneurship Support Project) (IFAD, 2017).

189. In Lima, a joint effort between LAC Division and the Sustainable Production, Markets and Institutions Division (PMI) of IFAD devised a Hackathon (the first of its kind within the institution) in 2019. The competition gathered teams of programmers and other professionals to create technological solutions to specific problems – in this case, to generate a technological solution to link small rural farmers with formal value chains, specifically with large food chains and franchises, giving both parties a clear channel for orders, sales, logistics, delivery and payment for quality fresh produce. From an initial 29 applicant groups, seven teams competed. IFAD organised the event with sponsorship and assistance of private sector actors, in the framework of IFAD's new private sector strategy. The main private sector sponsor (Subway) will also provide the framework on which the winning team will test its idea. It is anticipated that the new technological platform will promote the economic empowerment of farmers, greater access to markets, improvement in product quality and fair prices.

190. Often **youth require a combination of supports, including finance and capacity building**. Incubation units can be a good entry point. In Cameroon, IFAD has supported youth incubation and promotion within the Youth Agro-pastoral Entrepreneurship Programme. This innovation was developed to address challenges related to youth unemployment and lack of economic opportunities, and to ensure access of youth to midterm credits. **The incubation approach is effective to enable youths to identify their project idea, reorienting training to be more practical, and supporting the development of their business plan.** Beneficiaries interviewed reported positive changes in terms of: income generation through activities; improved technical and management capabilities; better capability to mitigate climate change burdens; improved morale and family wellbeing; job creation

[175] See Figure E7, Annex V.

by employing other youths; and increased social role and responsibility of the young entrepreneur. But only 668 enterprises[176] have been created and supported at the time of the CLE, four years after the project started. **The main challenge remains the reluctance of MFIs to remit credit to young entrepreneurs, as the majority do not have collateral to guarantee their loans.**

191. In Sudan, IFAD began a Young Professionals programme, which has built the human capital of youth. **It has been instrumental in advancing project implementation, especially in mobilising communities, raising awareness on gender inclusion and increasing women's participation.** In Moldova, IFAD opened a window for youth to access credit and non-financial services in 2010, improving financial inclusion. This window has now been expanded to retain youth talents in rural areas. Matching grants are tied to a loan, but only disbursed after the young entrepreneur has successfully purchased his or her assets and begun to use them. The grant improves the cash flow and reduces risks for loan repayment.

Conclusion on youth promotion

192. Based on the case studies analyses and evidence, **IFAD' support to innovation directed to youth promotion is moderately satisfactory**. Some innovations were very recent and have not yet shown results, while others are facing challenges. Human capital innovations were very effective, followed by PIPA ones. Unfortunately, **the mixed success of innovations in economic capital and marketing reduced the overall performance of IFAD's supported innovations directed to youth promotion.** This is the consequence of the fact that youths do not have resources and collateral to access credit. In addition, IFAD-supported projects focus more on capacity building and institutional development.

C. Innovations for marginalised groups and the very poor

193. Indigenous groups often live in marginal areas in many countries, ranging from remote uplands to tropical forest areas, with complex environmental issues. They may face economic, social, political and cultural marginalisation. For this reason, IFAD considers it important to design targeted interventions, and to consider nine fundamental principles: (i) cultural heritage and identity as assets; (ii) free, prior and informed consent; (iii) community-driven development; (iv) land, territories and resources; (v) indigenous peoples' knowledge; (vi) environmental issues and climate change; (vii) access to markets; (viii) empowerment; and (ix) gender equality (IFAD, 2009). However, while the IFAD Policy for Engagement of Indigenous Peoples makes reference to IFAD's need to support indigenous peoples in enhancing the resilience of the ecosystems with innovative adaptation measures, it is not particularly specific on the role of innovations.[177]

Indigenous groups

194. For instance, Fundación ACUA – the group promoting the rights of Afro-descendant populations in the region. The Foundation began with grants from IFAD; and has now had several projects, working in different countries in Latin America (including Colombia, Ecuador and Peru). Their main objective is to focus on afro-descendant populations. Topics vary according to the country – in some they are looking at cultural expression – in others it is focused on territory and environment, including the landscape approach, links to land, afro-descendent business development and resources mobilisation, influencing the public agenda, intellectual property registration, mapping resources, and food and music.

195. Another successful support for indigenous organisations from IFAD at global level has been the development of IPAF. **The IPAF is an innovative financial instrument in itself**, established in 2006, which facilitates direct partnerships among indigenous

[176] Very low, considering the needs.
[177] The Evaluation Synthesis Report on IFAD's engagement with Indigenous Peoples (2015) recommended that IFAD should promote innovations targeting indigenous peoples that could be scaled up in investment projects.

peoples' communities, grassroots organisations and NGOs working with indigenous peoples globally. It has served as a model for other donors and is facilitating the growing role of indigenous peoples in funds such as the Green Climate Fund. The Facility is owned by indigenous peoples. IPAF runs calls for proposals for small grants, both freestanding and linked to loan projects, with a particular focus on innovative approaches, ideas and processes. **IFAD has also used the IPAF experiences to improve indigenous sensitivity and lessons on what works in other loan projects** (although further work is needed) (IFAD, 2019e).

196. In Nepal, care has been taken to ensure proportional ethnic and caste representation among project participants and group leadership – for instance, in the Leasehold Forestry project. The country evaluation reported strong gender and ethnic inclusion and empowerment, and women members showed a high degree of ownership and interest in the programme.[178]

197. Indigenous issues have been a key focus of innovations in many projects in the Philippines (touching on the majority of the principals in the IFAD Indigenous policy). This has included innovations in Indigenous People's leadership strengthening, the covenant approach to natural resources management, use of participatory 3D mapping tools to identify lands, and strengthening indigenous land ownership (see Box 12, describing one aspect).

Box 12

Strengthening and revitalising indigenous leadership

One of the loan projects in the Philippines, NMCIREMP, worked with 17 indigenous communities belonging to six tribes to revitalise their leadership. It had become clear that there was a need to identify the true leaders within the communities, following years of political interference. NMCIREMP mobilised young indigenous people with professional education and linked them with selected elders ('keepers of traditional knowledge') to team up as co-facilitators to support indigenous development, reconstruct tribal identity and revitalise indigenous leadership. Traditional processes were used to identify the genuine customary law holders (257). IP professionals sought their permission to put into writing the oral traditions and customary laws, and provided an interface between traditional and mainstream ways of working. Tribal leaders were trained and capacitated and later approximately 100 became members of the Local Government Units – under the local government units system there are committees where they can represent their community. This ensures that IPs are recognised as partners in the development process, and that their interests and concerns are addressed. The young professionals who worked with IP leaders to revitalise the culture and leadership of their tribes, are still actively involved as tribal leaders. Learning sites/schools (Schools for Indigenous Knowledge Arts and Traditions) were also established to train the IPs (youth and adults) and share indigenous culture and knowledge.

Source: CLE.

Poor and marginalised groups

198. **There is a risk with some innovations that very poor groups in the community will be missed.** For instance, some market-linked innovations favour those with more land and entrepreneurialism. Wealth mapping or other tools are important for planning and ensuring equity (for instance, Nepal WUPAP). Technological innovations may require land, or strong literacy and education. The successful innovation of community-based competitions (concursos) for grant funding introduced in Peru, and replicated in many projects, runs this risk. The poorest members of the community may not have the skills to prepare business plans, and also could find it difficult to collect the counterpart funds. For instance, in PSSA, the groups competing for funds have to provide a 20 per cent cash contribution. This has been a struggle for some – but most respondents considered that this was important

[178] Also, many innovations listed in the projects in Peru, are benefitting indigenous peoples. However, they are not necessarily designed specifically for these groups.

for ensuring commitment. In addition, the evidence from the field visit, and from project reports (the recent collection of 'Stories of Value Creation'), suggests that groups supported some members who couldn't pay cash, in return for extra work in-kind. Not everyone is entrepreneurial, and some would prefer employment only (which could be a downstream outcome of some of the projects).

199. **The second innovative household methodology approach**, **household mentoring, is particularly effective as a mechanism for social inclusion and a graduation model for ultra-poor households.** This has been applied in Malawi (a case study country) and Uganda (IFAD 2019a). Mentors from the local community are trained and then befriend poorer households that are beyond the reach of usual community development initiatives. In Malawi, the IRLADP piloted used of the individual household approach, and this was scaled up by SAPP, proving particularly successful in empowering women, and in addressing health issues such as HIV and AIDS.

Conclusion on indigenous and marginalised groups

200. Few innovations have targeted indigenous groups and the very poor, but those that have, were successful overall. Some countries have introduced highly innovative ideas for working with indigenous peoples or the very poor. These should be better shared globally. Most successful innovations for the capabilities of the poorest farmers were related to production and SEP, followed by PIPA. **The CLE assesses performance of IFAD-supported innovations to promote indigenous and marginalised groups is satisfactory.**

Key points regarding inclusiveness

- In culturally conservative societies, innovations targeting gender equality and women's empowerment may still struggle to achieve impact.
- Not all innovations can and should consider all groups, however, potential impacts should be considered. For instance, gender-sensitive reviews of innovations should be carried out to ensure there are no negative impacts and that the activity is as inclusive as possible, and not gender blind.
- Household-level methodologies appear to be a useful innovation for reaching disadvantaged groups, particularly women.
- Grants have proved more flexible than loans, when considering innovations focused on marginalised groups or women. However, a committed CPM is also an important element for getting acceptance. While IFAD staff and partners are giving some consideration to inclusion issues when developing innovations, more focus is needed.
- Innovations targeting youth are providing them opportunities within the agri-business sector, not only on farm. To allow youth to enter SMEs within agri-food APVCs, capacity building is a key requirement.

XIV. Innovation contribution to NRM and adaptation to climate change

201. This chapter assess the extent to which IFAD supported innovations contributed to address challenges related to natural resources management (NRM) and CC. As most of the smallholders rely heavily on natural resources, NRM is a major issue for IFAD. In this specific area, several types of innovations in relation to production, social, regulation and policy play a major role in the degradation or rehabilitation processes.

202. NRM is also a global issue in a context, where resilience to climate change and adaptation to a growing population require a healthy environment supporting rural transformation.[179] Therefore, IFAD has given attention to the topic through its policies (see Box 13).

Box 13

IFAD core principles for environment and natural resources management

The Environment and Natural Resource Management Policy of 2012 states ten core principles for environment and natural resource management in projects. It recognises the importance of natural resource asset base for poor people and the damaging effects of some of the agricultural practices on these resources, and it advocates for 'multiple benefit' landscape approaches that reduce poverty, build resilience, increase food security, mitigate greenhouse gas emissions and promote sustainable agricultural intensification. Since 2015, SECAP outline how IFAD addresses the social, environmental and climate impacts associated with its projects and programmes. Such procedures are mandatory for all investments at 7 stages including design; projects are assessed according to their environmental, social and climate risks and to their climate vulnerability. Those with a moderate score must attest the planning of additional measures (SECAP review note, environmental and social management plan); those with a high score must conduct an Environmental and Social Impact Assessment at design. In addition, a SECAP preparatory study is conducted when a COSOP is developed. SECAP procedures require a systemic analysis, for example to identify indirect effects, cumulative effects of incremental outcomes and potential multiple benefits

Source: CLE.

203. NRM and CC are interlinked, for example a lower level of the water table in peatland makes it susceptible to fire and creates mazes, which causes significant carbon emission as well as health issues for inhabitants. Some of the innovations promoted enhance farming systems adaptation capacity to climate change but very few[180] address the issue at scales where sizable effects on climate parameter (CO_2 emissions) can be expected.

A. IFAD supported innovations affecting NRM

204. Previous analyses of the PoLG showed few projects that have NRM as a main domain of intervention (5.3 per cent of the large grants and 7.9 per cent of the loan projects). The analysis of case studies innovations showed that **most innovations in relation to production also have had an influence on NRM.** Nevertheless, one should acknowledge that the assessment of the effect of an innovation on NRM is not always straightforward, as both positive and negative outcomes may coexist. Market improvement may encourage smallholders to increase their cultivated areas while decreasing forest land, or to use inputs beyond sound thresholds. Alternatively, it may improve incomes and allow farmers to quit exploitative farming practices and adopt sustainable ones. In view of this fact, the CLE attempted to assess the extent to which innovations affected natural ecosystems management, both terrestrial and water

[179] Environment and climate change issues are wider scale issues and smallholders are in many cases not able to tackle the causes and have to adjust and find adaptive solutions rather than mitigating ones. Direct consequences of climate change in term of temperature, water imbalance and drought, occurrence of erratic events such as typhoons, storms, destructive wind and fire outbreaks differ from country to country and require context specific solution design.
[180] None as far as the case studies innovations are concerned.

based and cultivated farmland, and then analysed the approaches developed by IFAD to promote and assess innovation in NRM.

Incidence of innovations on ecosystem management

205. **Several projects intend to develop win-win solutions for the management of marine and inland waters**, developing solutions that sustainably manage the biodiversity, restore habitats and allow for greater harvests. Water-based interventions and the related innovations have been developed in the APR regions with its numerous and densely populated islands and inland waters. The expertise gained there can be of use in other regions as well. Again this requires care, as for example, developing value chains of wild fish and shellfish may lift poor fishers out of poverty but at the same time deplete the stocks. In some specific cases, protecting the natural biodiversity may imply the domestication of wild species in order to prevent the destruction of the wild stocks while promoting production, processing and marketing.[181] The relatively new Baywide alliance management approach, in the Philippines, brings together several bay-side councils and community actors to protect and co-manage a defined coastal area. Some of the activities have included mangrove restoration and declaration and guarding of protected coastal waters. This may even lead to an improvement of the greater environment, as councils are encouraged to deal with pollution from leaking toilets that are threatening the marine and fish farming environments.

206. There are also large-scale issues concerning the **management of terrestrial ecosystems, such as peatlands, tropical forests or arid steppes.** Some grants and loan projects develop solutions at country or regional level (such as PES/RES). How these will impact remains to be demonstrated. Rates of destruction seem to be more rapid than the positive impacts of innovative measures. As these resources are often open access or common pool resources, effective innovations are often community-based management initiatives developing sets of rules for users, combined with investments in water or connectivity infrastructures. For example, pasture conservation in the arid steppes of Kyrgyzstan or watershed management in Malawi both relied on such principles, with investments in water for respectively herds and crop irrigation and common rules against soil erosion and degradation of the vegetation cover.[182] In the Philippines, IFAD has supported the introduction and replication of the Covenant approach, which uses traditional systems in place of legal contracts, to effectively engage indigenous communities in reforestation and natural resource management. It recognises the role of indigenous communities as the protector and manager of watersheds in their traditional domains, and uses many indigenous land management practices. Activities to strengthen indigenous land rights - such as Covenant approach, and the issuance of Certificate of Ancestral Domain (CATI) for land titling for indigenous peoples – are expected to improve environmental protection and management. For instance, titling can give confidence to plant longer-term, slower growing crops such as abaca palm or tree species.

207. In general, **IFAD has supported over the past a wealth of innovative agricultural production practices, which also contribute to sustainable NRM**: soil and water conservation, small scale irrigation, agroforestry, intensive farm and pond systems, and also practices preserving environment such as integrated pest management (IPM) or organic farming.

208. In farming systems, several grants have been provided to CGIARs for breeding purposes (rice and tubers especially). In parallel a significant number of projects

[181] In the case of the mud crab in Bangladesh, fishers were used to fatten crablets but did not know how to hatch them. Several devices from other countries were pilot-tested, while marketing for export was being promoted. In other cases, management plans of the wild resources are designed in a participatory manner, with rules to be applied to community users and exclusion of non-members, as in the case of sea weed harvest in Indonesia. Rule enforcement requires monitoring and control by community members. Such initiatives have been found in inland waters of Bangladesh and in the Philippines in the bay wide approach. The security of water rights is a major constraint to the sustainability of the fisher communities' efforts.

[182] See further details in Table A6, Annex IV.

invest in small scale irrigation schemes and water conservation and storage. With the CURE regional grant in the APR for example, IRRI is breeding rice varieties together with APR farmers to combat the challenges of difficult environments, such as too much or too little water, high salinity, etc. In addition, community-based seed systems build on community practices, where farmers (in groups or in a community) produce, save (including storing at community level), and exchange or sell good quality (even certified) seeds, especially in times of disaster or seed shortages. Such systems support farmer resilience to disasters and climate change by ensuring their secure access to seeds. **In a few cases, introduction of new and more productive varieties may result in the loss of the traditional cultivars and the erosion of the genetic variability of the species**.

209. **Soil conservation innovations, including no tillage, as well as water saving technologies, are cropping practices that also belong to NRM**. In Moldovan large-scale open field farms, cultivation practices with recurrent interventions on the same plot each season were damaging the soils. Pioneer farmers experimented with no tillage farming practices. IFAD projects supported them in their pilot-testing and peer training efforts, and this contributed to a significant expansion of conservation farming among large farms. In orchards, tree plantation in association with grassland cover for soil preservation has also been promoted and combined with water-saving irrigation. **All these practices reduce the climatic risk of crop failure as well, and after a few years, reduce the costs and improve the yields.** [183]

210. **Irrigation and water conservation in farming are important NRM issues.** Irrigation can be damaging for the soil when poorly applied and competition for scarce water is also an issue. These are also areas of effective innovations. In Sierra Leone, the quality and efficiency of water management structures such as dams, head-ponds and peripheral-ponds had demonstrated serious inadequacies in design and materials used, and many were no longer operational. The beneficiaries often did not avail of the right knowledge and/or materials for repair and had to continue their activities as they did before the project. In repairing the infrastructures, room was created for innovation in lowland rice, contributing to its expansion. In Rwanda, the introduction of more sophisticated irrigation systems reduced soil erosion and prevented community conflicts through improved water control. In Peru, groups have competed for funds to construct infiltration ditches, geo-membrane water reservoir, or other types of water catchment or storage. This has improved the water recharge and provided water for the irrigation of vegetables or for the recovery of pastures for livestock.[184]

Innovations for NRM

211. **Innovations may display multiple benefits, including on NRM, with a potential to be transformative, if bundled.** In Rwanda for example, farmers have energy for their house by producing biogas with the cow dung as well as organic manure for their small plot to improve soil fertility and crop productivity. All the farmers who benefited from a (flexi) biogas system (complementary innovation) were given a milk cow as part of the Pass-on-a-Cow scheme (initial innovation) and had to pass on the first female born as a way of repayment, thus creating a solidarity chain or family of farmers who benefited from the first cow given; a cow insurance scheme (third innovation) has also been promoted.[185] With the introduction of biogas, the reduction in firewood use was estimated to amount to one tonne per person per year. For farmers who can increase their cow herds in a significant way (meaning solving

[183] See further details in Table A7, Annex IV.
[184] More details are in Table A8, Annex IV. Not all conservation and NRM farming practices are easy to adopt. Some reduce farmer incomes for a period before yielding positive benefits (conservation farming, agroforestry), others improve the food product quality but reduce the yield in contexts where food quality may not be valued in monetary terms (Integrated Pest Management).
[185] The “flexi biogas” system is an innovation, which started with an IMI supported project, and spread across the region. See http://www.ifad.org/pub/thematic/biogas.pdf

the fodder and marketing problems, for example), such an innovation bundle may have a transformative character.

212. Apart from a few grants financing R&D of production related innovations, **most NRM innovations supported by IFAD are transferred from other settings, adjusted then disseminated in loan projects** where they are also combined with specific institutional settings (PIPA related innovations) such as community-based management committees, and shared if necessary at a higher-level. Transfer may already require a significant amount of knowledge sharing and additional pilot-testing in the project context. In some unique contexts, transfer cannot even be envisaged. In Bangladesh for example, in the lower part of the delta, erosion of the riverbanks in some locations is accompanied by accretion in others. Accreted land (charland) has been stabilised through social forestry measures, partly protected against erosion and resettled by ultra-poor landless people. Innovative agroforestry measures are developed for intensive use of these extremely fertile soils. This represents a large scale environmental and social intervention. Protection from erosion requires specific hydrological and engineering expertise (in fact, parts of the investments in the former project phase have already been destroyed).[186]

213. **Since 2015, major progress has been made with IFAD to better anticipate potential outcomes of projects on NRM and the environment**. In Malawi for example, the TRADE APVC project conducted a SECAP assessment in 2019, also involving officers of the Ministry for the Environment. It identified in a systematic way all subprojects, which might have negative impacts, in order to design mitigation measures. The assessment was much more comprehensive than the 2015 assessment of the irrigation PRIDE project. Drainage and taking wetlands into cultivation were assessed as the most negative potential impacts. Restoration and mitigation measures were planned over five years, as well as their monitoring. IFAD guidance statements encourage assessments at higher system levels, something which is not performed in usual cost-benefit analysis.

B. IFAD supported innovations for adaptation to CC

214. Climate change affects most countries in diverse ways, through higher risks of drought, flood, bush fires, storms, and other erratic events, and through structural changes in cultivation patterns (seasonal distribution of rainfall, floods and temperatures). **Smallholders, the poorest in particular, living in remote places and depending on difficult environments are the most affected by climate change.** Out of 124 SECAP assessments, 15.3 per cent of the project situations are facing high climatic risks, and 83.8 per cent are at moderate risk (IFAD, 2018).

215. The PoLG analyses, which covered all projects within the period 2009-2019, have revealed that only few projects have climate change (CC) and other environmental issues as a main domain of intervention (12.3 per cent of the large grants and 8.7 per cent of the loan projects). Very few innovations in the CLE case studies have adaptation to climate change and other environmental issues as their main domain either, but most of the production innovations are said to positively affect these issues[187].

216. Different types of projects and innovations can be found in the area of climate change. **A number of projects try to capture the phenomena related to climate change by innovating in information system tools at different levels.** They

[186] Assessments of such large-scale complex impacts over time are difficult without additional resources. They can better be funded by grants or in-loan grants. Grants are also easier to use for scientific assessments of innovation outcomes and impacts on NRM status, as well as on resource users' livelihoods. These aspects have been undeveloped in the past.
[187] New trends based on recent project validation reveal a higher focus on climate change. The full IFAD PoLG climate finance results for 2019 across 38 projects shows that 34% of IFAD's total investments in 2019 count as climate finance; (see Document IFAD12/1/R.2, https://webapps.ifad.org/members/repl/12/01/docs/IFAD12-1-R-2.pdf). New IFAD instruments such as the Adaptation for Smallholder Agriculture Programme launched in 2012 to channel climate and environmental finance towards needs begin to display innovative results for example in digitalised climate services, renewable energy, participatory adaptation planning approaches, but these are diluted when the whole portfolio is assessed.

may use earth observation and geographic information system for planning and monitoring purposes, for early warning systems and to manage natural resources. For example, a grant is assessing "Earth Observation Technologies for Well-informed Decisions in Transforming Smallholder Agriculture in West and Central Africa". In loan projects as well, a number of information systems are being developed with user friendly devices for disseminating the information. In Bangladesh, a flood warning system has been developed, which informs inhabitants of flood prone areas of the occurrence and severity of floods 2-3 days in advance. This gives them the opportunity to gather livestock, belongings and people on elevated shelter places and to harvest their rice in time. IFAD's recently launched geospatial database, GeoNode, will systematically integrate geospatial information in corporate operational systems. It also supports the analysis of climatic data and the use of satellite-based information.

217. **Protective innovative measures are also put in place in storm and flood prone areas.** Bangladesh has a strong expertise in introducing different types of flood protection walls, elevated shelter places and elevated schools, as well as in the building of infrastructures, which can remain under water half of the year. Understanding the issue of climate change and how it is affecting agriculture and livelihoods is also an actual concern in several countries. A project in El Salvador (Amanecer Rural) supported studies on resilience and adaptability to climate change – trying to measure climate parameters at local level, such as rainfall, temperature, etc. and studying what happened with production. They used local knowledge combined with scientific information. This was particularly interesting for youth.

218. In many countries affected by elevated to temperatures and changes in rainfall patterns, **adaptation is also sought with innovations related to improved varieties**. Breeding efforts of rice and roots & tubers have already been noted above. In Tunisia, winter garden crops, late season crops and early-season peaches have been pilot-tested, whose peak water requirements fall outside of the driest summer period. Research is active for major crops (see NRM paragraph) but biodiversity conservation and breeding out of landraces is an issue for minor crops, especially fruit trees. In Moldova for example, the objective of increasing fruit tree productivity and quality has as a consequence the replacement of local landraces by imported ones. In Kyrgyzstan, the livestock sector is being particularly affected by climate change, but the IFAD portfolio did not include any specific technological innovation in this regard.

219. **Irrigation practices are adjusted regarding water scarcity as a consequence of climate change.** In Tunisia for example, upcoming projects intend to generalise the use of water saving equipment at plot level. In Ecuador, a country prone to a range of disasters, climate smart technologies are introduced as a way to develop a transversal strategy (water harvesting, reservoirs, micro-sprinkler plot irrigation systems, planting in contour lines and establishment of fruit trees to avoid soil erosion, ecosystem protection in the sources of water, agro-ecological production, provision of seedlings adapted to the soil and climate conditions, awareness raising and promotion of environmental responsibility among the beneficiaries). Beyond these adaptation practices, the expansion of irrigation can be seen as a mitigation strategy reducing the risks of drought.

220. Some countries develop strategies and plans promoting a transition to a green economy. The initiative was very recent and the CLE could not find any related innovation. However, the framework was being operationalised, for instance in Moldova and El Salvador.[188]

[188] Moldova has assessed the threats and planned accordingly. One of the reasons to include conservation agriculture in its official agricultural strategy is that it is a water conservation as well as a soil conservation measure. Other donors now also consider the issue. In 2017, the World Bank started a climate adaptation project disseminating ecological practices, many of which have been developed in IFAD interventions. As WB works with organized farmers and offers larger loans, some of the farmers who had started investing with the support of IFAD interventions are now seeking the WB support. Coastal

Conclusion on NRM and ECC

221. Specific NRM and CC related innovations are few. However, evidence showed that several production-related innovations have had positive influence on NRM. In the same line, innovations in other domains (production and PIPA) have also contributed to adaptation to CC. Overall, **the CLE assess the performance of both criteria as satisfactory.** Also great efforts were made to develop corporate documents that provide guidance in both aspects, although not on related innovation development.

Key points

- Very few projects promoted innovations specialised in NRM, but production-related innovations also contributed to address this issue, as farming technologies in many cases affect natural resources. There are several cases of addressing NRM challenges in IFAD interventions, through innovations aiming at improving the productivity, simultaneously contributing to a better management or production resources.
- Innovations in CC are to a certain extent, innovations in NRM, but better informed and adjusted to climate change issues. Countries are at different stages of internalising the climate change threats and developing coping strategies. Valuable innovative experiences can be found in all categories, which can be transferred and pilot-tested elsewhere.
- Innovations specifically in Climate Change-related interventions have not yet fully come to bear fruit. IFAD projects are at the onset of a long learning process on how to develop strategies that work in the field of climate change and make food systems resilient.

areas in El Salvador, home to over 30 percent of the population, are highly vulnerable to the combination of sea level rise and El Niño events. IFAD-supported Rural Dialogue Group (RDG) led the preparation of the Strategy and Plan for the Development of the Coastal Region (75 municipalities), which is the basis for a US$ 3 billion investment from the Millennium Challenge Corporation. The RDG has also worked with the government in the Food and Nutritional Security and Sovereignty Law, the National Environmental Policy and the Interministerial Agreement on a Green Sugar Harvest. Uruguay was the first country to assume its international commitment to climate change, in compliance with the United Nations Framework Convention on Climate Change, but with no influence on (very recent) IFAD projects yet.

XV. Sustainability and scaling up of IFAD supported innovations

222. This chapter assesses the sustainability and scaling up of innovations promoted through IFAD's support.

A. Sustainability

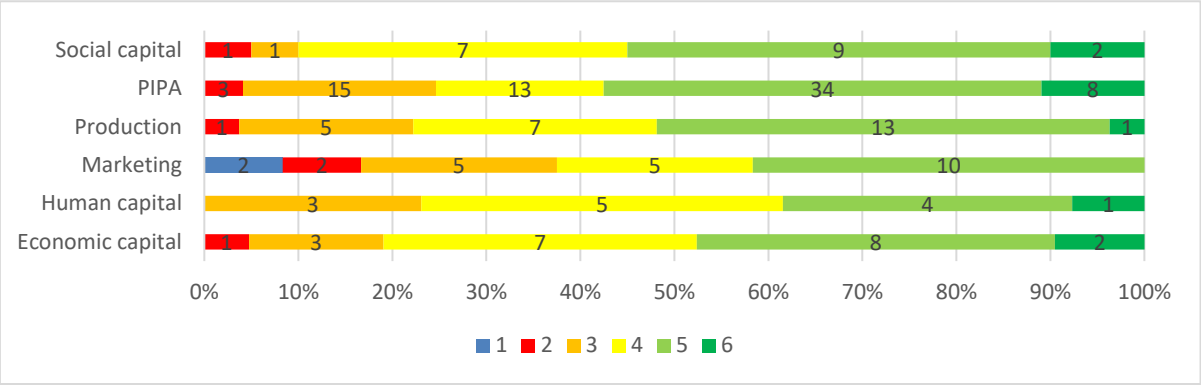
223. Sustainability assesses the extent to which achieved results persisted over time, after the IFAD's support has ended. Sustainability is considered to include issues such as: political and institutional; economic and financial; social; and environmental sustainability. In order to be sustainable, innovations should have been successful and gone through, at least, the stage of piloting, and dissemination / replication or upscaling. The sustainability of case studies innovations has been assessed considering the extent to which they remain over time and this enabled to draw up hindering factors for sustainability.

Trends of case study innovations

224. The cases studies innovations were rated for their sustainability aspect. Looking at the specific domains that have the best scores (5 and 6), PIPA comes at the first place, followed by social capital and production (Figure 24). These categories of innovations are easier to be implemented by government and projects' actors (for PIPA); and smallholders for social capital and low risk and low inputs production technologies.[189] Again, PIPA related innovations play an enabling role to enhance the sustainability in those specific domains. An example is the participatory approach for watershed management (PIPA innovation) implemented in Rwanda, which established committees that organise and oversee the watershed activities. This contributed to sustaining the social capital and the production potential of the watershed.[190]

Figure 24

CLE rating of case study innovations for sustainability



Source: CLE case studies innovations (N=219, only the six main specific domains are reflected).

Institutional sustainability

225. Institutional sustainability refers to the likelihood that the progress made, the achievements attained, and the capacities developed among organisations, agri-businesses and government institutions will be sustained over time. **Institutional factors provide additional chance for the sustainability of innovations.** For instance, production-related innovations were more likely to be sustainable if they

[189] Productivity enhancement: Low risky innovations, they lead to incremental changes to the farm business without radical or transformative changes. Examples are system of rice intensification (SRI) in Rwanda, Senegal; introduction of improved aquaculture techniques in Cameroon; IPM in Nepal

[190] The LMSC is the driving engine that ensures the participation of local / community stakeholders in watershed management. Each watershed has a LMSC whose role is to define and oversee all priority activities within the watershed through the Watershed Natural Resource Development and Management Plan. Its uniqueness / strength lies in the fact that that it includes all major categories of rural stakeholders living within the watershed. This makes it a key community collective decision-making body that takes into account the interests of all stakeholders.

were embedded in value chain development and/or supported by adequate extension approach. Another way is to involve cooperatives or private sector organisations. For instance, in Indonesia, the 4P approach with MARS is considered sustainable, as the company has its own strong interests in sustaining smallholders' production and quality. This 4P approach has now been extended by the Government of Indonesia to other companies as well. **Innovations that have been mainstreamed and incorporated at national policy level are the most sustainable**. In this way, they are no longer innovations, but instead, part of good national practice. Examples are provided in Box 14.

Box 14

Examples of institutional embedding of innovations, leading to sustainability

1. In the Philippines the buffer stocking concept for certified seeds was piloted within IRPEP, whereby 10 per cent of needed certified rice seeds for the new planting season is maintained in community warehouses, ready for rapid deployment to farmers affected by disasters. It was found to be beneficial, and the Department of Agriculture adopted the concept across the country to improve resilience against disasters.
2. In Nepal, the Leasehold Forestry Programme is considered an effective forest-based poverty reduction strategy of the Government. There is a high level of awareness and sensitisation among political parties and local governments about the potential benefits that LF could provide to the poor people, who lack access to land and other economic assets, for secure and viable livelihood options. The Government took over the Leasehold activities on its own financing after the completion of the IFAD supported project.
3. The institutionalisation of the youth movement INJUVE as a government institution in El Salvador is an excellent example of institutional sustainability. There is a grant project beginning at present with INJUVE, which plans to build on the earlier work with youth and to make rural youth more visible in national debates. It will link to the new loan project, Rural Adelante, when that begins. While this grant will be limited in nature, the government hopes to replicate it with government funds in the future across all municipalities.

Source: CLE.

Economic and financial sustainability

226. The economic and financial sustainability of an innovation indicates the likelihood that actual and anticipated economic results will be sufficient to fairly remunerate the work and investments of all stakeholders, that the financial flow generated will be sufficient to replicate the innovation at scale within the agri-food system, and that both features will be resilient to risks.

227. The CLE found that **innovations that are not dependent on access to rural finance services are more likely to be sustainable than those that are**. This has obvious reasons. Financial innovations introduced by donors may also rely on the donor funding. For instance, PROCASUR was established by IFAD, as an innovative mechanism, however, it has proved difficult to gain adequate financial sustainability via other donors and wean it off dependence on IFAD.

228. A good example of potential difficulties with financial sustainability was found in Sierra Leone with RFCIP. It aimed to broaden rural financial service outreach with the introduction of private-sector investment to agricultural financial services, and the creation of several community banks and an apex bank. The institutional and financial linking of the banks, and the establishment of a loan recovery system feeding into an Agricultural Development Fund under the Apex Bank, were considered innovative aspects. While the results were positive overall, the business model for the apex bank is questionable. There is insufficient emphasis on generating its own revenues other than through the IFAD support; no projections of the viability have yet been undertaken; and no business plan has been prepared to determine the path to profitability and independence.

229. Another example relates to the revolving credit funds in Indonesia. Revolving funds had not built linkages with a bank before the end of the READ project. Repayment rates of loans may undermine the sustainability of revolving funds in SOLID. In the Philippines, the Farmer Irrigator Operators promoted by IRPEP, were sustained for some time, however recently the government ruled that payment of water tariffs in community irrigation is no longer required. This has undermined the financial status of the irrigation groups and it is unclear whether the Farmer irrigator organisers will continue to be able to provide services to members.

Conclusion on sustainability

230. Analyses show that **IFAD supported innovations performed satisfactorily in terms of institutional sustainability, while for financial sustainability, results were mixed.** This due to the fact that innovations pertaining to social capital and governance were the most sustained. Innovations within PIPA appear essential, as they contribute enhancing the sustainability in other specific domains, corroborating the importance of packaging standalone innovations. Innovations on economic capital and marketing were less sustainable, likely aligned with their lesser effectiveness, as they require continuing involvement of other actors, government and private sector.

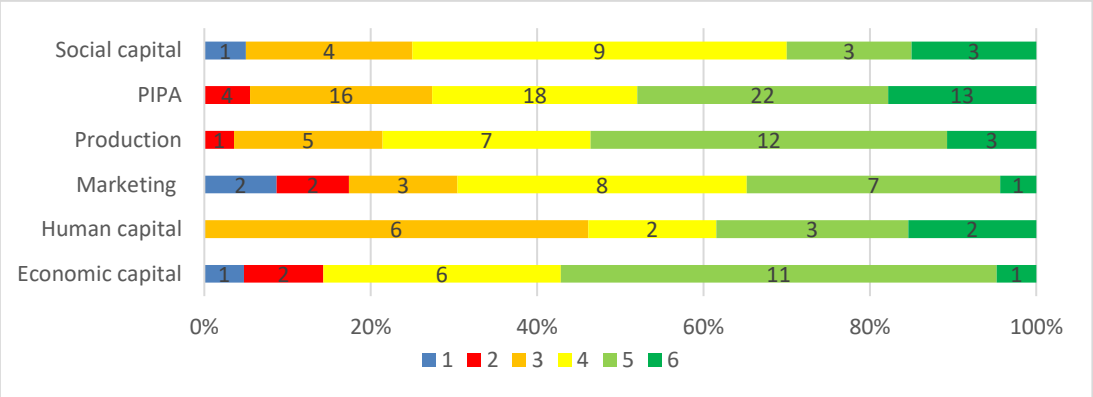
B. Scaling-up of IFAD supported innovations

231. With the IFAD Operational framework for scaling up of results (2015)[191], scaling up means considering how successful project-level initiatives may sustainably leverage policy or legal changes, additional resources and learning to bring the results to scale. The CLE ascertained the upscaling of case study innovations, in line with the extent to which IFAD's supported innovations were successful in leveraging resources of other partners (including governments), in order to be generalised. The ToC shows clearly that scaling up is one pathway that leads to the desired impact.

232. The CLE team also rated the case study innovations for scaling up for each innovation (Figure 25). It appears that **economic innovations scored highly for scaling, followed by production and PIPA.** Looking at smallholders' agriculture challenges related to (i) access to resources (including rural finances); and to (ii) productivity within the farming systems, closely linked to issues of natural resource management; this trend is justified. Governments and funding partners are more favourable to support the scaling up of successful innovations in these domains. In these cases, governance innovations are needed for their enabling role to facilitate the buying in of other partners.

Figure 25

CLE rating of case study innovations for scaling up



Source: CLE (N=219, only the six main specific domains are reflected).

[191] Scaling-up defined as "expanding, adapting and supporting successful policies, programmes and knowledge so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way."

Evidences from the case studies

233. A good example of scaling up is the Nepal WUPAP Wealth ranking innovation. IFAD was the first organisation to bring wealth-ranking as a targeting method to Nepal; there had been no such mechanism in the targeted districts earlier. Based on this approach, the Government has developed its poverty card system and started the distribution of poverty cards in 2015. The communities took full ownership and this led to selection of the poorest among those who had been already considered for WUPAP support.

234. There are general IFAD scaling up operational guidelines, however, **scaling-up of innovations appears to vary according to practice in each country**. In general, government commitment and engagement are essential. National coordination and knowledge sharing among donors is also determinant. More and more, the private sector is also becoming engaged in scaling up, especially in relation to APVC activities. As an example, the scaling up of innovations was part of the IFAD strategy in Kyrgyzstan. IFAD carried out a step-by-step countrywide process which firstly disseminated an innovation, and in the subsequent project, it was replicated. The idea was to test the innovation for a learning process at the earliest stage and then strengthened it based on the previous lessons learned.[192]

235. **Planning for scaling-up from the start is a good approach**. For instance, in Indonesia IFAD has identified scaling-up pathways for each investment, to build on successful replication and propose approaches for scaling-up. This has been successfully applied in the National Programme for Community Empowerment in Rural Areas (PNPM Agriculture), which has been widened into the Village Development Program, the planning approach of which has been turned into a national policy. PNPM Agriculture and VDP have been recognised by the Government of Indonesia as best practice. VDP was designed to adapt the PNPM Agriculture approach to the Village Law new institutional context in remote and destitute areas of Papua and West Papua. In turn, the Government of Indonesia requested IFAD to scale up VDP through its successor project, TEKAD, with the Government of Indonesia contributing around US$ 144 million through Village Fund resources. The Asian Development Bank will join forces with IFAD in financing TEKAD through an expected contribution of US$ 85 million. The Planning Ministry has already approved a bridge financing for pursuing VDP activities on national budget in the meanwhile. Comparable examples are found in Rwanda. Naturally this isn't possible in all projects – according to the CLE findings, around 30 per cent of innovations arise during the implementation (discussed under Relevance).

Paths for scaling up innovations

236. **Similar contextual and socio-economical characteristics can facilitate the scaling up of innovations in neighbouring countries**, facilitating building of synergies and partnership at the government level. An example is the scaling-up of the pasture management system from Kyrgyzstan to other countries in the region (see Box 15).

[192] One observation in most of the case study countries has been the practice to ensure that there is overlapping in part of the implementation period, and to some degree in location of the loan projects. Hence, it has been possible to review, learn from and constantly develop the innovations. This approach is rather a replication, as it relies in majority on IFAD funding.

Box 15

Examples of institutional embedding of innovations, leading to sustainability

Pastoral livestock management is an important source of livelihoods for many rural communities in Central Asia, with similar natural and socio-economic environments, composed of steppes, mountains and deserts, and experiencing the same challenges after the collapse of the USSR. Thus, the pasture management system developed in Kyrgyzstan and the resulting approach has been shared with those countries. The Kyrgyz Pasture Law of 2009 was one of the first pasture laws in the area. Tajikistan adopted a national law on pastures in 2013, in 2015 it was the turn of Turkmenistan and in 2017 that of Kazakhstan. Lastly, Uzbekistan approved a pasture law in 2019. In all cases, Kyrgyzstan has been a pioneer with this innovation. Among these countries, IFAD worked in Tajikistan and Uzbekistan and supported exchange meetings between Kyrgyzstan and both Tajikistan and Uzbekistan.

Source: CLE.

237. Another method observed to use regional sharing of lessons to promote scaling up to other countries. For instance, PROCASUR, in itself an innovation supported by IFAD,[193] has been used by IFAD to share lessons learned, via Learning Routes. This can be seen clearly within Latin America, but also globally.

238. **Scaling up by different donors for replication at larger scale**. IFAD has often piloted innovations which are picked up and disseminated at much larger scale by other financiers (for instance, in Indonesia). An example includes SIPA model in Senegal. At the time of the case study mission, the West African Development Bank had put funds towards the scaling up of the model, with complementary government financing. But these are few successes, considering the diversity of innovations supported. **The two examples provided pertain to transformative innovations, which suggest that they contribute to more success in scaling up.**

239. In Malawi, IFAD has been able to replicate successful innovations across its own projects, but also helps internalise innovations within the operations of the government agencies and attracts other financiers. The World Bank considers both the SRI technology and Water User Associations (WUAs) demonstrated through IRLADP (which it co-financed through IDA) sufficiently successful to have become part of mainstream policy for enhancing agricultural productivity and management of irrigation schemes in Malawi. The Bank also states that the project helped clarify a number of legal issues regarding water regulations, including mechanisms for irrigation management transfer, registration of WUAs, land leases, and water abstraction rights, all of which have now been adopted as general practice in Malawi.

Impediments to scaling-up

240. Many of the innovations seen during the CLE field visits, or described in reports, are still at the piloting stage. Consequently, it was not possible to judge whether they will be scaled up. **Not all innovations will be scaled up.** They may be developed for a unique set of circumstances – for instance, it remains to be seen whether the novel submerged lobster cages, trialled in Mindanao in the Philippines to cope with heavy waves, will be scaled up. In addition, novelty is not necessarily in line with scaling up, and it may be difficult to do both.

241. However, some of the **reasons for failure to scale up innovations include poor social fit, not addressing geographic and cultural differences between regions** in a country, too complex technology, and inadequate follow-up once the project support has ended. Naturally there are also sometimes unexpected impediments, which interrupt the scaling process, such as natural disasters or the case in Moldova in 2014 of large-scale fraud by three banks misusing credits (more than 25 per cent of the country banking assets), which brought the country to the brink of financial collapse.

[193] See Table A2, Annex IV.

242. **A key impediment to scaling up is that the government has short-term plan**, – a change of government means a change of higher management and policies in the ministries – making it difficult to integrate successful innovations into programme, as they need a longer-term approach. This has been seen in some case study countries, like: Burkina Faso, Peru and El Salvador. By comparison, Rwanda demonstrates that a consistent approach by a government allows innovations to achieve impacts.

243. **IFAD staff noted that priority is given to managing loans and piloting innovations, with less time available for non-lending activities and work on scaling up**. The 2016 CLE on Decentralisation confirms this mismatch between expectations and resources. Project evaluation ratings for innovation and scaling up were significantly higher in countries with in-country offices (CLE 2016). However, in countries without a country office, there may be insufficient face-to-face time building relationships with stakeholders to support scaling up. There could also be a limitation to international scaling up, due to the decrease in contacts between IFAD staff at a global level, which tends to reduce cross-fertilisation of ideas.[194]

244. In some countries, there is a limited availability of financing from the government or other financiers, or the users themselves. In conflict countries or those facing significant instability, this lack of continuing funding is particularly severe. Those countries reaching middle-income status may not have access to external donor funds. The 2016 Operational Framework for Scaling Up considered these points. In theory, **IFAD is meant to have better opportunities to scale up in MICs,** where its role is likely to involve facilitating innovation, knowledge-sharing and policy changes. The innovative nature of the IFAD-financed project would be dominant in an MIC, where IFAD would be testing approaches, technologies and markets, and gathering systematic knowledge to enable the government, private sector or other partners to take the idea to scale. **In the case of fragile contexts**, project designs need to be kept simple, ensuring consistent implementation arrangements with permanent capacity at the community level and sustainable results. **The space for policy innovation may be limited, and grants may be the preferred financing instrument.[195]**

245. In Moldova (as in many other countries) it was noted that in the absence of business clusters with similar growth history and prospects, the idea that an innovative business operator would now help his/her neighbour's businesses develop as competitors is not realistic, as they have no common higher objectives such as competing together for a rewarding market. The IFAD/project team grasped the issue and tried to facilitate multi-stakeholder platforms to link smallholders and processing or storage units to larger market operators. For such clusters to coalesce into a competitive APVC, large operators may need funds but won't be eligible for IFAD credit or have needs well above IFAD ceilings. Therefore, strategic partnership with large donors would be useful.

Conclusion on scaling up

246. **The performance of IFAD supported innovations in scaling up have been moderately successful overall**. Innovations related to economic capital and production are more likely to be scaled up, especially if followed by governance innovations. **The likelihood of scaling up increases, when innovations are in**

[194] The availability of IFAD staff can have a positive or negative effect on scaling up of innovations, both locally and globally. IFAD staff noted the limited time available for non-lending activities and work on scaling up, with the most focus placed on loans and piloting innovations. As noted, the decentralisation of IFAD staff is relatively recent. There could be a limitation to international scaling up and knowledge sharing, due to the decrease in contacts between IFAD staff at a global level, which tends to reduce cross-fertilisation of ideas.

[195] In terms of project design, the main difference with traditional interventions is that project teams should explore scaling-up pathways and drivers from the design stage onwards, and not when the project is well under implementation or about to close. For projects already implementing innovations but without a scaling up framework at the design stage, the document recommended to identify areas and approaches for generating knowledge and guiding future decisions on scaling up.

bundles, with transformative features. This is important to be considered by IFAD, as well as key determinant of scaling up.

Key points: Sustainability and scaling up

- Many of the innovations identified were still considered to be at piloting, or perhaps learning stage, and therefore it was difficult to comment on their likely sustainability. Socioeconomic innovations had a greater likelihood for sustainability, if successful – either because they are market driven, or they become part of government policy and programmes. However, institutional inconsistency (e.g. political instability) can undermine sustainability. Financial sustainability is one of the most difficult aspects to achieve with smallholder agriculture. Often innovations are dependent on external financing, which may wither away when the donor funding ends.
- Scaling up is dependent on successful implementation of innovations over time, with a good social fit in the agri-food system and adequate financing. Different types of scaling-up are observed, including replication by IFAD from project to project, uptake by the government into its own policies and programs, and scaling up within the one country, by the government or other donors, or within the region. Institutional sustainability is likely to support scaling up.
- Some of the impediments are inadequate financing – locally, government or other financiers. However, IFAD has also played a key role in piloting innovations that are then picked up by other financiers with much larger budgets.

XVI. Conclusions and recommendations

A. Conclusions

247. IFAD's Strategic Framework (2016-2025) outlines the critical role of innovations in achieving inclusive and sustainable transformation in rural areas. **Its three strategic objectives involve the three components of an agri-food system: the agricultural production and value chain component, the socioeconomic component and the natural component. Therefore, the CLE applied a system-based approach to assess IFAD's support to agricultural innovations.**[196] Taking into account IFAD's operating contexts, this CLE also considered an additional pillar as essential – the governance pillar (including policy, regulation and procedures) – because they are driving elements that enable the effectiveness of agri-food systems.

248. A system-based approach to agricultural innovations must consider: (i) innovations and related processes; (ii) the actors contributing to these processes; (iii) the relationships and interactions among actors; (iv) the linkages between the objectives (i.e. results hierarchy); and (v) the supporting institutional framework. The CLE assessments covered these aspects, while focusing specifically on the performance of IFAD-supported innovation processes.

249. The Fund started to institutionally recognize that innovation is critical for its mandate in the early 2000s. **The Innovation Strategy approved in 2007 paved the way for an organizational approach to innovations; however, its relevance has been moderate, as it did not include strategic objectives**. In addition, no operational framework (e.g. guidelines) was developed, nor were specific budgets allocated, until the launching of the innovation challenge in 2019, to enhance the innovation culture in in IFAD's operations. To date, IFAD's innovation processes have not been updated to include evolving development trends, especially in terms of applying a systematic approach to innovations. **Compared to other RBAs and IFIs, IFAD's business model for supporting innovations is among the best, as assessed by the CLE;** however, there is room for improvement, in particular with respect to the development of guidelines and the provision of incentives to innovate.

250. IFAD-supported innovation processes follow the project cycle and therefore start at the planning stage. **During the planning of COSOPs and the design of projects, innovation processes are moderately relevant.** In fact, COSOPs and PDRs are important documents that specify areas where innovations are needed in order to positively influence performance within the agri-food system. Unfortunately, **the approaches applied to identify innovation needs are inconsistent and unsystematic**, due to the lack of an overarching framework to steer the process.[197] In addition, no guidelines are available to help perform systemic analyses before incorporating innovations into IFAD's operations. The promotion of successful innovations is not yet considered an objective, meaning a critical output that leads to higher level results (outcomes and impacts).

251. **IFAD's innovation processes during the project implementation stage are adaptive and effective, while they are incomplete at the completion stage.** Although the domains of a majority of innovations are identified at project design stage, a significant number still emerge during implementation. At the latter stage, as well acknowledged by its partners in recipient countries, IFAD applies an effective adaptive approach that allows for the identification and implementation of innovations during project supervision and mid-term review missions. This process is important, because it enables the emergence of innovations responding to evolving smallholder challenges. Nevertheless, **the adaptive innovation process is unsystematic and insufficiently monitored and documented, because it does not follow an agreed framework.** At completion stage, innovation processes are not specifically

[196] Although this was not a novel approach, it was new compared to that adopted in the previous CLE that addressed the topic of innovation, and thus enabled various aspects of agri-food systems to be covered.
[197] This was one of the conclusions of the CLE on IFAD's capacity to promote innovation and scaling up (2010).

analysed to ascertain their effectiveness and to clarify the linkage between promoted innovations and the project results achieved, as well as underpinning factors.

252. **In terms of partnerships,** partners of IFAD-supported innovation processes include a diversity of actors (extension services, national and international research centres, multilateral partners, the private sector, NGOs and farmers' organizations), which all play complementary roles in the effectiveness of the innovation system. In fact, **the capability of partners of loan-supported projects to scout for effective innovations and strengthening their linkages with national agricultural innovation systems have received little attention.** This would be necessary to enhance the effectiveness and sustainability of IFAD's supported innovations processes.

253. In addition to partnerships, other **non-lending activities – KM and policy engagement –** play a pivotal role in creating an enabling environment for the success of innovation processes. **Unfortunately, there are gaps that weaken their effectiveness in supporting innovation processes.** Indeed, despite IFAD's increasing attention to KM overall,[198] knowledge on innovations is not collected and shared in a systematic and consistent fashion, due to the existence of a plethora of channels and information overload.[199] Currently, innovation knowledge and information are dispersed in a multitude of websites. M&E systems are inadequate to capture data and information specifically related to innovations, and to assess their contribution to effectiveness, efficiency and impact in loan investment projects. Furthermore, as currently collected, monitoring data are not well disaggregated by gender and youth. **Lastly, policy engagement activities have devoted insufficient focus on influencing national frameworks for greater governmental commitment to IFAD-supported innovation processes at all stages.**

254. During the period evaluated, IFAD has financially supported its innovations processes mainly through loans and grants funding. **Grant windows have been a prominent means to identify genuinely novel solutions to the challenges of smallholder agriculture.** However, grants have had a limited capacity to provide loan investment projects with tested and ready-to-use innovations, due to weak synergies and timing constraints.[200] Other funding mechanisms have also been applied during the evaluated period. Although some of these were innovative in nature, none were exclusively dedicated to supporting the promotion of innovations, nor were any specific funds devoted except IMI financing (2005-2011) and, in 2019, the Innovation Challenge Fund. In terms of human resources, CDI unit was recently created, with a very limited number of staff. The staff of several other divisions, both at HQ and in the field, have also contributed to innovations processes, but were not exclusively focused on them.[201]

255. Despite the relatively limited availability of innovation-specific funds during the period evaluated, **IFAD has successfully supported a diversity of stand-alone innovations, not genuinely new, which have been effective and are likely to have contributed to project impact achieved. However, those innovations were not with transformative features.** Effective innovations (in terms of addressing smallholders' challenges) were identified in the areas of production, social and human capital. It was noted that their effectiveness is greater when they are combined with governance-related innovations, playing an enabling role.[202] Less successful innovations were burdened by difficulties in accessing rural finance, poor targeting or excessive complexity for local organizations. The positive effects of

[198] As mentioned earlier, the 2007 KM strategy was followed by an operational framework (in 2013) and an action plan (in 2015), as well as a revised strategy in 2019.
[199] This was already an implicit conclusion in the CLE on IFAD's capacity to promote innovation and scaling up (2010).
[200] As already highlighted in the CLE on IFAD's policy for grant financing (2014).
[201] In this respect, the new decentralized model implemented in 2018 and 2019 is noteworthy.
[202] A result also found in the CLE on IFAD's support to value chain activities (2019), which stated that IFAD's long-term support and attention to governance issues were associated with stronger performance.

innovations increase when they are combined and complement each other in addressing multiple challenges simultaneously. A key finding of the CLE is: **the need to bundle or package innovations of different specific domains in order to enhance their effectiveness and impact, thus giving them a transformative dimension. In fact, innovations do not need to be radical to be transformative.** Unfortunately, the bundling of innovations has not been an area of focus during the period reviewed.[203]

256. Unlike transformative aspects, **IFAD devoted attention to sustainability and scaling up of innovations; however, results achieved were mixed.** With respect to sustainability, positive results were obtained on institutional aspects, due to innovations in the domains of human and social capital (farmers' organizations and rural institutions). As for sustainability, the results of economic innovations were less positive due to difficulties in sustaining smallholders' access to rural finance for smallholders. Results were mixed also in terms of scaling up, due to the (stand-alone and context-specific) nature of the majority of innovations.[204] **The CLE found that the likelihood of scaling up increases when innovations are bundled with transformative features.**

257. **Other areas in which IFAD has also sought to support innovations are: (i) inclusiveness; (ii) natural resource management (NRM); and (iii) adaptation to climate change (CC)**, which were not covered in the previous CLE on innovations. Indeed, even though few promoted innovations specifically addressed challenges pertaining to these aspects, other types of innovations have been relevant, especially production-and governance-related innovations in general.

258. **An overall satisfactory performance was achieved with regard to innovations addressing NRM and adaptation to CC.** This was because numerous production-related innovations have contributed to the better management of natural resources, as well as to improved adaptation of farmers to CC. The latter type of innovations have increased within IFAD's portfolio, in line with recent attention to the topic.

259. **Satisfactory performance was also attained for gender and women's empowerment.** In these cases, socio-economic innovations were critical, and often complemented by governance-related ones. GALS methodology, identified as one of the few transformative innovations, is a very good illustration in this respect. **Innovations related to youth promotion have performed moderately,** due to difficulties in sustaining youths' access to financial inputs and services. **Finally, in terms of indigenous and marginalized groups, the innovations supported have been satisfactory**, due to the innovative ideas introduced in some countries, with IFAD's support, for working with indigenous peoples and to target the very poor.

B. Recommendations

260. The recommendations below seek to revamp IFAD's innovation agenda and to enhance its performance, in order to bring about effective, sustainable and resilient transformation in rural areas. They are aligned with recent guidelines, the SPACE model (presented in Table A9, Annex IV),[205] developed in the framework of the UN Innovation Network, to help UN organisations accelerate their innovation impact.

261. **Recommendation 1: IFAD should set clear corporate / strategic goals for its innovation agenda, develop and implement operational frameworks, aligned with its 2016-2025 Strategic Framework and the Agenda 2030.** The framework should provide an appropriate innovation definition in line with IFAD's operation

[203] Similarly, the CLE on IFAD's capacity to promote innovation and scaling up (2010) found that IFAD has pursued innovations in a variety of topics, rather than focusing on a few critical areas or domains.
[204] This was also a conclusion of the Brookings study on IFAD's institutional approach to scaling up (2010).
[205] Recommendation no.**1** refers to **S for Strategy**, Recommendation no. 5 to **P for Partnership**, Recommendations no. **2** and **3** to **A for Architecture**, Recommendation no. **4** relates to **C for Culture**, and Recommendation no.6 refers to **E for Evaluation**.

context, include specific objectives and priority result areas, as well as guiding principles and actions over a limited period of time (similarly to the knowledge management theme).[206]

262. **Recommendation 2:** IFAD **should improve the operating model that supports its innovation processes.** Relevant guidelines should be developed to provide orientation on methodologies (along the project cycle), aiming to: (i) incorporate innovations as key outputs that lead to higher level results; and (ii) adopt a holistic system approach to innovations.[207] The guidelines should be less prescriptive to suggest tools and/or frameworks for monitoring and evaluating innovation processes (linked with existing tools), as well as for assessing their contribution to projects' outcomes and impacts.

263. **Recommendation 3: IFAD should dedicate greater attention to bundles of innovations that are transformative:** the more transformative innovations are, the more sustainable and amenable to scaling up they will be. Orientations should be provided on key methodological steps that favour the identification, at planning stage, of innovations that can work in synergy with one another, to be clustered or bundled at the implementation stage, leading to packages with transformative features. Guidelines or frameworks suggested in the previous recommendation should allow measuring results achieved through transformative innovations.

264. **Recommendation 4: IFAD should enhance the innovation culture within its business model, to steadily and effectively support its innovation agenda.**[208] This should be accomplished through an ongoing implementation of specific funding initiatives (like the innovation challenge), to elicit innovation appetite, and encourage risk-taking initiatives associated with very genuinely novel solutions and approaches addressing important smallholder agriculture challenges. It is also essential to: (i) strengthen internal capabilities (relevant staff required and their skills) for that purpose; and (ii) support emerging innovation champions across the organisation by promoting incentive mechanisms (e.g. financial or non-financial rewards).

265. **Recommendation 5: IFAD should increase funding and operational partnerships that contribute to the support of its innovations agenda.** Strategic co-funding opportunities should be boosted with partners (e.g. bilateral with governments and multilateral with other IFIs) that share similar innovation goals. The aim should be to enhance operational synergies for piloting, up-taking, disseminating and scaling-up of innovations,[209] especially those addressing issues pertaining to inclusiveness, natural resources management and adaptation to climate change. The IFAD's grant programme should be better leveraged for the development of effective innovations addressing smallholder agriculture challenges. Therefore, priority and flexibility should be given to grant partners' proposals that plan on: (i) strengthening capabilities of national players of IFAD supported innovation processes; (ii) scouting for novel solutions; and (iii) enhancing the effectiveness of partnership and synergies at national and regional levels.

266. **Recommendation 6: IFAD should streamline knowledge management tools for accessing and sharing innovations-related information by limiting their number.[210]** One main common platform should be used to promote IFAD supported

[206] The UN innovation network toolkit "Headline of future" will be useful to clarify innovation goals.
[207] The SPACE framework highlights that: "By establishing repeatable processes and organizational structures to support each stage of the innovation life cycle, organizations reduce their reliance on luck, the talent specific individuals, or external factors for innovation success". See Table A9, Annex IV.
[208] As per SPACE framework, "Because innovation inherently involves risk-taking, employees must understand the circumstances under which they are able to take risks and how to capture learning throughout the process – even when the results are considered "failures."
[209] According to the SPACE model, "Making innovation successful requires organizations to engage with other groups, and the most consistently innovative organizations have developed standardized approaches to effectively engage potential partners, identify synergies, and create joint value".
[210] The 'Story Telling' toolkit will be useful for that purpose. It said: "innovation fails, not because of the quality of an idea but, rather, how that idea is shared".

innovations and disseminate monitoring and evaluating findings on innovation results and lessons. Opportunities offered by knowledge management events should be used as an occasion to launch and promote the platform on a periodical basis. Communication activities (including social media and internal website alerts) should be used to draw the attention of IFAD's staff and other stakeholders to generate and keep enthusiasm, as well as sustain engagement on IFAD supported innovation activities.

Excerpts of CLE (2010) and ES (2019)

CLE (2010) on IFAD's Capacity to Promote Innovation and Scaling Up

Conclusions

The performance of IFAD-funded projects has steadily improved in promoting innovations. … The steady improvement is commendable. However, it is to be noted that close to half of the projects evaluated reveal merely moderately satisfactory results in innovation and scaling up is particularly weak. But the problem is not just with scaling up: the evaluation concludes that IFAD's approach to the innovations journey, which includes the critical steps of searching (or scouting), exploring, committing, realising (piloting), and optimising (scaling up) is not yet systematic and effective as it should be. Far too much is left to the initiative and individual entrepreneurial skills of CPMs, who act without concrete incentives and accountability.

This evaluation found that the third and probably the most important IMI objective on changing organisational culture and practices to support innovations has largely not been met. The evaluation therefore points out that IFAD's organisational capabilities still remain generally weak and has only changed marginally since the beginning of the decade. This is in fact to say that the Fund's strong strategic commitment and pronouncements towards innovation have not been adequately converted into action and become part of IFAD's corporate culture.

IFAD's knowledge and information systems are not strong in enabling effective decisions about which innovations should be selected for scaling up. Also, IFAD is slow in taking new ideas through the system and, importantly, the Fund is insufficiently open to ideas from a wide diversity of sources, including the rural poor themselves. All these and other factors are constraining IFAD from developing into a more effective innovative organisation.

The evaluation found that IFAD has followed a broad-based innovation approach ("let a thousand flowers bloom"). … That is, the Fund has pursued innovations in a variety of topics, rather than focusing on few critical areas or domains, where there is a documented need for innovative solutions and where the Fund has a proven capability and track record to develop pro-poor innovations successfully.

There are two further reasons that can explain why IFAD's performance in upscaling has been inadequate in the past. Firstly, the attention devoted to non-lending activities (including knowledge management, partnership building, and policy dialogue) has been generally poor. Secondly, the Fund's operating model in the past – which did not allow IFAD to conduct direct supervision and implementation support and the lack of country presence - restrained its ability in promoting innovations, including scaling up.

On another issue, the evaluation reveals that there is inadequate amount of resources that are specifically allocated to the innovation promotion process, as well as the usage of existing instruments that are required for the purpose. Notably, few resources and efforts have been devoted specifically towards building IFAD's internal innovation capabilities. The main instruments available to IFAD (loans and grants) have not been used in a complementary and strategic manner in support of innovations.

Recommendations

The evaluation therefore recommends that an IFAD-wide innovation agenda should be developed at corporate level that consists of few selected themes or domains. The themes or domains selected, Big Bets, should be in those areas of the agriculture and rural sector where there is a proven need for innovative solutions and where IFAD has (or can develop) a comparative advantage to promote successfully pro-poor innovations that can be scaled up.

IFAD should set corporate targets for scaling up and monitor and report upon it annually. In this regard, it is also important to underline the accountability framework for scaling up, which would ensure that this critical phase in IFAD's innovation journey is given due attention and resources.

The Fund needs to develop practical innovation management skills. The management of innovation is different from implementing proven approaches.

Evaluation Synthesis (2019). Technical Innovations for Rural Poverty Reduction

Conclusions

Technical innovation, defined as the introduction of a process or product that is new to the context, is mainstreamed in IFAD and examples can be found in all aspects of the portfolio.

A smaller number of innovations are transformative. Transformative innovations are more risky and they carry a higher level of high-tech change. They can be more disruptive, with the potential for higher rewards but require higher investments in resources and knowledge.

Accompanying support and partnerships are essential for introducing innovations that require new knowledge and skills. IFAD is well positioned to provide this type of support as it is seen as a strength of IFAD's approach across the portfolio.

Many innovations related to agricultural practices are potentially significant for NRM and climate change mitigation but the associated risks need to be carefully managed.

IFAD is dealing with a very assorted portfolio with few repeat examples of many innovations. A small number of specific technical innovations have been replicated in many locations. Otherwise there is an extensive range of other innovations that respond to local context and needs. The challenge to scaling up comes from innovations being so many and various, that there are few simple messages about what works where and for whom.

Recommendations

Recommendation 1: Enhance focus on transformative practices within IFAD's approach to technical innovation while continuing to promote low risk improvements to productivity for the majority of poor smallholder farmers.

Recommendation 2: Systematically monitor, evaluate and learn from innovations.

Recommendation 3: Use the forthcoming CLE to explore IFAD's readiness to promote transformative innovations.

Senior independent advisor's report

Jan Brouwers, Wageningen Centre for Development Innovation Wageningen University & research

A. Summary

1. The evaluation report presents a detailed and well elaborated overview of IFAD's practices to foster innovation within its corporate programme. A rich variety of cases and applications is presented, showing IFAD's efforts to promote agricultural innovations, which contribute to effectively address rural development challenges, through supported operations in recipient countries. In addition, the report provides detailed information on IFAD's contribution for the dissemination and scaling up of successful pro-poor innovations, sustainable and climate resilient, that reach diverse groups of smallholder farmers. IFADs main instruments to support innovation were loan projects, grants programmes and non-financial instruments. The CLE reviewed an extensive set of data: 580 loan projects and a data base of 678 grants, with a focus on 240 large grants, combined with 100 in-depth case studies in twenty countries. Twelve countries were visited to study how 158 innovations contributed to achieve impact. The five constraints and limitations mentioned on pages 38-39 provide a realistic perspective of how the findings can be interpreted, including the challenges related to qualify innovations.

2. The evaluation has applied a systemic view while analyzing IFADs contributions in the four main pillars. Based on mainly a qualitative assessment there is a high likelihood that IFAD-supported innovations have made satisfactory contributions to impacts. Finally, the report provides six recommendations for improving IFAD's approach and performance in promoting successful agricultural innovations for rural poverty reduction in recipient countries. With this report the institutional history how IFAD has conceptualized and implemented its support for innovation is well documented and illustrated (for overview see Table 1, p. 26), combined with corporate learning on the topic over two decades. It is rare to see an organisation invest in this type of long term learning and therefore important that the report will be used by not only IFAD but also other IFIs and innovation research agencies.

3. **M&E and innovation:** The evaluation mentions that M&E systems are mostly designed for reporting against the planned activities, whereas innovation requires adaptation to face new realities, foresight thinking what are likely scenarios, and strategizing to improve project performance. This will require a stronger link with learning and adaptive planning, meaning that M&E systems would be better designed as PMEL systems.

4. **M&E and gender:** In many countries it was difficult to get adequate gender disaggregated monitoring data, as the activities targeted households, rather than individuals (point 171, p. 81). This is an observation often made in evaluations, yet seldomly combined with recommendations to cater this lack of gender information. And having only gender disaggregated data will not be sufficient, also monitoring effectiveness of gender strategies will be needed to achieve gender changes. Innovation projects are often assuming that they are gender neutral but in reality they are in most cases gender blind (ref. Gender and ToCs, Eerdewijk & Brouwers, 2014). Innovative gender results like those reported on pages 81-85 deserve to be captured and documented by the M&E systems and shared amongst IFAD partners. They also show how IFAD collaborates with gender scaling partners.

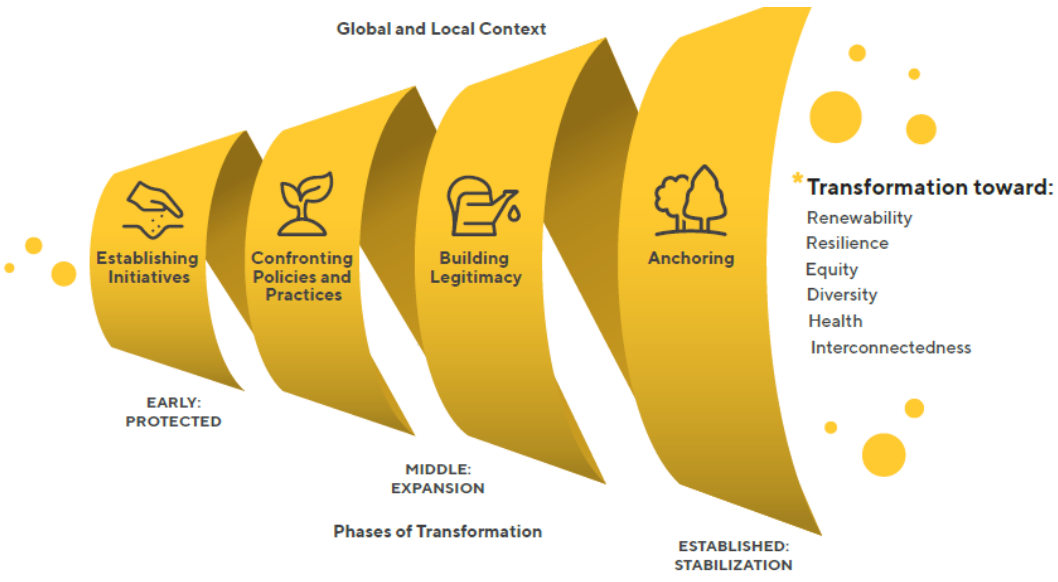
5. **Point 192 (p.87) Concluding on youth:** Results where youth has been significantly supported are below expectations. A recommendation could be to advise innovation projects to analyse which systemic reasons impede that youth can be involved in decision making processes and have equal access to resources. These can provide leverage points for interventions to change the agri-food system towards more inclusive systems.

6. **Innovation practices and scaling (235 p. 99):** Logic conclusion to advise that planning for scaling-up should be done as from the start of the project. Suggestion to add the argument that this is also likely to enhance sustainability, as national partners are engaged in the scaling approach as of the start and co-invest together.

7. **Bundling of innovations by applying systems thinking**: Based on the findings of the evaluation, the evaluation team rightly pointed out the importance of bundling innovations, as observed in the CLE. The evaluation illustrates a range of diverse but often stand-alone innovations, which have been effective and are likely to have contributed to project impact achieved. A key finding of the report is that most of those innovations were not with transformative feature. The CLE argues that a future programme therefor needs to bundle or package innovations addressing diverse challenges of the agri-food system, to give them a transformative dimension.

8. The report could underscore this more clearly by applying systems thinking that is not only conceptualised by the four selected components. For instance, at point 5 (page 9) the CLE indicates that innovations are meant to improve the performance of agri-food systems. The latter include three aspects (TEEB, 2018): the agricultural production and value chain (APVC) component, the socioeconomic pillar or component (SEP) and the natural pillar or component (NP). IFAD's Strategic objectives (2016-2025) relate to these three aspects. Taking into account IFAD operating contexts, the CLE identified an additional component, the governance pillar (GP), which includes driving forces for the effective functioning of the entire agri-food system. The evaluation report presents the system-based approach to agricultural innovations also in the conclusion (247-248; p. 103).

9. As mentioned above, in parts of the CLE report agri-food systems are presented as the combination of the four components APVC, SEP, NP and GP. The report recognizes that innovation in one of the subcomponents can affect one or more other subcomponents (point 20, p. 25), nevertheless sub-components were applied to categorize innovations. Separating APVC and SEP, for instance, might not represent systemic thinking as economy is closely linking to production and value chains. There is also a risk that key elements of the system like nutrition and education are not included in the food system innovation thinking to their full potential. Education, for instance, is a major driver of inclusion, increasing lifelong income and improving nutrition, health, civic engagement, and gender equality. Working systemically shows how food system actors deal with their context and arrange for protected early innovations. This can be shown as a more dynamic transformation process of agri-food system, like the model below.



Source: Beacons of Hope, 2020.

10. Looking at small farmers as not only being part the SEP component would allow them to understand the food system and be empowered to make strategic choices within food systems and have a voice in holding governments accountable for delivery of inclusive food systems. In this way IFAD can recognize in further innovation projects the contributions smallholders already make to food systems with their time and labor, and promote policies that empower them to secure more equal benefits. In other words, small holders are acknowledged as a key actor in the Governance Pillar (see also point 25, p. 13 and point 165, p. 78).

B. Other suggestions

11. Point 22, page 13 on relevance: *despite the lack of framework to steer the innovation processes, a diversity of IFAD supported innovations have occurred. These innovations have been mostly relevant (to their context and to smallholder farmers), but remained scattered and stand-alone.* This could also indicate that such a framework is not needed to support innovation, but rather a set of guidelines. Innovation can be stimulated, but not planned.

C. Recommendations

12. The six recommendations are logically deduced from the evaluation results and present a coherent and well-argued set of recommendations. New innovation initiatives need a corporate strategy that is harmonized with other policies, have programming guidelines driven by a coherent theory of change or theory of innovation, put forward a range of implementation modalities that help programme managers engage with governments and other stakeholders to agree on appropriate innovation designs, and bring resources to build staff capacity and provide technical backstopping. This includes the M&E staff, which should be allowed to link M&E more strongly with adaptive planning as well as new learning tools that enhance reflexivity and strategic thinking.

Suggestions related to the recommendations

13. Linked with recommendation 1: It is suggested to add a specific suggestion on IFAD's ambition and proposed added value in agricultural sustainable innovation **linked to SDG 17 (partnerships**), based on the findings of the evaluation. Reference is made by the CLE to SDGs 2 and 9, but the report also provides material to be more clear on how IFAD contributes to SGD 17.

14. Linked with recommendation 4: in addition to fostering an internal innovation culture, IFAD could also enhance its culture to **partner with other innovation actors** willing to invest in innovation. Not only IFIs and interested partner governments could provide innovation partners (as mentioned in recomm. 5) but also other societal actors like research, civil society and private sector including agricultural producers.

15. The material is very rich and provides arguments for more than six recommendations. Another recommendation, for example, could pertain to the types of innovations IFAD and partners are promoting. Whereas past innovation programmes had a strong orientation on technical agri-innovations, the evaluation report shows a rich practice of emergent additional types of innovation: transformative innovation, system innovation, social innovation, disruptive innovation, frugal innovation. Within the European Union also responsible innovation is now also promoted. A recommendation to be open for new types of innovations that are especially of interest to small holders would befit the depth and range of the current evaluation report.

D. Conclusion

16. The report will provide a valuable resource for IFAD to deepen and enhance its approach to inclusive innovations focused on smallholders. The many findings and lessons draw together information from a range of sources and deserve to be widely shared. In view of their importance adding a short summary would help accessibility by a wider audience.

Evaluation matrix

Criteria	*Evaluation questions*	*Data sources*
	Overarching questions A. To what extent (how and why) have corporate instruments, tools and approaches been successful in promoting agricultural innovations within IFAD's country programs? B. To what extent (how and why) have IFAD's operations promoted agricultural innovations that: (i) have responded to smallholder farmers' needs / demand; (ii) were targeted and inclusive? C. How did those innovations lead to positive outcomes, and were scaled up for sustainable and resilient development of smallholder agriculture?	
1. Relevance	• How relevant are IFAD's strategies, policies, procedures and guidelines for promoting innovations for inclusive and sustainable smallholder agriculture? - How relevant is the IFAD Innovation Policy, guidance and approaches to the IFAD Strategic Framework and the Sustainable Development Goals (SDGs)? - Is there conceptual clarity on the concept of innovation within IFAD and has this been translated into programme design? - What is IFAD's added value with regard to innovation? - Are IFAD's business model and culture adequate to promote innovation (fit for purpose)? - How relevant are IFAD's operational procedures, manuals, guidelines and quality assurance processes for effectively implementing the IFAD Innovation Policy? - Are adequate resources available? Are IFAD staff sufficiently motivated and supported to take risks in developing innovations? - To what extent is IFAD's support to innovations in line with governments' policies and strategies?	IFAD strategic frameworks and policies Governments' policies in case of study countries Country strategic opportunities programme (COSOP) documents for selected case study Guidelines and guiding documents (for grants, loans, knowledge management, formulation of COSOPs, etc.) Quality assessment documentation Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Case studies Interviews with national stakeholders in case study countries IFAD knowledge products
	• To what extent have the smallholder context, needs and constraints (especially of disadvantaged groups) been considered and addressed in innovations promoted through IFAD-supported operations? - How are the different challenges between regions reflected in the types of innovations developed and rolled out? - Are IFAD's country strategies and approaches relevant to promote innovations that address the needs of smallholder farmers, especially poor and disadvantaged groups? - Are the innovations relevant to smallholders' needs (do they arise from clear needs or from the supply side)? - Are the portfolio and non-lending activities (including grants) relevant in addressing the needs of smallholder farmers, especially poor and disadvantaged groups?	IFAD strategic frameworks and policies Government policies in case study countries COSOP documents for selected case studies Guidelines and guiding documents (for grants, loans, knowledge management, COSOP formulation, etc.) Quality assessment documentation Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Case studies Interviews with national stakeholders in case study countries IFAD knowledge products

Criteria	*Evaluation questions*	*Data sources*
2. Effectiveness	• To what extent (how and why) have instruments, tools and approaches been effective in enabling IFAD's operations to promote a systems approach for agricultural innovations (in terms of success and failure) as reflected in the theory of change (ToC)? - How effective is the systems approach to supporting agricultural innovation? - Are there linkages and complementarities among loans and grants?	COSOP documents (for selected case studies) National strategy documents (for selected case studies) Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Quality-at-entry assessment reports Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Interviews with national stakeholders in case study countries IFAD knowledge products Direct observations and testimony Monitoring data Impact assessment databases (when available)
	• To what extent (how and why) have IFAD operations that promoted agricultural innovations been effective in terms of: (i) addressing smallholder farmers' needs and demands; (ii) inclusiveness; (iii) outreach; and (iv) achieving results? - How effective have innovation systems been in responding to needs (demand driven) and addressing challenges of smallholder farmers? - How effective have innovations been in terms of inclusiveness, targeting and outreach (dissemination)? - How effective have innovations been in terms of results achieved? - Are the novelty level and type of innovation important determinants of success or failure?	
	• To what extent (how and why) are non-lending activities effective in ensuring the effectiveness of the innovation system? - How effective are IFAD's partnerships? - How effective are IFAD's knowledge management systems? - How effective is IFAD's policy engagement? - To what extent have lessons learned from experiences related to innovation promotion informed the design of new projects and programmes?	
3. Efficiency	• To what extent have agricultural innovations promoted through IFAD-supported operations been cost efficient in achieving their outputs (especially in the context of smallholder agriculture)? • How efficient are IFAD's financial and non-financial instruments? - How efficient have the organisational structure, availability of skilled human resources and budget allocation been over time? - How efficient are IFAD's partnerships to develop innovations? • Are there possible links between the novelty level of promoted innovations and the level of efficiency? • Which innovations (types or categories) were the most efficient and why? - Are there any potential linkages between level of efficiency and adoption of innovations? - What are the linkages between efficiency and goals achieved as a result of the innovation promoted?	• Grant and Investment Projects System database • Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) • Financial reports • Quality-at-entry assessment reports • Past evaluation and study reports • Interviews with IFAD Management, staff and partners • E-surveys • Interviews with national stakeholders in case study countries • IFAD knowledge products • Databases on budget allocation and implementation • Project financial management data

Criteria	*Evaluation questions*	*Data sources*
4. Impact	• To what extent (how and why) have agricultural innovations promoted through IFAD-supported operations had positive impacts on smallholder farmers, taking into consideration IFAD's impact domains? - What are household incomes and assets? - What are the levels of productivity and food security? - What are the capacities of participating farmers, their organisations and other stakeholders (human and social capital)? - What rural institutions and policies are in place? • To what extent can successful impacts be attributed to favourable context or external factors, e.g. weather or markets? • To what extent (how and why) have the type and nature (novelty level) of innovations determined their outcomes and impacts? • Have there been any negative or unexpected impacts? • To what extent have gains towards productivity, social and environmental goals been achieved in a complementary manner, and which trade-offs (negative impacts) have occurred?	COSOP documents (for selected case studies) National strategy docs (for selected case study) Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Quality-at-entry assessment reports Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Interviews with national stakeholders in case study countries IFAD knowledge products Direct observations and testimony Monitoring data Impact-assessment databases (when available)
5. Sustainability	• To what extent (how and why) were innovations promoted with IFAD's support sustained after closure of the project or programme? - Was the viability of innovations promoted (economically, technically, environmentally and social)? - Were farmer-driven innovations more sustainable?	Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Interviews with national stakeholders in case study countries Direct observations and testimonies (for selected case studies) Monitoring data and impact-assessment databases (when available)
6. Scaling up	• To what extent were innovations promoted through IFAD-supported operations scaled up? - Were innovations involved in scaling up results? - What were the influencing factors? - Were partners (governments, donors, etc.) involved? - What were the links between the type of innovation and scaling up results? - Were there other factors that explained the scaling up or successes and failures? - To what extent can successful outcomes from scaling up be attributed to favourable context or external factors (e.g. weather or markets)? • Was there a specific strategy for scaling up the innovation, including funding, partners and targets? - What types of evidence were collected to justify and support the scaling up of successful innovations, and how this was documented?	Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Past evaluation and study reports Interviews with IFAD management, staff members, project staff and partners E-surveys Interviews with national stakeholders in case study countries Direct observations and testimony (for selected case studies) Monitoring data and impact-assessment databases (when available)

Criteria	*Evaluation questions*	*Data sources*
	• To what extent has IFAD been proactively engaged in partnership-building and policy dialogue to facilitate the development, uptake and scaling up of successful innovations?	
7. Gender equality and empowerment	• To what extent (how and why) were innovations promoted through IFAD's operations socially acceptable and contributing to equity among beneficiaries, with a focus on gender equality, women's empowerment and representation, and workload? - What types of innovations have helped to improve gender equality and empowerment? - Were women, men, communities and women's organisations all consulted in planning and monitoring? - How many new and adapted technologies, and management strategies have been taken up by women as opposed to men, and how many by smallholders as opposed to larger farmers? - Have IFAD's innovation activities had any unintended negative impacts on women as decision makers or beneficiaries? - Did IFAD engage in policy dialogue with partners to improve gender equality and women's empowerment (to include more women in innovation systems)? • To what extent (how and why) were innovations promoted through IFAD's operations socially acceptable and have they contributed to improving conditions and opportunities for youth? - Have IFAD's intervention approaches improved youth and other marginalised groups' capabilities?	Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Interviews with national stakeholders in case study countries Direct observations and testimonies (for selected case studies) Monitoring data and impact-assessment databases (when available)
8. Environment and natural resource management	• Have IFAD-supported innovations led to improved environmental outcomes and improvements in natural resource management? - What was the incidence and in what types of situations did negative environmental outcomes occur and why? - What was the incidence and in what types of situations were there "win-win" outcomes encompassing both productivity increases and environmental goals?	Project documentation: design, approval, supervision, mid-term review and completion reports (for selected case studies) Past evaluation and study reports Interviews with IFAD Management, staff and partners E-surveys Interviews with national stakeholders in case study countries Direct observations and testimony (for selected case studies) Monitoring data and impact-assessment databases (when available)
9. Climate change adaptation	• To what extent (how and why) have IFAD-promoted innovations improved smallholder farmers' ability to adapt to climate change or support disaster risk reduction? - Have IFAD-supported innovation systems addressed challenges related to climate change? - Have innovations promoted by IFAD strengthened the adaptive capabilities of smallholder farmers?	

Additional tables to chapters

Table A1: Review of corporate documents

Corporate documents	*Excerpts / review in relation to innovations*
IFAD, strategic Frameworks	In IFAD's Strategic Framework 2007-2010, innovation, learning and scaling up became one of the six engagement principles. Because IFAD is not a large-scale financial institution, it is necessary to foster partnerships for developing innovative approaches to rural poverty reduction, and testing methodologies, institutional arrangements, partnerships or technologies that are new within the context in which they are being applied. The strategic framework referred to have all elements of IFAD's country programmes to be innovative, and to ensure the scaling up of innovations, through learning arrangements, as well as mechanisms for feeding lessons to the higher, national level. The knowledge management strategy was mentioned to transform the organisation into a knowledge-sharing and innovative institution and centre of excellence for rural poverty reduction. Thus, innovative projects, embedding innovations, learning, knowledge management and scaling-up mechanisms, are expected to be implemented through country programmes. Grant programmes would continue to be an important mechanism for IFAD to promote innovation, knowledge-sharing, build capacity, and develop partnerships at regional and global levels, but it should ensure that they strengthen national programmes. In the IFAD Strategic Framework 2011-2015, innovation, learning and scaling up were kept as one of the eight principles of engagement. In view of rural development challenges (related to environmental degradation, climate change and agricultural and food market transformations), IFAD should be able to innovate and learn. Thus, it is necessary to work with a variety of partners – including the Consultative Group on International Agricultural Research (CGIAR), national research agencies, farmers' organisations, and commercial technology providers – in order to identify appropriate technologies for smallholder agriculture, to increase crop and livestock productivity and improve the resilience and sustainability of systems. Lines of actions mentioned in the strategic framework include to: - Continue to promote innovation at all levels in its operations, and to focus on developing demand-driven and innovative approaches to rural poverty reduction; - Place greater emphasis on knowledge generation and sharing within IFAD and in its operations management, with a focus on building on operational experience; - Scale up successful approaches and innovations, when appropriate, by treating scaling up as "mission critical", and building on recent efforts to better understand the preconditions for successful scaling up and to systematise IFAD's approach in this regard; and - Review existing policies and strategies on knowledge management and innovation to develop an integrated innovation, learning and scaling up strategy focused particularly on RB-COSOPs and projects. In IFAD's Strategic Framework 2016-2025, innovations, learning and scaling up are still kept as one of five principles for engagement. Innovation, knowledge-sharing, partnerships and policy engagement will contribute to strengthening the quality of IFAD's country programmes. Improving the quality of IFAD's programmes entails some critical dimensions like: (i) strengthening its capacity to identify innovations that respond to constraints faced by rural people, and to incorporate and test them through IFAD supported programmes; (ii) strengthening its ability to learn, to generate knowledge, to provide evidence of what works, and to leverage the knowledge of others; (iii) enhancing project quality-at-entry and implementation support; and (iv) strengthening partnerships and policy engagement, inter alia, through expanded country presence. The 2016-2025 Strategic Framework explicitly highlights that, IFAD-supported programmes should: - Offer opportunities to innovate in a range of ways that respond to the specific challenges faced by programme beneficiaries; - Build new forms of partnerships with local communities, organisations of rural people, the private sector and other development partners that can bring to bear substantial financial resources, new approaches to rural development, and strong technical expertise; and - Have effective M&E and knowledge management systems in place for testing innovative approaches, measuring results and impact, and analysing drivers of success, in order to generate lessons and evidence to shape policies, institutions and practices for expanded impact in terms of rural poverty and hunger reduction
COSOP guidelines	Revised RB-COSOP Framework (2006). The IFAD country strategy should have a clear innovation agenda and mechanisms for scaling up activities via strategic, partnerships. The previous guideline was revised to strengthen the emphasis on: (i) IFAD's core competencies and comparative advantage; (ii) target groups and targeting approach; (iii) assessment of past programme performance and lessons learned; (iv) harmonisation and alignment with the government's own poverty reduction strategy and programmes, and those of other donors; (v) policy change aspirations over the COSOP period; (vi) knowledge management approach; (vii) innovative approaches; and (viii) risks and risk management. The 2016 guideline included a sub-section on "opportunities for innovations" This

Corporate documents	*Excerpts / review in relation to innovations*
	subsection identifies potential innovation ideas/areas for each of the selected strategic objectives. It also identifies the intended innovation approach (for example: scoping, testing, validation, communication of results, replication) to be adopted by IFAD. This section will seek to link research work funded by IFAD grants (both in the country and elsewhere) to future projects that could benefit from innovations. Revised guidelines (2011) introduced a dedicated section on "Opportunities for Innovation and Scaling Up". In addition to what was mentioned before, this section will seek to link research work funded by IFAD grants (in both the country and elsewhere) to future projects that could benefit from innovations. Concerns about environment and climate issues should also be reflected –as deemed appropriate- in the innovation, knowledge management and scaling up agenda. For COSOPs to become strategic documents for scaling up, the review processes needs to focus on strategic questions, including the following: (i) what does IFAD wish to achieve through its programme in the country and at what scale; (ii) does it have the right mix between innovation and scaling-up; (iii) what kind of scaling up is anticipated, by whom, how; (iv) how will IFAD help support to achieve this scaling up; (v) does the COSOP provide for the appropriate instruments to allow this to happen; (vi) how will new projects that will be approved through the COSOP contribute to the results objectives and indicators laid out in the results management matrix; and (vii) through what pathway and over what time frame could this be achieved? Revised RB-COSOP Guidelines (2016). A dedicated sub-section to: - Innovation, that shall present the strategy and approach for generating innovations, for example through linking to research or setting up innovation platforms with private and public sectors. It would also describe (if any) previous IFAD grant financed innovations that can be replicated or scaled up in the future portfolio. - Scaling-up. Drawing on lessons learned and past results, the RB-COSOP is presented according to IFAD's Operational Framework on Scaling Up. IFAD's new approach demands that scaling-up is not incremental through a sequence of IFAD funded projects but includes other instruments i.e., scouting for innovations, policy engagement, partnership and knowledge sharing. Opportunities for building on loan or grant financed investments in the past would remain an option. The RB-COSOP will be the main vehicle to define and promote IFAD's scaling-up agenda in the country. Revised RB-COSOP Guidelines (2019). A sub-section "Innovations and scaling up for sustainable results" is introduced and should include. - IFAD's comparative advantage in encouraging innovation through projects and associated non-lending interventions (e.g. policy experimentation, sharing knowledge through pilot activities). Description of how innovation fits the country context (e.g. setting up innovation platforms with the private sector may be more relevant in UMICs); of any ongoing or previous IFAD grant-financed innovations, or good practices developed by others, that can be replicated or scaled up in the future portfolio; Integrating ICT for development into projects and non-lending activities can be a valuable source of innovation and can enhance the scaling up process. - Scaling up to draw on lessons learned and past results of IFAD interventions, summarise IFAD's scaling up strategy in the country, both for proven innovations and to develop innovations for future scaling up. Additional financing for successful earlier pilot phases may be relevant. Describe how tapping into strategic partnerships (e.g. government inclusion in larger programmes, co-financing, private sector involvement) can help to scale up successful innovations. Policy engagement may be one of the principal mechanisms for scaling up through national strategies or programmes.
Knowledge management	Knowledge Management Strategy 2007. Due to evolving realities, IFAD needs to be more agile, to apply appropriate innovations and improves its systems and its institutional readiness for more continuous learning and sharing. By doing so, IFAD can become a knowledge-based organisation. It will learn systematically and collectively from its own projects and programmes, and from the experience of its partners, particularly poor rural people, in order to deliver high quality services and to enable its partners to find innovative ways to overcome poverty and to use the knowledge acquired to foster pro-poor policy reforms. Strengthen innovation and knowledge sharing and learning within IFAD is necessary to have knowledge-intensive and innovation-based programmes for institutional and policy transformation. The direct supervision policy will enhance learning and provide the basis for stimulating, replicating and scaling up innovations. IFAD will share information and knowledge related to rural poverty in order to promote good practice, scale up innovations and influence policies, thus positioning the fight to reduce rural poverty as a global, regional and national priority. Knowledge Management Framework 2014-2018. The core purpose of IFAD's KM shall be to "identify, develop and promote successful and innovative approaches and interventions that have demonstrated potential to be scaled up." IFAD integrates knowledge sharing and learning functions into key business processes, to promote a culture of knowledge application, innovation and learning. The framework established a KM Coordination Group to serve as a technical group with reference to KM and, among other tasks: Promote discussion on the linkages between knowledge management, innovation and scaling up; and Identify new trends in KM and innovation. The result area no.5 of the framework includes incentives to put in place for business processes and performance frameworks that foster

Corporate documents	*Excerpts / review in relation to innovations*
	sharing, reporting, lesson learning, documentation and innovative behaviour, including learning from failure. Knowledge Management Strategy 2019. The strategy acknowledged how IFAD implemented and is still implementing significant reforms, including the decentralisation and a business model that focuses on results and innovation across all areas of work, in order to have an effective development impact. It introduces the need of innovative behaviour for a stronger learning culture. The action plan of the strategy includes an initiative to mainstream innovation in IFAD operations and organisational culture and to develop and test solutions to address knowledge challenge. It also introduces an incentive framework for staff to support learning, sharing and innovative behaviours. The CDI unit will collaborate with the KM unit in the implementation of innovation related actions.
Implementation	Policy on Support and Implementation (2007). IFAD aims to achieve a stronger, more sustainable impact on rural poverty through: (a) strategic planning and guidance; (b) a new operating model to strengthen country programmes; and (c) knowledge management and innovation. Implementation support focuses on development impacts. Where needed, technical support, policy dialogue, innovations and programme and/or design adjustments will be applied to improve effectiveness. The policy encourages innovations during projects' implementation. The policy introduced knowledge management and innovation as an area of focus to achieve a more sustainable impact on rural poverty, together with strategic planning and guidance and the new operating model (direct supervision). One of the guiding principles in the policy was the "encouragement of innovation during project implementation", assuming that IFAD direct supervision would respond adequately to country context and country programme with a deeper understanding of national capacities and opportunities for innovative approaches based on local experiences. Guidelines on Supervision and Implementation Support of Projects and Programmes Funded from IFAD loans and grants (2007). Among main principles guiding the supervision and implementation support, there are: encouragement of innovation during project implementation; and ongoing learning and sharing of knowledge with all stakeholders. Supervision is required to provide information on how the project is implementing IFAD's Innovation and Knowledge Management strategies. Innovations being developed through the project should be clearly identified in supervision reports. The supervision and implementation support process should focus on active learning. It should help improve learning possibilities; facilitate processes of creativity and innovation and bring about change in attitudes and the way we work. Guidelines for Project Design Report - PDR (2011). The Project description and Implementation arrangements should incorporate elements related to Innovative features, scaling up, learning and knowledge management. The section on Planning, M&E, learning and KM to include, among others, the presentation of how the knowledge generated by the project including innovations will be captured, analysed and shared. Recalibrating IFAD's project design process (2018). In the President's report template, innovations and scaling-up shall be described in the implementation section, as a point of M&E, learning, KM; and strategic communication approaches. In the PDR template, the project implementation description to include aspects related to, distinctively from the sub-section on M&E, learning, KM; and strategic communication and reputation management approaches. Guidelines for Internal Project Review Quality Enhancement – QE (2007). Key success factors of IFAD projects include: a) country relevance, b) poverty / social targeting, c) alignment of design with IFAD's strategic objectives, d) implementation arrangements, e) risks and sustainability, f) innovation features, learning and knowledge management. Quality assessment during the design of projects aim at providing feedback on the extent to which Key success factors are well addressed in the design report. With regard to innovation, QE comments include: How innovative is the project? Has the issue of innovation been discussed with the Government?
Other corporate documents	Environment and Natural Resource Management Policy (2012): Innovation is mentioned in two of the ten core principles of the NRM policy, in connection with (i) risk management, building resilience to climate change, access to mitigation incentives and funding; and (ii) embracing innovative adaptation measures in carbon sequestration and other environmental services. It introduces the principle that country programmes need to respond more systematically to increased demands for innovations in climate change and sustainable NRM; encourages the sharing of knowledge whereas innovation informs enhanced global and national advocacy. Policy for Grant Financing (2009 and 2015). IFAD's Grant Policy (2009) emphasised the strategic role of grants in innovation and, for the first time, provided an opportunity to involve the private sector in research and the piloting of innovations for replication and scaling up through investment projects. These principles were re-affirmed in the revised Policy for Grant Financing (2015), which recognised the value of grants in supporting policy engagement, research and partnerships, and for generating, testing and implementing innovative ideas and approaches, not only with partner governments, but also with actors in civil society, academia and the private sector. Grants should promote innovative, pro-poor approaches and technologies with the potential to be scaled up for greater impact. IFAD's Social Environmental and Climate Assessment Procedures – SECAP (2017). The procedures indicate that IFAD will take a proactive and innovative approach to promote projects and initiatives that

Corporate documents	*Excerpts / review in relation to innovations*
	are specifically designed to deliver significant environmental, social and climate adaptation and mitigation benefits. The preparatory study must identify and assess win-win solutions and innovations to support scaling up. There is a reference to Innovation is in all sections dedicated to Biogas, Livestock, Roads, MSME and Rural Finance
	IFAD11 - IFAD's Role in the 2030 Agenda (2018). There is a need to embrace the culture of results and innovation to transform resources into development results; to use supplementary funds to finance innovation; and grants to innovate in areas such as ICT or capacity building. IFAD-HQ has to play a strategic role to promote innovation. Flexibility is required in project design to stimulate innovation and adapt design during implementation. Partnerships are a condition to promote and showcase innovations.

Source: compiled by the CLE team.

Table A2: KM activities affecting innovations

PROCASUR EXAMPLE: An innovative KM approach to make innovation more effective
PROCASUR started work particularly in Peru and Argentina, but has been supporting work in El Salvador for many years (as well as in many other countries globally). IFAD noticed that knowledge sharing tended to be top down, and wanted to create knowledge exchanges to be able to share community knowledge. The PROCASUR Corporation was started to organise study trips for farmers, or women's handicraft groups, etc. to visit others in the same business and learn from them – Learning Routes. This was a method to share knowledge at community level and to value it better, moving away from the idea of 'expert' knowledge. It started as a low level community activity, but now is working with policy makers. This has developed to policy engagement with governments, which has proven effective to induce government actions to reduce rural poverty. PROCASUR noted that participants would come up with good ideas during the Learning Routes, but these can't be implemented without participation of higher level government staff. Consequently the Rural Dialogue Groups in Peru have also developed to include policy makers.
When PROCASUR looked at doing learning routes in Latin America, they considered two of the important innovations to showcase were the 'concursos' in Peru, and the gender approach and rural economic empowerment for women in El Salvador. Current participating countries in PROCASUR's cross-regional activities - Priority host countries (9 countries): Senegal, Mauritania, Rwanda, Mozambique, Peru, Bolivia, Colombia, El Salvador, and Ecuador. Participating countries (18 countries): Brazil, Guatemala, Nigeria, Venezuela, Botswana, Malawi, Tanzania, Uganda, Benin, Cape Verde, Ghana, Guinea Conakry, Liberia, Madagascar, Mali, Sierra Leone, Chad, RCA.

Source: CLE team

Table A3: Promotion of R&D and extension in Bangladesh

Development of agricultural technologies and a more efficient extension approach were and still are the main concerns for three of the IFAD nation-wide interventions, which have a consortium of ministries for agriculture, livestock and fisheries as partners in Bangladesh. In NATP-I and -II, IFAD was a co-funder in a World Bank intervention and in SACP, IFAD is a main funding agency. NATP supported national research organisations through strategic planning, competitive funding grants for research teams and competitive adoption grants for smallholders interested in pilot-testing innovations in early stage of development. This was tied to an extension strategy. Main innovations in extension are related: (i) to the participatory extension planning and budgeting of services at union and district levels; (ii) its planned evolution towards multi-stakeholder platforms linking public and private stakeholders; (iii) the set-up of one-stop FIAC facilities for public and private extensionists and service suppliers at district level (for livestock and fisheries). IFAD promoted the implementation of these public strategies. In all projects there were activities for technology development, pilot-testing and dissemination resulting in productivity increase among adopters, in the assets accumulation by the very poor and in the emergence or consolidation of clusters on which a value chain approach could be built.
Development of agricultural technologies and a more efficient extension approach were and still are the main concerns for three of the IFAD nation-wide interventions, which have a consortium of ministries for agriculture, livestock and fisheries as partners. The grant component in the projects gave flexibility in the design of research grants and the complementarity in the projects over time ensured continuity in the innovation development process and the development of institutions for their dissemination.

Source: CLE team

Table A4: Additional examples of impacts on institutions and policies

Description
Moldova is a small country and the IFAD CPIU is a long-lasting institution within the Ministry of Agriculture. Discussions at that level are permanent and IFAD displays how national policies can be implemented efficiently. IFAD innovates and kick-starts processes and other donors inject much larger funds. However, impacts of IFAD on the country finance policies are less evident.
The single project implementation unit (SPIU) was initiated in Rwanda in 2012. The COSOP 2019 highlighted the fact that the SPIU has proven to be "an effective vehicle in guiding the process of designing, implementing and monitoring projects together with IFAD. SPIU was initiated in 2012. Earlier, each project had a single coordination unit, which operated as an independent structure. The government set a regulation to have one single coordination unit for all IFAD supported projects, directly under the ministry supervision. This allowed better synergy between projects, and having scale economies, and improved follow up and capitalization of lessons. Several IFAD country programmes in Sub-Saharan Africa have already visited Rwanda to learn from this model". Stakeholders interviewed during the case study mission mentioned the SPIU as one of determinant factors that contribute to the success of IFAD supported projects, as well as of other donors, in Rwanda. Similar support to establishing units within the Ministry of Agriculture has been seen in various countries, such as El Salvador and Uruguay.
In Peru, the concept of NEC was used in all the loan projects during the evaluation period, as a method to decrease bureaucracy and speed up operations (under the domain of Operational practices and approaches). This had an impact on both Rural Institutions and Policy. The NEC modality was developed as a means to move funds from the public to private sector or individuals, and from national to local level. This approach empowers legally recognised entities in the form of the project NEC and its project staff (contracted by AgroRural) to manage funds, sign contracts and carry out all the necessary administrative and judicial procedures. According to one respondent this was "the most fundamental innovation – wouldn't have been possible to implement IFAD projects effectively and efficiently without that".

Source: CLE team

Table A5: Innovations affecting marine and inland water biodiversity protection

Type of innovation	*Description of examples*
Innovation affecting NRM in a positive way	Several successive loan projects in Bangladesh have supported sustainable "beel" management by the riparian fisher communities. Beels are depressions, which remain under water when the seasonal floods in the Hoar region recede. They are under State ownership and rented out, often to local elites despite the fact that poor fishers depend on the resource. Interventions consisted in organising fishers in order to secure their access to beels, encouraging them to develop sustainable fisheries practices such as planting and protecting mangroves as fish sanctuaries, as well as enacting local rules protecting fish in spawning times. Environmental outcomes are very positive, with the reappearance of extinct fish species and the replenishing the fish stock. Security of small fisher rights remains an issue endangering the sustainability of communities' engagement. Developing value chains out of wild fish and shellfish may lift poor fishers out of poverty but at the same time deplete the stocks. In some specific cases, protecting the natural biodiversity may imply the domestication of wild species in order to prevent the destruction of the wild stocks while promoting production and its value chain. Domestication is usually linked to the pilot testing of innovation. In the case of the mud crab in Bangladesh, fishers were used to fatten crablets but did not know how to hatch them. Several devices from other countries were pilot-tested, while a value chain for export was being promoted. The FishCORAL grant in the Philippines is supporting protected areas and fish sanctuaries. Fisher groups try to increase fish biomass and live coral cover via placing artificial reefs in black sand barren areas; replanting of mangroves; enhancing giant clam stock and requiring law enforcement in protected areas; and. Several areas are also under protection to foster spawning. Watch towers have been erected and fishermen are working in teams to guard the areas from incursions. Each of these activities may not be innovative, but their bundling into a bay wide approach is. Bay management councils are carrying out coastal resources management and this has the potential to be an innovation.
Innovation affecting NRM in a less positive way	Fish farming of any kind (such as in crab and lobster cages) has the potential to cause water pollution. But in the Philippines project, a more serious concern is that of the polluted environment is damaging the fisheries and is putting the innovative approach at risk. There is always a risk when a new resource is harvested for the market that it could be depleted. In Indonesia, a seaweed value chain has been recently actively promoted by local coastal communities in Papua. Management plans also have been developed with harvesting rules, in order to reduce the risks of negative outcomes.

Source: CLE team.

Table A6: Example of innovations affecting terrestrial ecosystem protection

Type of innovation	*Description of examples*
Innovation affecting NRM in a positive way	Pasture conservation in the arid steppes is considered when sound community management of these common pool resources can be put into place, as in Kyrgyzstan. Additional infrastructures (water, access road) also contribute to a better use of pastures in remote places while deciding upon rules for sustainable use of the nearer overexploited ones. Watershed and catchment management also requires collective agreement. In Malawi, a GEF program set up committees at different levels to introduce more sustainable uses of the upper catchment, reduce deforestation and soil erosion. This is a way of mitigating the siltation and water shortage risks of the irrigation investments.
Innovation affecting NRM in a less positive way	Taking the equatorial forest in the Amazon and other frontier areas into cultivation is also a global issue. In Ecuador for example, the expansion of the agricultural frontier towards areas of high biodiversity, expanded banana cultivation, growth in the oil sector and new mining operations have had a significant impact on the environment. The "boom" of oil has promoted migration to the areas of the Amazon, pollution of land and water, deforestation, and increasing social conflict between the new settlers, indigenous communities, and large mining companies. Excessive use of agrochemicals, the existence of large areas of monoculture, erosion, burning and indiscriminate deforestation have led to a significant degradation. There is also degradation of large areas of natural vegetation such as moors, forests and dry forests due to a disorderly occupation of land. The portfolio of projects did not address the issues beyond the promotion of usual reforestation and agroforestry practices. Peatland degradation is very concerning in the APR region. Peatland ecosystems are threatened by timber harvesting and oil palm plantation, which is accompanied by drainage; drying out of the peatland makes them very susceptible to fire. Peatland destruction by fire causes serious air pollution and haze. The destruction of peatland causes the loss of a environmental benefits such as flood mitigation, prevention of saline intrusion, groundwater regulation and detoxification, and carbon storage. Peatland covers 20.65 million hectares in Indonesia; one national and a succession of regional grants intend to cope with this matter.

Source: CLE team.

Table A7: Example of innovations affecting NRM in farming systems – breeding, soil conservation, IPM, agroforestry

Type of innovation	*Description of examples*
Innovation affecting NRM in a positive way	**Breeding** is performed for rice in risk prone environments. AfricaRice grants had multiple benefits. In Sierra Leone, many farmers could move from upland to lowland rice cultivation, and the support of IFAD in providing water management infrastructure and knowledge played into the opportunity to help farmers deal with increasing erratic climate patterns, increasing production and productivity of rice and vegetables through cropping intensification and diversification in the Inland Valleys. The move away from the upland rice cultivation also led to decreased slash and burn practices. The use of short duration Nerica rice, as promoted in the projects, made farmers less depending on the duration of seasons and enabled them double or triple cropping. With the CURE regional grant in the APR, IRRI is breeding rice varieties together with APR farmers to combat the challenges of difficult environments. In addition, Community-based seed systems will support farmer resilience to disasters and climate change. CBSS builds on community practices, where farmers (in groups or in a community) produce, save, and exchange or sell good-quality seeds, especially in times of disaster or seed shortages. In several countries, sustainable rice intensification (SRI) packages allow to rice intensification under irrigation. SRI does not require a high level of the water table in the rice plot and reduces water needs considerably. SRI is disseminated through Africa, for example in Senegal, with some success. Several projects have been promoting **soil conservation** practices. In Moldovan large-scale open field farms, cultivation practices with recurrent interventions on the plot each season were damaging the soil and pioneer farmers experimented with no tillage farming practices. IFAD projects supported them in their pilot-testing and peer training efforts, and this contributed to a significant expansion of conservation farming among large farms. In orchards, tree plantation in association with grassland cover for soil preservation has also been promoted and combined with water-saving irrigation. All these practices reduce the climatic risk of crop failure as well, and after a few years, reduce the costs and improve the yields. In Moldova, these technological

	innovations are linked to social innovations, as pioneer farmers have been put in charge of Farmers Field Schools (FFS). In arid regions, more basic research is performed by ICARDA.
Innovation affecting NRM in a less positive way	Many countries have projects disseminating **Integrated Pest Management**; IPM also often must have a pilot testing component to adjust the innovation to the types of pests and crops. As a standalone innovation in Burkina Faso, it has been assessed as insufficient to address the natural resources depletion challenges. Some projects have developed more comprehensive packages of soil and water conservation techniques. The issue of IPM is re-emerging when the sector of intensive vegetable farming grows implying extensive use of pesticides and high risk of pollution. Very few countries could couple the promotion of improved farming practices with the development of higher value chains (for organic products for example). **Agroforestry** belongs to the standard practices which can be innovative when reintroduced in tropical cropping systems, especially as shade trees in coffee or cocoa, support for pepper, etc. (Indonesia). Multiple benefits over a longer planning horizon usually make for the immediate loss of productivity.
Innovation affecting NRM in a negative way	When new breeds are introduced from elsewhere for their higher productivity or only a few varieties are improved for standardisation of marketable products, there is always a risk that **erosion of local biodiversity** occurs if no additional measures are taken to keep them.

Source: CLE team.

Table A8: Example of innovations affecting NRM in farming systems – irrigation and soil & water conservation

Type of innovation	*Description of examples*
Innovation affecting NRM in a positive way	Successful innovations can be found to collect and store water. In Peru, through competitive NRM, groups have competed for funds to construct infiltration ditches, constructed geomembrane water reservoir, or other forms of water catchment or storage. This has improved the water recharge and provided water for irrigation of vegetables or for the recovery of pastures for livestock. In Bangladesh, inflatable dams are used to store water at flood recess.
Innovation affecting NRM in a less positive way	Irrigation is a major source of concern. In Sierra Leone, the quality and efficiency of water management structures such as dams, head-bonds and peripheral-bonds had demonstrated serious inadequacies in the design and materials used, and many were no longer operational. The beneficiaries often do not avail of the right knowledge and/or materials for repair and have to continue their activities as they did before the project. In repairing the infrastructures, room was created for innovation in lowland rice, contributing to its expansion. In Rwanda, the introduction of more sophisticated irrigation systems reduced soil erosion and prevented community conflicts through improved water control.
Innovation affecting NRM in a negative way	Irrigation can be damaging for the soil when poorly applied and competition for scarce water is also an issue. Not all countries have performed well on these topics. Small-scale irrigation schemes of the south of Tunisia, although providing some security to the farmers, have come up against the problem of salinization of irrigation water as well as an underutilization of the developed areas that require important technical solutions. Overexploitation of aquifers for irrigation is also expected as no irrigation management mechanism or local monitoring of water tables has been introduced (or tested). More recent projects have learnt from these initial shortcomings.

Source: CLE team.

Table A9: The UN Innovation S.P.A.C.E. Framework and Toolkits

The five key areas	*Relevant toolkits*
Strategy Innovation strategies help organizations and teams make key decisions about how to get from where they are to where they want to go and how to allocate resources effectively. Without an effective innovation strategy, organizations often find themselves: (1) launching innovation initiatives that are not complementary to each other or to broader mission priorities, (2) missing new opportunities and threats associated with new trends and technologies, and (3) taking on responsibilities that are better suited to another player in the broader mission ecosystem. The enclosed Strategy Module tools help users define their innovation goals and organize to achieve them	• Headlines of the future • Scenario blueprint • Ecosystem analysis • Portfolio strategy • Innovation planner
Partnership Global development involves complex ecosystems of actors with overlapping and – in some cases even competing – interests. Making innovation successful requires organizations to engage with these other groups, and the most consistently innovative organizations have developed standardized approaches to effectively engage potential partners, identify synergies, and create joint value. Often, this process includes working with non-traditional partners – extending efforts beyond traditional global development organizations to include private sector entities, academic institutions, and government agencies. Organizations that have the ability to manage innovation efforts across these ecosystems will often find success that they could never achieve working in isolation.	• Define a value proposition • Find different partners • Prepare to partner • Prioritize and select partners
Architecture The most innovative organizations do not treat innovation as merely a series of consecutive projects. Rather, they take deliberate steps to build their capabilities to sustain innovation over time. By establishing repeatable processes and organizational structures to support each stage of the innovation life cycle, these organizations reduce their reliance on luck, the talent specific individuals, or external factors for innovation success. Instead, innovation becomes repeatable and embedded in the agency's way of working. Innovation Architecture tools focus on helping UN entities become more effective innovators by establishing new operating models, developing catalysing capabilities, and going through each phase of the innovation life cycle in a systematic manner.	• Scan the horizon • User-centered design • From pilot to scale • Operating model
Culture Organizations that hope to truly embed innovation into their DNA must create a culture that provides employees with the skills, opportunities, and incentives to innovate. Because innovation inherently involves risk-taking, employees must understand the circumstances under which they are able to take risks and how to capture learning throughout the process – even when the results are considered "failures." They must also be able to effectively engage governing bodies and communicate their innovation activities in a manner that resonates with potentially risk-averse groups both within and outside their organization.	• Embrace failures • Create incentives and opportunities • Define strategic risks • Engage government bodies
Evaluation Innovation is a dynamic and iterative process, and as such evaluating innovation effectiveness can prove challenging. However, adopting an effective evaluation program for innovation can yield tangible benefits for an organization or team, helping them to identify opportunities to improve innovation processes, allocate resources more effectively, and demonstrate value to decision-makers.	• Innovation story telling • Stage-gate assessment • Life cycle analysis • Enabling environment scan

Source: https://un-innovation.tools

E-survey results

In the framework of the CLE, an e-survey was implemented with the aim of gathering opinions on IFAD supported innovation system. The survey, posted on Survey Monkey, was opened from September to November 2019 to IFAD staff (HQ and field), IFAD supported projects staff (also called government projects staff) and partners-recipient of IFAD grants. The tables present major results by: A) questions to all categories of respondent, B) questions to two categories, and C) questions specifically directed to a category.

Table E1
Survey respondents by category

	No. Respondents	*No. full Completion*	*% Full Completion*
IFAD STAFF (HQ and field)	120	73	61%
GRANT RECIPIENTS PARTNERS(*)	68	43	63%
GOVERNMENT AND PROJECT STAFF (**)	247	167	68%
GRAND TOTAL	**435**	**283**	**65%**

(*) Include representatives of Academic institutions NGOs / civil society, Private sector organisation, multilateral organisations, Research institutions.
(**)Include: Ministry central and decentralised directorates, Regional directorates and IFAD-supported project staff

GROUP A – results

Figure E1
Do you know examples of innovations promoted through IFAD supported projects over the past 10 years? If yes, let us know the specific domain(s) in which these innovations took place.
Total Respondents 283

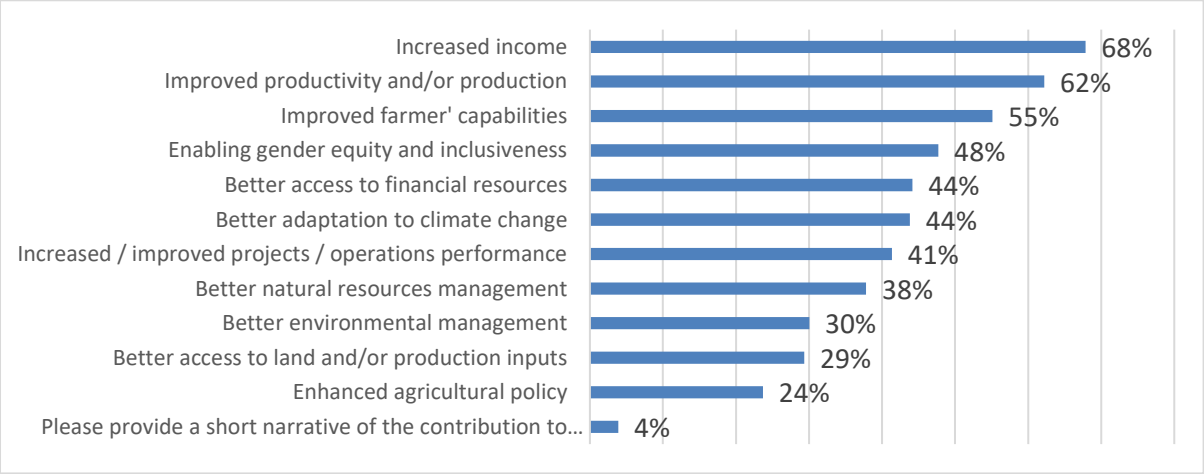


Figure E3
Provide examples of IFAD's supported innovations especially directed to women
Total Respondents 283

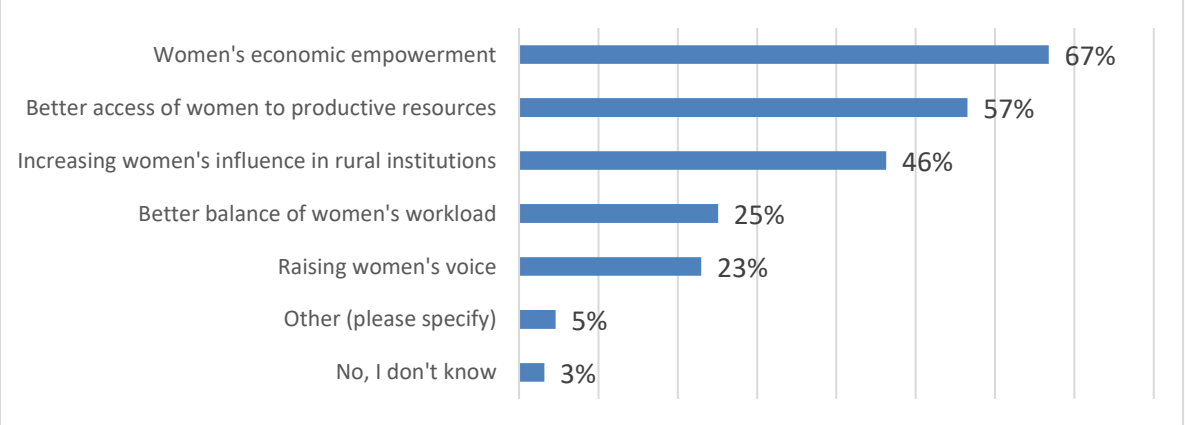


Figure E4
Provide examples of IFAD's supported innovations especially directed to youth
Total Respondents 283

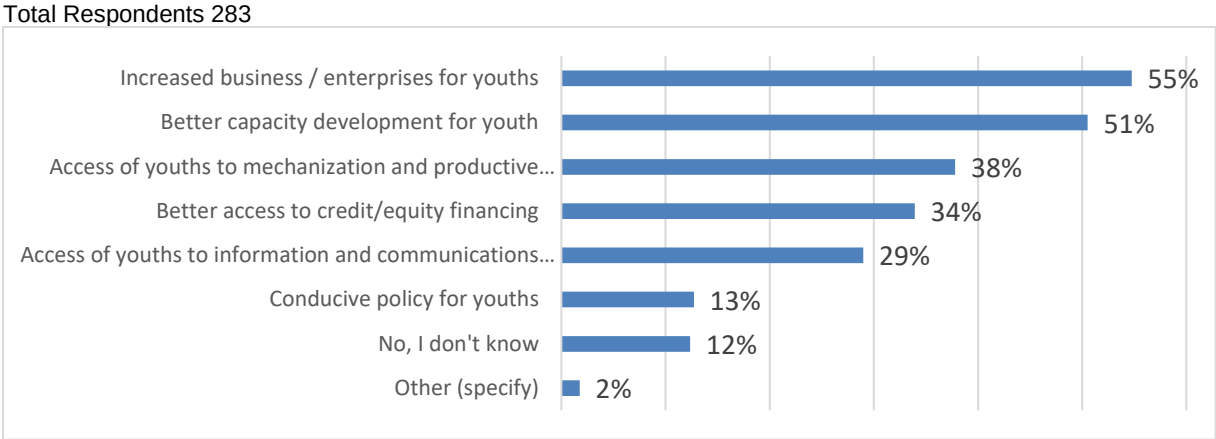


Figure E5
Where do innovation ideas come from most frequently in loan investment projects? (Select the most frequent three options)
Total Respondents 283

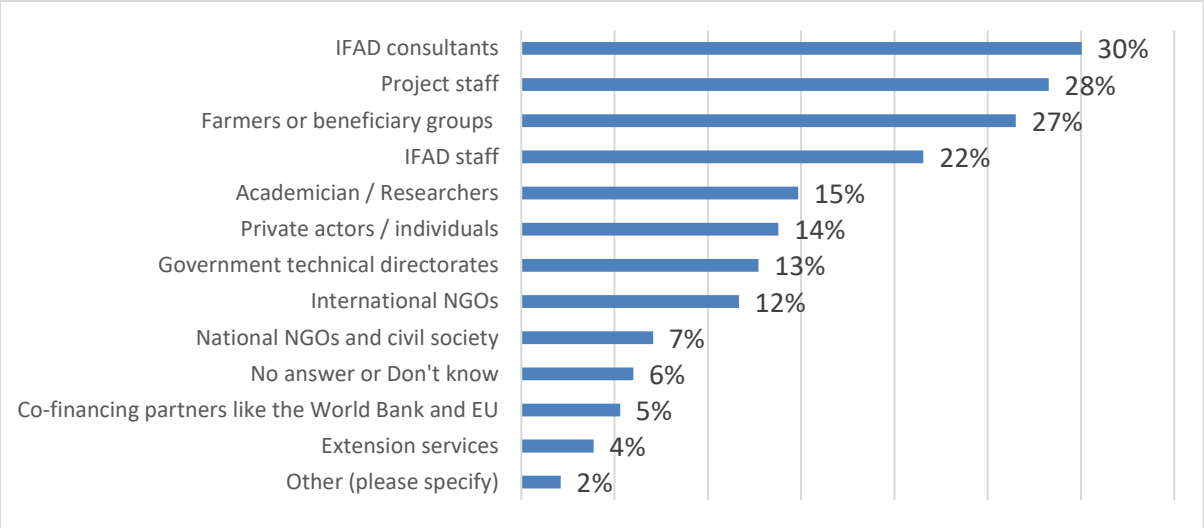
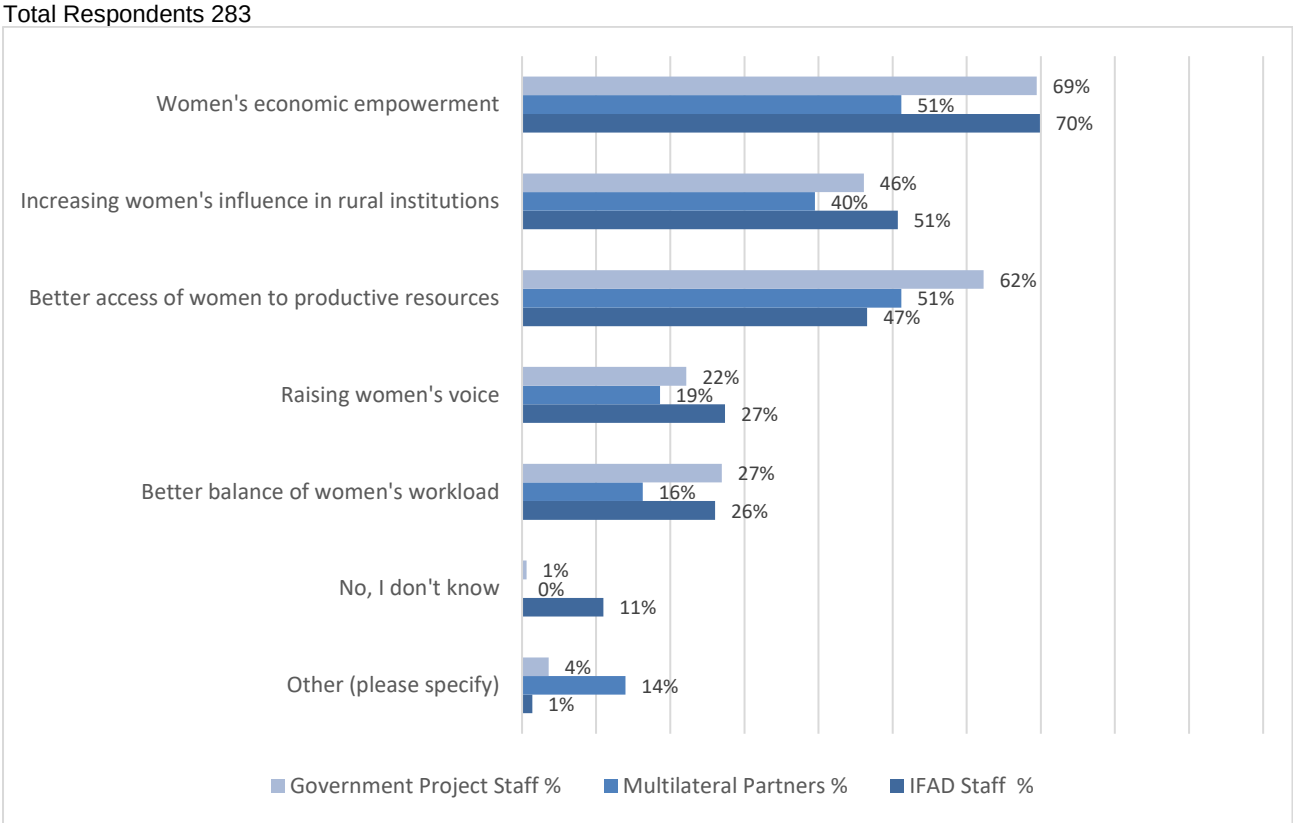
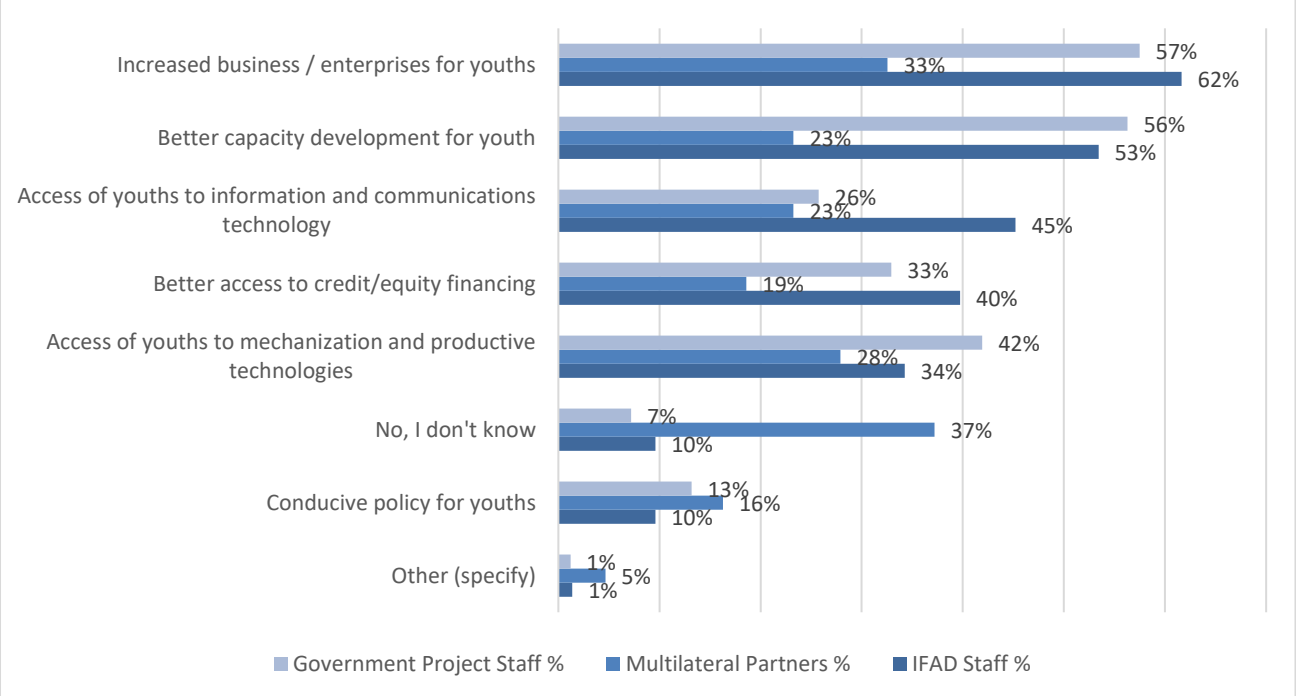


Figure E6
Provide examples of IFAD's supported innovations especially directed to women
Total Respondents 283



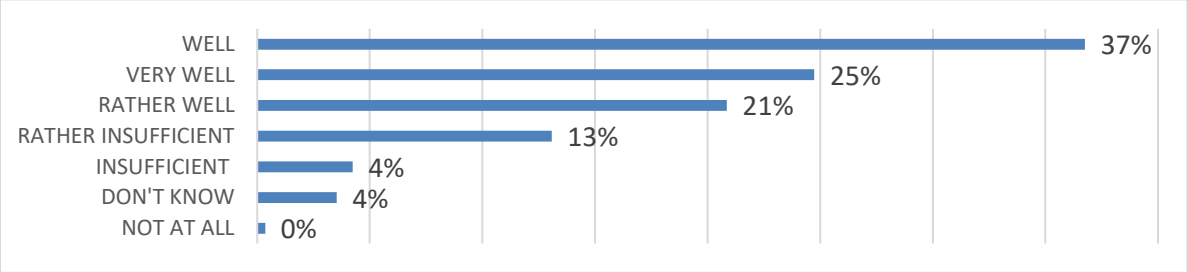
Source: CLE (E-survey staff (IFAD + projects) and partners responses).

Figure E7
Provide examples of IFAD's supported innovations especially directed to youth
Total Respondents 283



Source: CLE (E-survey staff (IFAD + projects) and partners responses).

Figure E8
How do you appreciate the capabilities (technical, human and financial) of IFAD to promote innovations for smallholder agriculture?
Total Respondents 283



Group B results

Figure E9
What do you consider as the most important factors to take into consideration when identifying / choosing innovations to promote, in the context of smallholder agriculture? Select the three most important. (IFAD Staff, Government Project Staff)
Total respondents 240

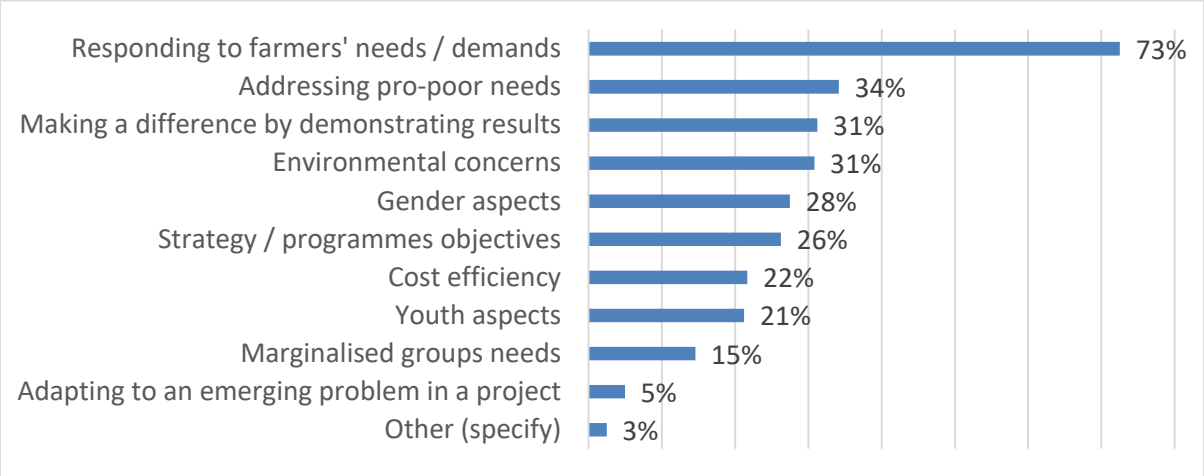


Figure E10
Please rate the sufficiency of IFAD's capabilities (expertise, human and financial resources) to support recipient governments in promoting innovations for smallholder agriculture? (Partners, Government Project Staff)
Total respondents 210

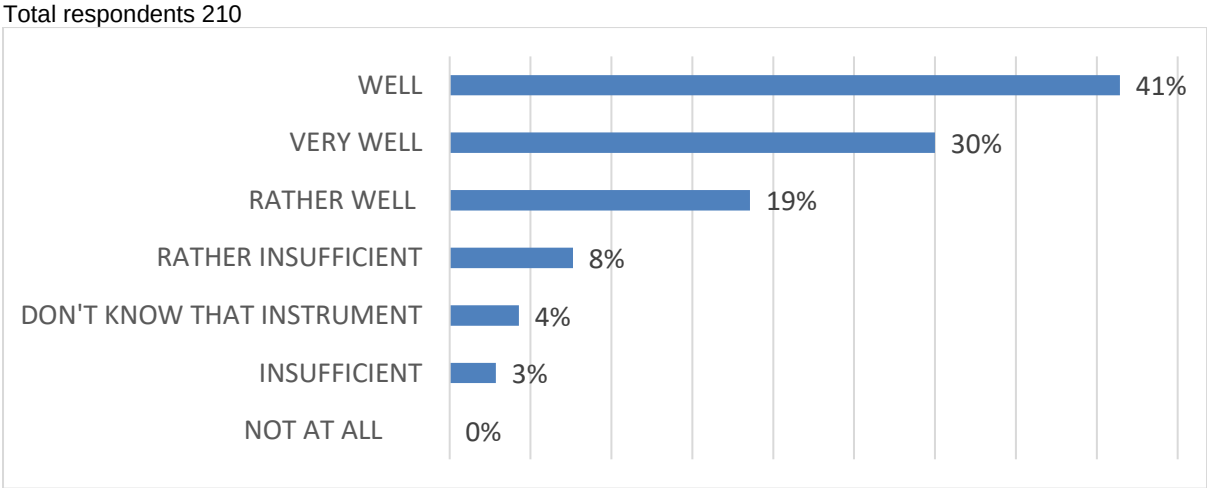


Figure E11
What do you consider as the most important reasons why some innovations are better implemented and replicated? Select the three most important reasons. (Partners, Government Project Staff)
Total respondents 179

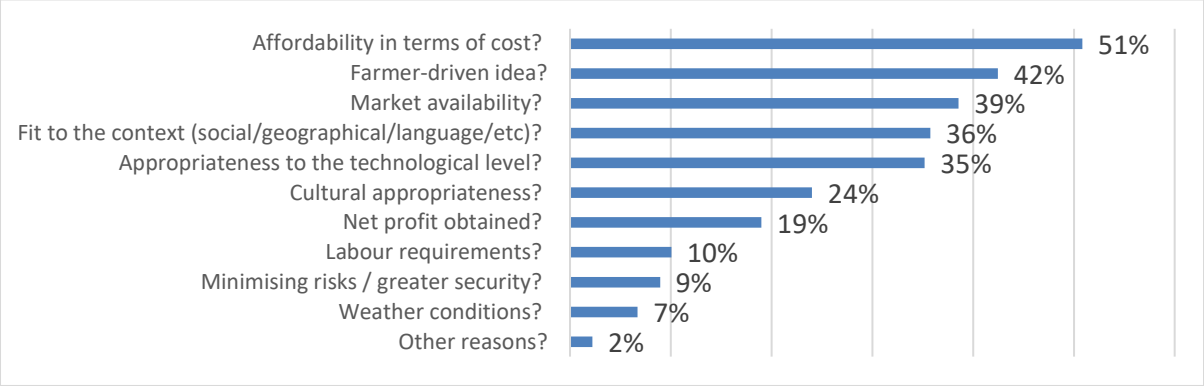
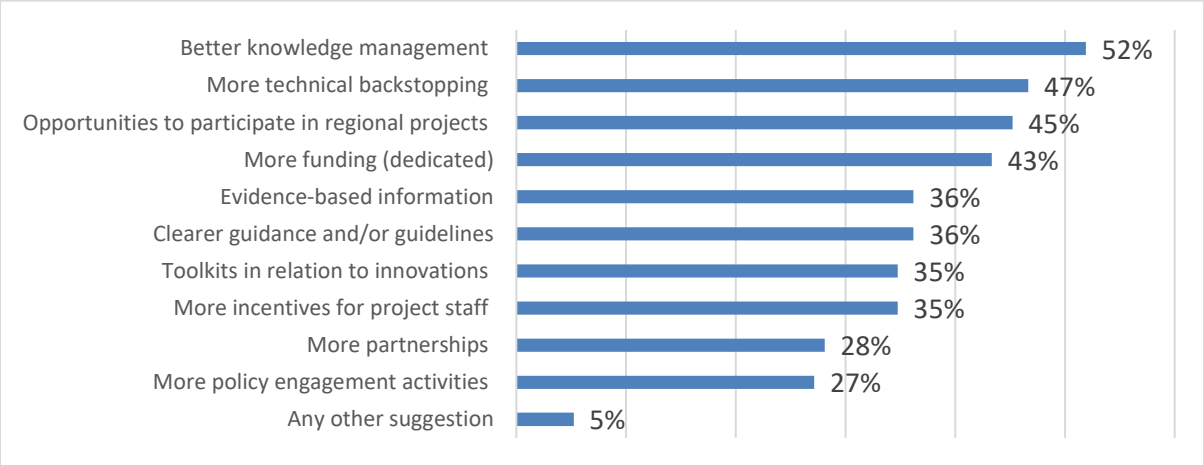


Figure E12
What do you think is needed to increase IFAD performance in promoting innovations within IFAD? (Partners, Government Project Staff)
Total respondents 210



Group C results

Figure E13
Are there guidelines and/or guiding documents sufficiently available for IFAD staff to address innovation challenges? (IFAD Staff)
Total respondents 73

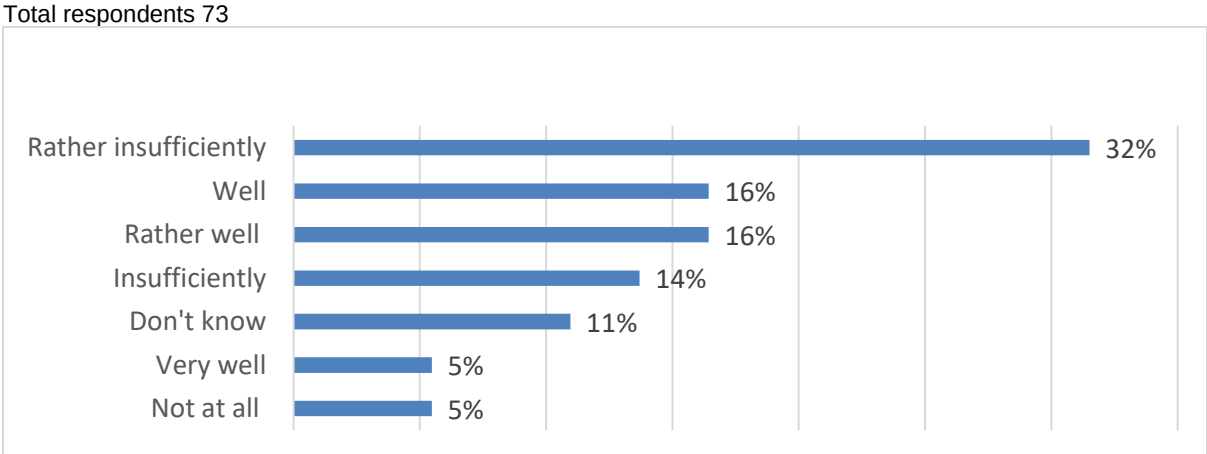


Figure E20
What are possible advantages of promoting innovations using grant supported projects?
Total respondents 43

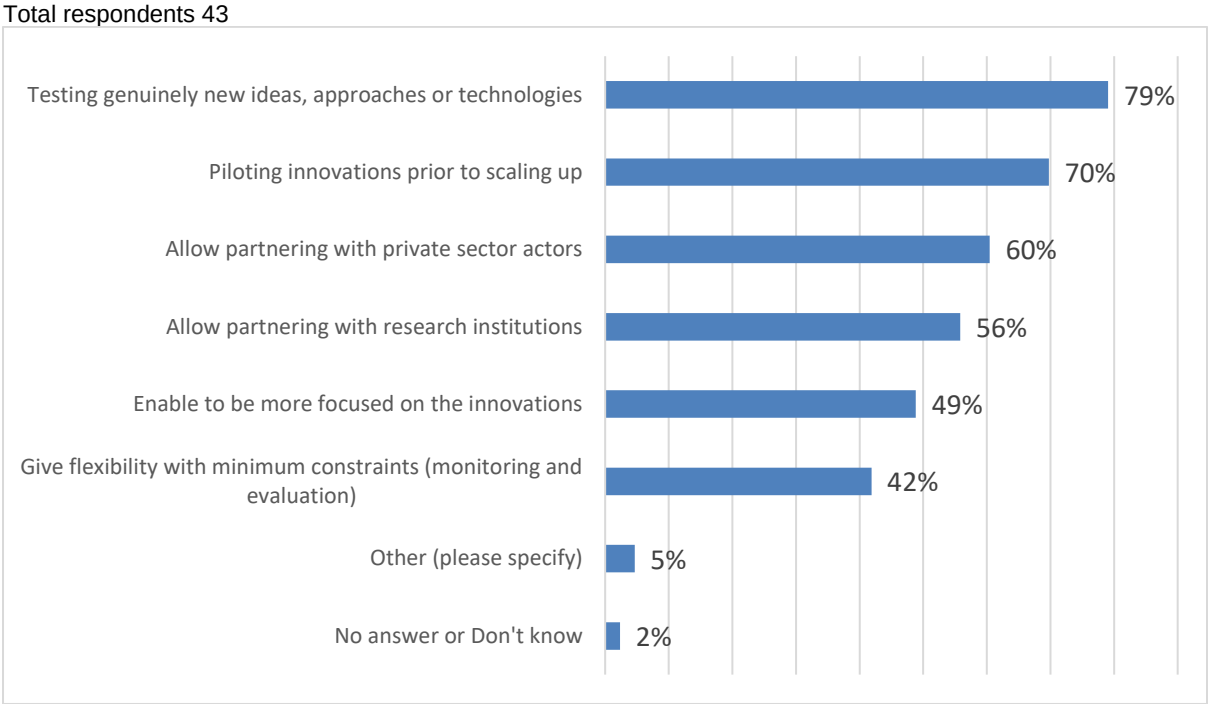


Figure E21
What are possible disadvantages of promoting innovations using grant supported projects?
Total respondents 43

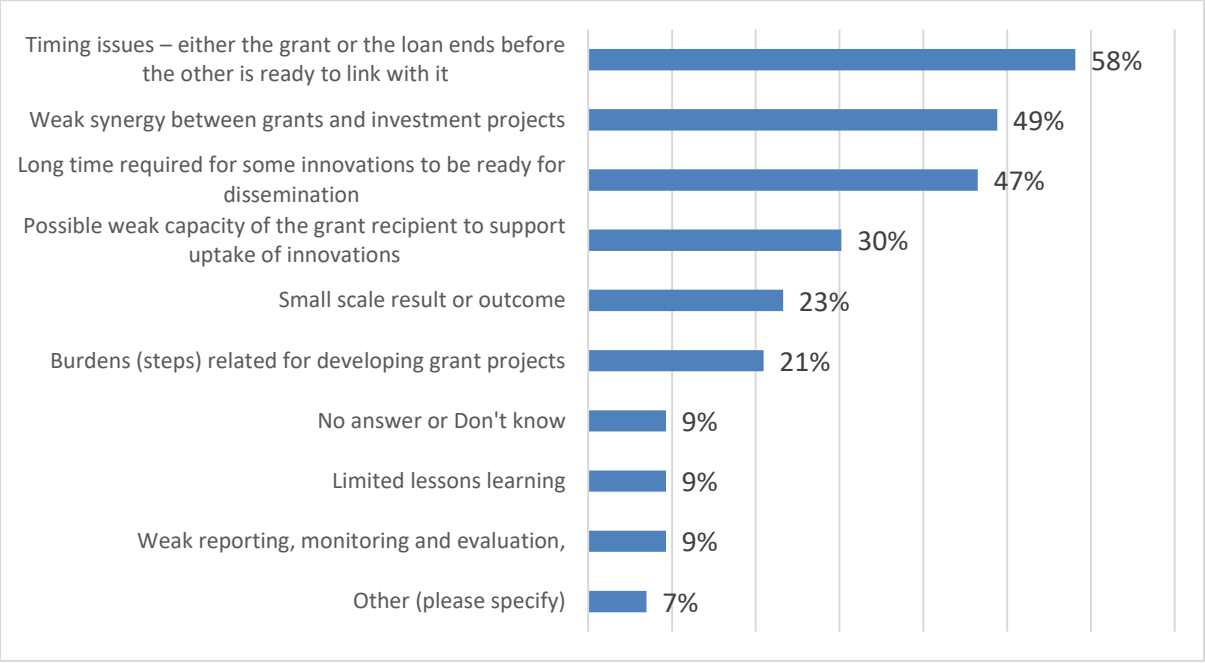


Figure E14
Do you think that IFAD's business model is appropriate to support the promotion of innovations for smallholder agriculture? (IFAD Staff)
Total respondents 73

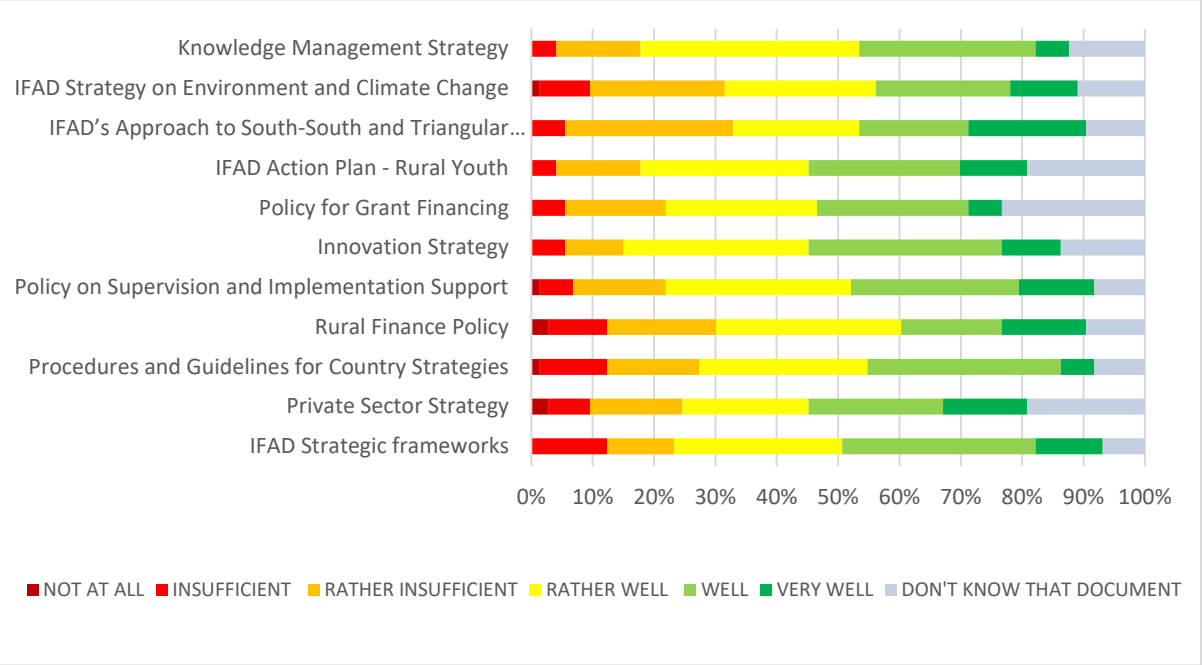


Figure E15
Please rate the sufficiency of incentives or motivations for IFAD's staff to take risks associated with innovations or put in the added time (IFAD Staff)
Total respondents 73

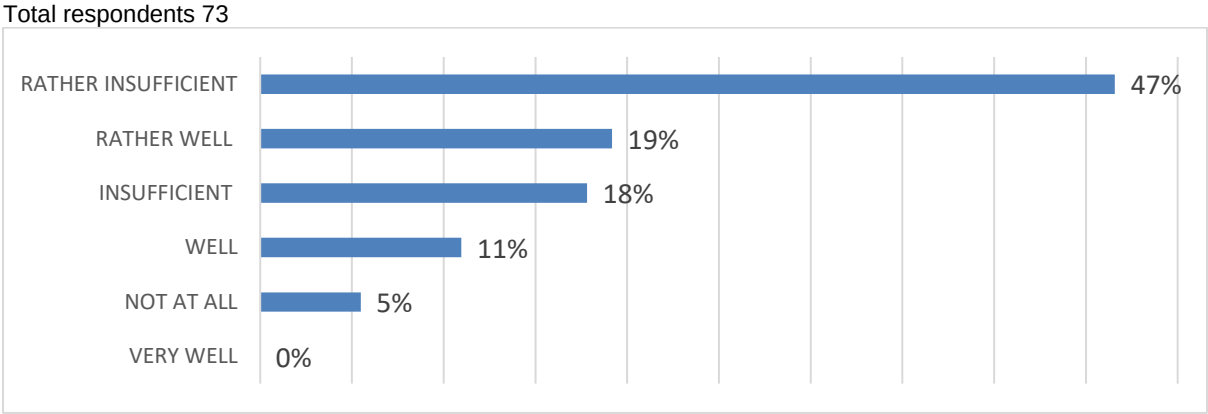


Figure E16
Please rate the culture within IFAD in promoting innovations (IFAD Staff)
Total respondents 73

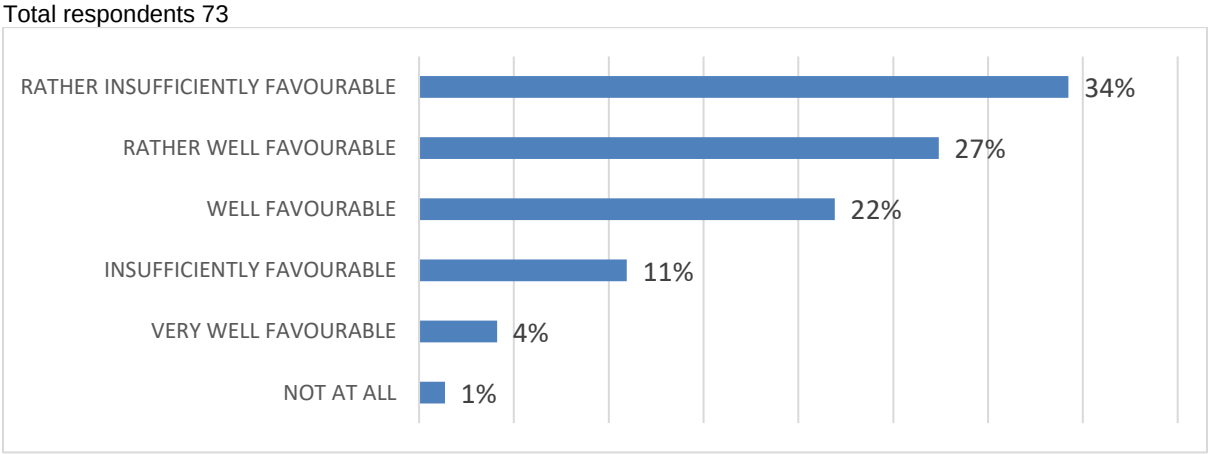


Figure E17
What is IFAD's added value and/or what distinguishes IFAD's expertise (compared to other funding partners) in addressing innovations? (Government Project Staff)
Total respondents 167

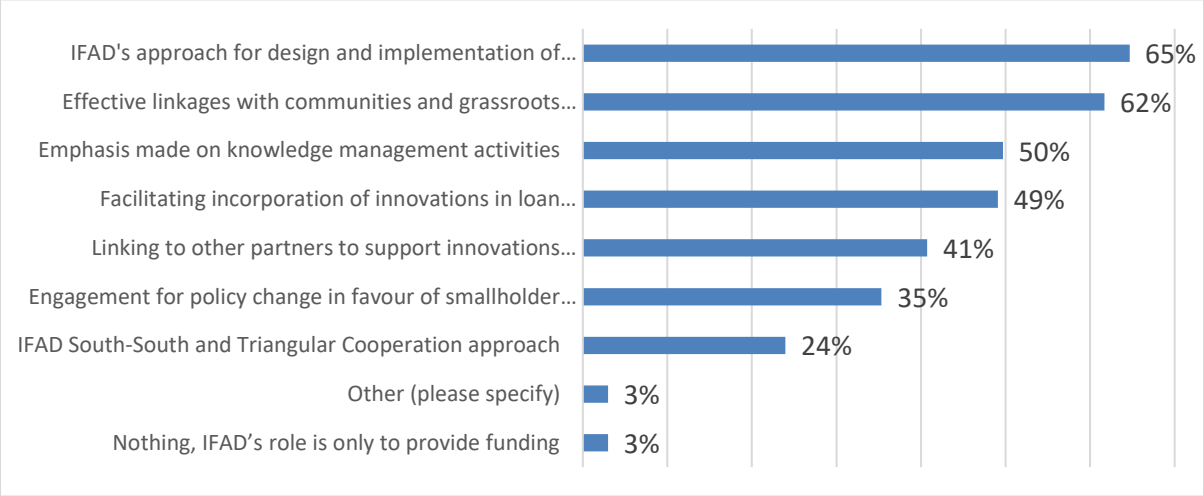


Figure E18
What do you consider as IFAD comparative advantaged and/or what distinguishes IFAD's expertise in addressing innovations? (Partners)
Total respondents 43

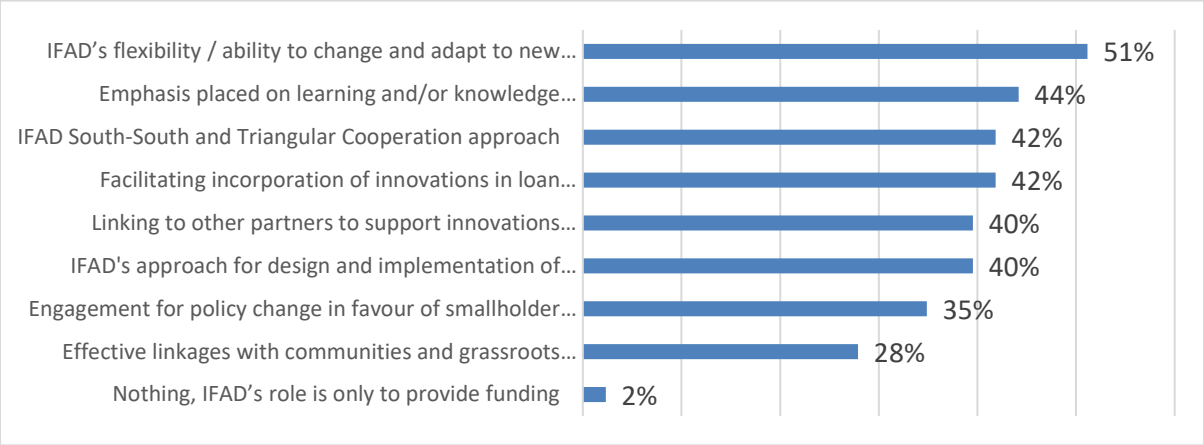
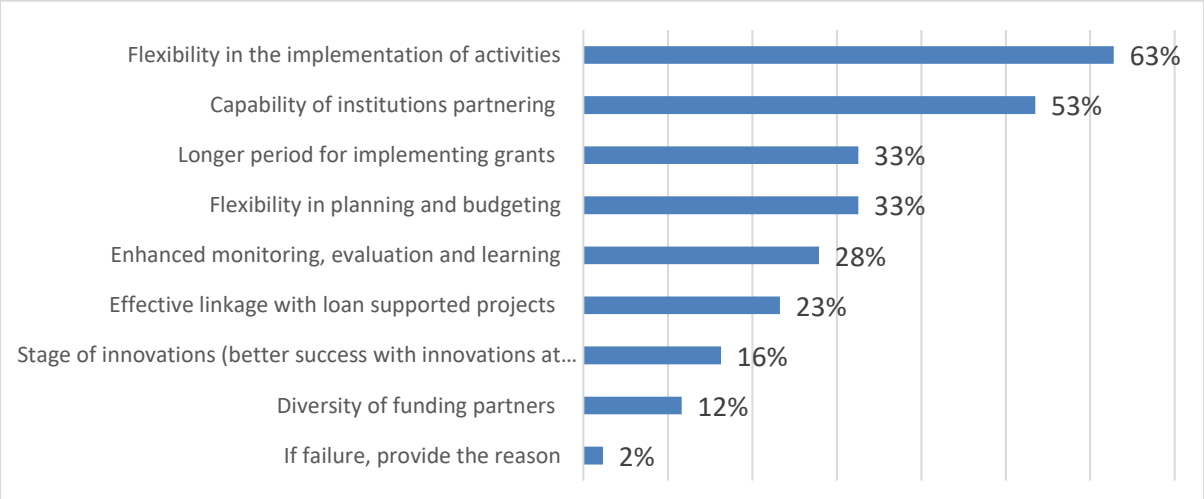
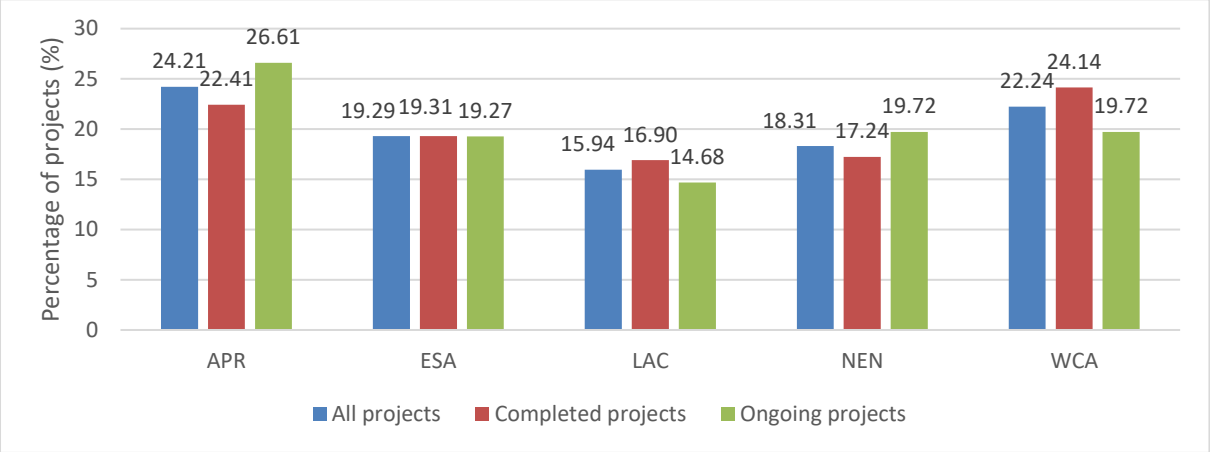


Figure E19
Provide the most important reasons that underline the success of partnerships you had with FIDA in the promotion of innovations. Select the three most important (Partners)
Total respondents 43



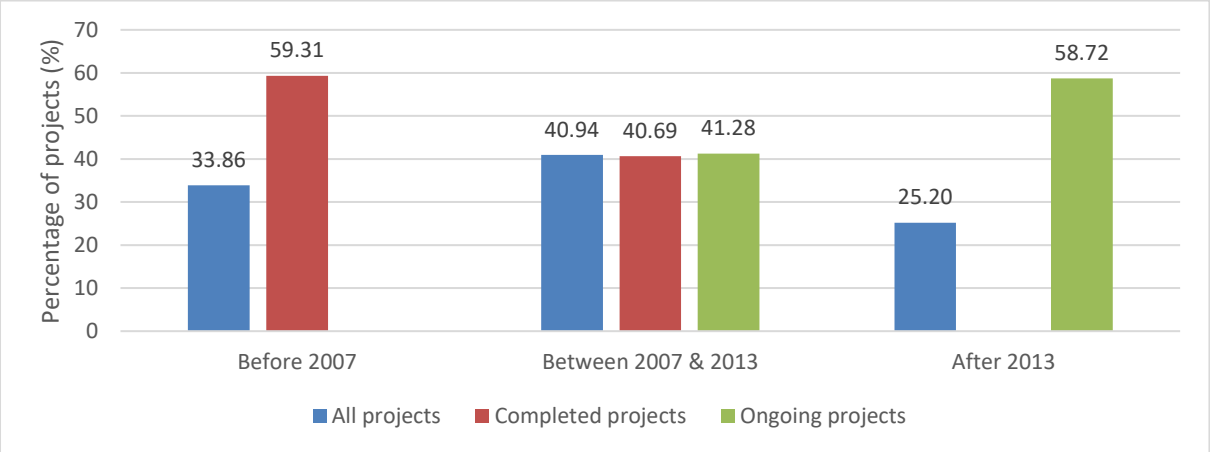
Detailed results of IFAD portfolio analysis

Figure B1
Distribution of projects across IFAD divisions



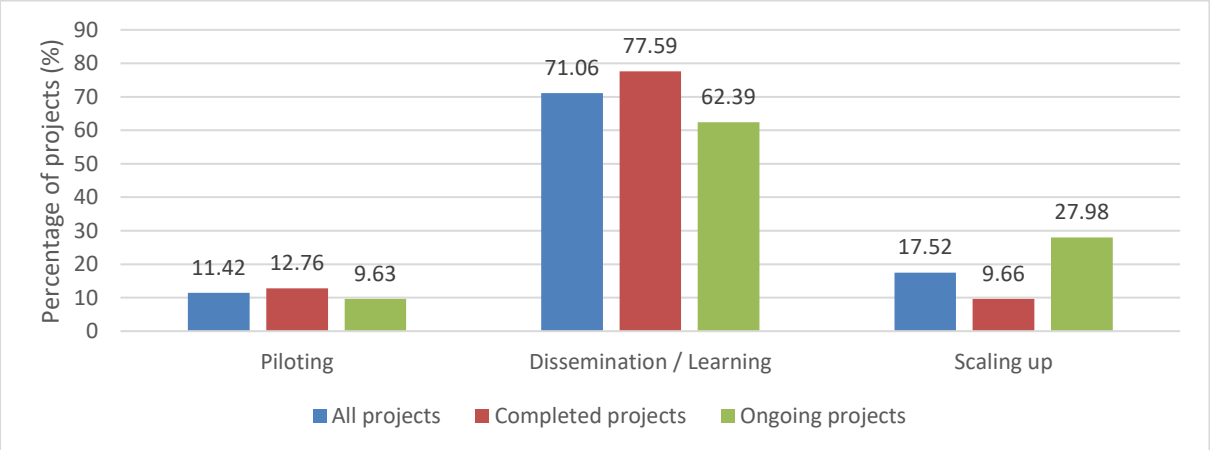
Source: CLE
Note. APR: Asia and the Pacific; ESA: East and Southern Africa; LAC: Latin America and the Caribbean; NEN: Near East, North Africa and Europe; WCA: West and Central Africa.

Figure B2
Distribution of projects by year of EB approval



Source: CLE
Note. Time periods are based on changes in IFAD's definition of innovation (see Table 1 of the approach paper).

Figure B3
Different stages of innovation



Source: CLE.

Table B1
Descriptive statistics of innovation stages

	No. of observations	*Mean*	*Standard deviation*	*Min*	*Max*
All projects					
Dissemination / Learning	508	0.7106	0.4539	0	1
Piloting	508	0.1142	0.3183	0	1
Scaling up	508	0.1752	0.3805	0	1
Completed projects					
Dissemination / Learning	290	0.7759	0.4177	0	1
Piloting	290	0.1276	0.3342	0	1
Scaling up	290	0.0966	0.2959	0	1
Ongoing projects					
Dissemination / Learning	218	0.6239	0.4855	0	1
Piloting	218	0.0963	0.2957	0	1
Scaling up	218	0.2798	0.4499	0	1

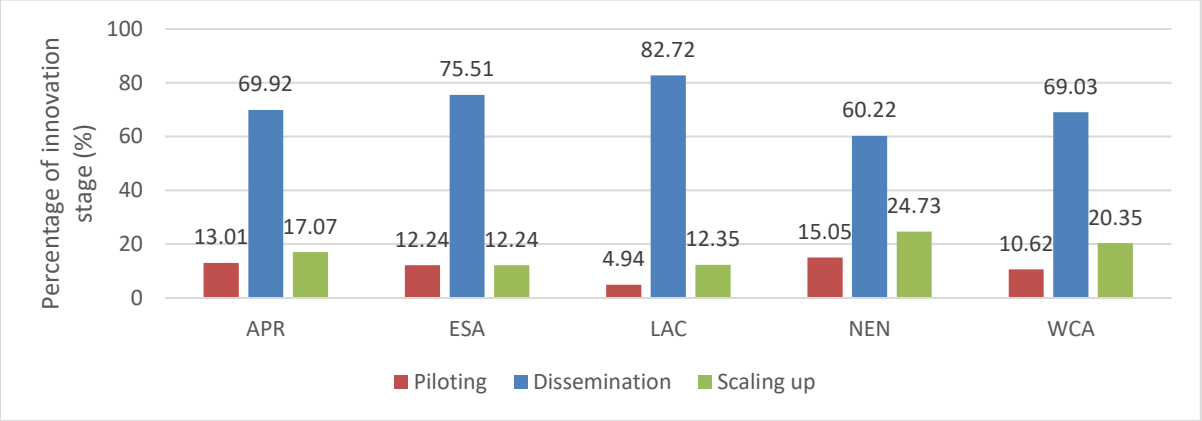
Source: CLE.

Table B2
Descriptive statistics of innovation stages across IFAD divisions

	No. of observations	*Mean*	*Standard deviation*	*Min*	*Max*
APR					
Dissemination / Learning	123	0.6992	0.4605	0	1
Piloting	123	0.1301	0.3378	0	1
Scaling up	123	0.1707	0.3778	0	1
ESA					
Dissemination / Learning	98	0.7551	0.4322	0	1
Piloting	98	0.1224	0.3295	0	1
Scaling up	98	0.1224	0.3295	0	1
LAC					
Dissemination / Learning	81	0.8272	0.3805	0	1
Piloting	81	0.0494	0.218	0	1
Scaling up	81	0.1235	0.331	0	1
NEN					
Dissemination / Learning	93	0.6022	0.4921	0	1
Piloting	93	0.1505	0.3595	0	1
Scaling up	93	0.2473	0.4338	0	1
WCA					
Dissemination / Learning	113	0.6903	0.4644	0	1
Piloting	113	0.1062	0.3095	0	1
Scaling up	113	0.2035	0.4044	0	1

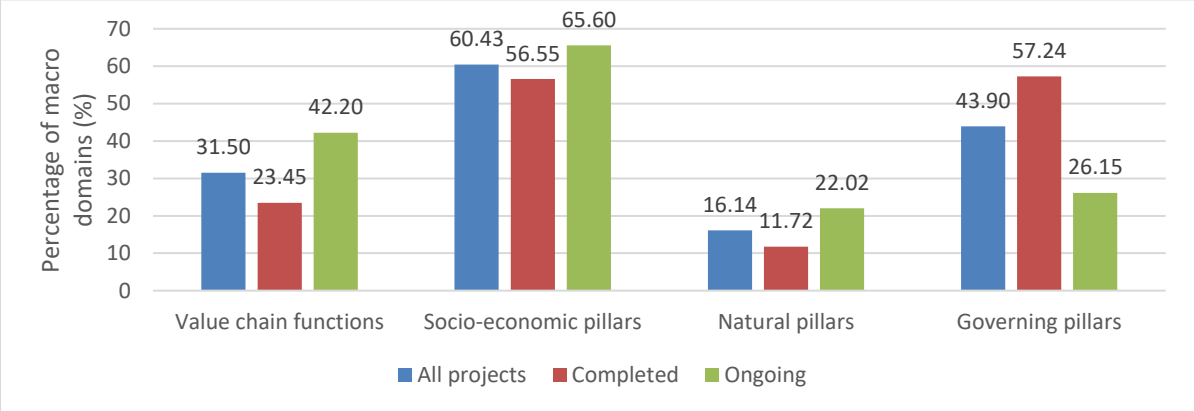
Source: CLE.
Note. APR: Asia and the Pacific; ESA: East and Southern Africa; LAC: Latin America and the Caribbean; NEN: Near East, North Africa and Europe; WCA: West and Central Africa.

Figure B4
Stages of innovation across IFAD divisions



Source: CLE.
Note. APR: Asia and the Pacific; ESA: East and Southern Africa; LAC: Latin America and the Caribbean; NEN: Near East, North Africa and Europe; WCA: West and Central Africa.

Figure B5
Distribution of macro domains



Source: CLE.

Table B3
Descriptive statistics of innovation macro domains

	No. of observations	*Mean*	*Standard deviation*	*Min*	*Max*
All projects					
APVC	508	0.3150	0.4650	0	1
SEP	508	0.6043	0.4895	0	1
NP	508	0.1614	0.3683	0	1
GP	508	0.439	0.4968	0	1
Completed projects					
APVC	290	0.2345	0.4244	0	1
SEP	290	0.5655	0.4965	0	1
NP	290	0.1172	0.3223	0	1
GP	290	0.5724	0.4956	0	1
Ongoing projects					
APVC	218	0.4220	0.4950	0	1
SEP	218	0.6560	0.4761	0	1
NP	218	0.2202	0.4153	0	1
GP	218	0.2615	0.4404	0	1

Source: CLE.

Table B4
Mean and standard deviation of macro domains across IFAD divisions

Macro domain	*APR*	*ESA*	*LAC*	*NEN*	*WCA*
APVC	0.3089	0.3163	0.3457	0.3118	0.3009
	(0.4639)	(0.4674)	(0.4786)	(0.4658)	(0.4607)
SEP	0.6992	0.5000	0.5185	0.6452	0.6195
	(0.4605)	(0.5026)	(0.5028)	(0.4811)	(0.4877)
NP	0.1951	0.1429	0.1605	0.2043	0.1062
	(0.3979)	(0.3517)	(0.3694)	(0.4054)	(0.3095)
GP	0.4634	0.3878	0.6420	0.3656	0.3717
	(0.5007)	(0.4897)	(0.4824)	(0.4842)	(0.4854)

Source: CLE.
Note. APR: Asia and the Pacific; ESA: East and Southern Africa; LAC: Latin America and the Caribbean; NEN: Near East, North Africa and Europe; WCA: West and Central Africa. All values are means and the standard deviation is in parenthesis.

Table B5
Mean and standard deviation of macro domains for project characteristics

	Value chain functions	*Socio-economic pillars*	*Natural pillars*	*Governing pillars*
Project period (year of EB approval)[a]				
Before 2007	0.1860	0.5581	0.1047	0.6453
	(0.3903)	(0.4981)	(0.3070)	(0.4798)
Between 2007 & 2013	0.3317	0.5817	0.1827	0.4038
	(0.4720)	(0.4945)	(0.3873)	(0.4919)
After 2013	0.4609	0.7031	0.2031	0.2188
	(0.5004)	(0.4587)	(0.4039)	(0.4150)
Project duration[b]	6.85	7.01	7.14	7.11
	(1.53)	(1.87)	(1.74)	(2.02)
Project size[c]				
Small	0.2813	0.5417	0.1250	0.5208
	(0.4520)	(0.5009)	(0.3325)	(0.5022)
Medium	0.3029	0.6058	0.1286	0.4523
	(0.4605)	(0.4897)	(0.3355)	(0.4988)
Large	0.3509	0.6374	0.2281	0.3743
	(0.4786)	(0.4822)	(0.4208)	(0.4854)
Cost for the beneficiary at the design stage				
Total budget	438.92	417.86	421.91	332.76
	(743.50)	(687.83)	(501.60)	(369.04)
IFAD budget	194.07	201.24	212.15	172.67
	(227.71)	(269.17)	(275.64)	(198.68)
Projects with partners[d]	0.6750	0.6580	0.6463	0.5785
	(0.4698)	(0.4752)	(0.4810)	(0.4949)

Source: CLE.

Note. [a] Time periods were delineated based on key milestones of IFAD's innovation agenda: 2007 was the approval year of the IFAD innovation strategy and 2013 was the mid-period of Strategic Framework 2011-2015, the second (after the one of 2007-2010) that highlighted Innovation, Learning and Scaling up among the key IFAD engagement principles. [b] Duration of the project is the difference between the year of completion and year of entry to force. [c] Small project: approved amount less than 18.8 million of US$; Medium size: approved amount between 18.8 million of US$ and 49.2 million of US$; Large project: approved amount greater than 49.12 million of US$. [d] The variable includes the projects with a private national partner and/or international partnership. All values are means and the standard deviation is in parenthesis.

Table B6
Mean and standard deviation of macro domains and characteristics of the beneficiary country

	Value chain functions	*Socio-economic pillars*	*Natural pillars*	*Governing pillars*
Country income level[a]				
Low income	0.2596	0.5745	0.1404	0.4468
	(0.4393)	(0.4955)	(0.3482)	(0.4982)
Lower-middle income	0.3452	0.6091	0.1726	0.4467
	(0.4766)	(0.4892)	(0.3789)	(0.4984)
Upper-middle income	0.4133	0.6800	0.2000	0.3867
	(0.4957)	(0.4696)	(0.4027)	(0.4903)
Agricultural value added (% GDP)	17.54	19.27	18.33	19.07
	(11.85)	(11.46)	(11.72)	(11.21)
Employment in agriculture (% of total employment)	44.95	45.91	43.78	45.92
	(21.62)	(20.51)	(20.06)	(20.58)
Research and development expenditure (% of GDP)	0.48	0.47	0.58	0.44
	(0.45)	(0.40)	(0.46)	(0.41)

Source: CLE.

Note. [a] Income classification is based on country classification of the World Bank (High income economies are missed because it includes only one project). Each project is classified according to the country classification at the board approved year. All values are means and the standard deviation is in parenthesis.

Table B7
Descriptive statistics of types of innovation

	No. of observations	*Mean*	*Standard deviation*	*Min*	*Max*
<u>All projects</u>					
Production	508	0.1772	0.3822	0	1
Processing	508	0.0433	0.2037	0	1
Marketing	508	0.1476	0.3551	0	1
Consumption	508	0.0315	0.1748	0	1
Human capital	508	0.1693	0.3754	0	1
Social capital	508	0.2717	0.4453	0	1
Economic capital	508	0.3406	0.4744	0	1
Natural resources	508	0.0787	0.2696	0	1
Environment and CC	508	0.0866	0.2815	0	1
Policies	508	0.1378	0.345	0	1
PIPA	508	0.3031	0.4601	0	1
Regulations	508	0.0217	0.1457	0	1
<u>Completed projects</u>					
Production	290	0.1207	0.3263	0	1
Processing	290	0.0241	0.1537	0	1

	No. of observations	*Mean*	*Standard deviation*	*Min*	*Max*
Marketing	290	0.1276	0.3342	0	1
Consumption	290	0.0138	0.1168	0	1
Human capital	290	0.1552	0.3627	0	1
Social capital	290	0.2828	0.4511	0	1
Economic capital	290	0.3034	0.4605	0	1
Natural resources	290	0.0621	0.2417	0	1
Environment and CC	290	0.0586	0.2353	0	1
Policies	290	0.1966	0.3981	0	1
PIPA	290	0.3862	0.4877	0	1
Regulations	290	0.031	0.1737	0	1
Ongoing projects					
Production	218	0.2523	0.4353	0	1
Processing	218	0.0688	0.2537	0	1
Marketing	218	0.1743	0.3803	0	1
Consumption	218	0.055	0.2286	0	1
Human capital	218	0.1881	0.3917	0	1
Social capital	218	0.2569	0.4379	0	1
Economic capital	218	0.3899	0.4889	0	1
Natural resources	218	0.1009	0.3019	0	1
Environment and CC	218	0.1239	0.3302	0	1
Policies	218	0.0596	0.2374	0	1
PIPA	218	0.1927	0.3953	0	1
Regulations	218	0.0092	0.0956	0	1

Source: CLE.

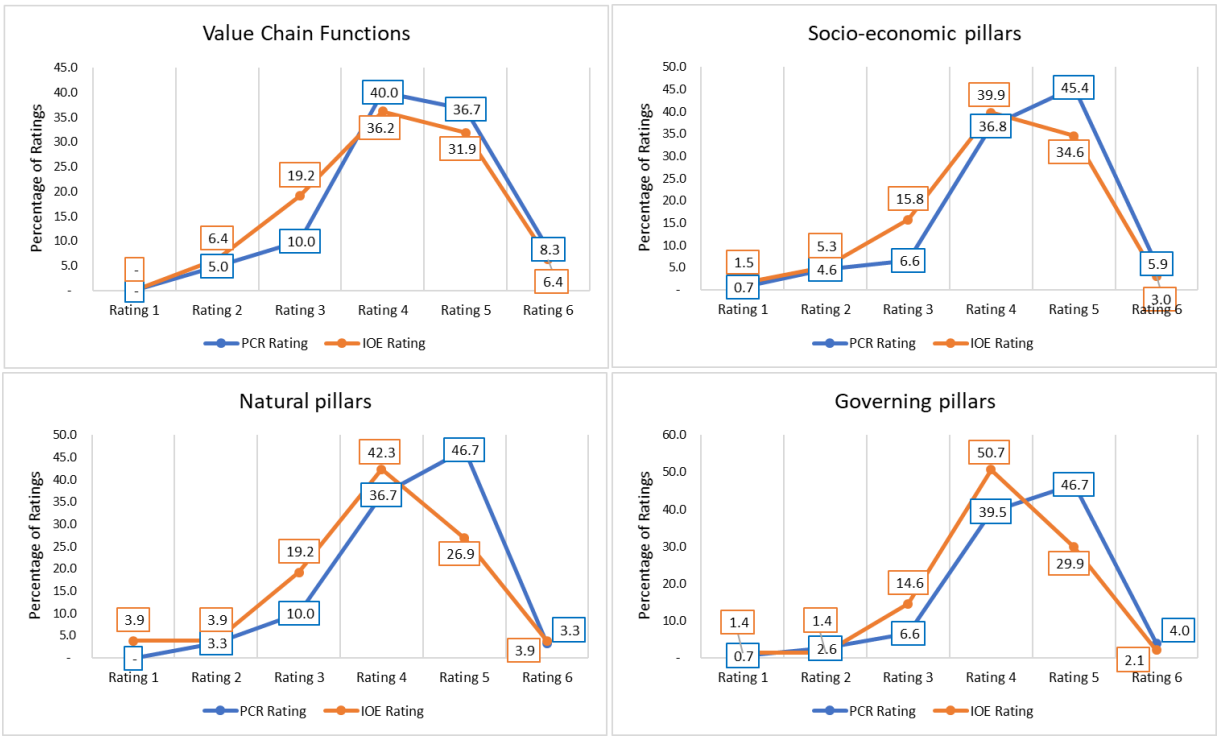
Table B8
Pairwise comparison of group means: innovation macro domains for other project characteristics

Macro domain	*Cost per beneficiary (Total budget*	*Cost per beneficiary (IFAD budget)*	*Duration of project*	*Project partnership*
APVC	67.42	-3.29	-0.227	0.057
	(0.243)	(0.895)	(0.222)	(0.214)
SEP	67.42	-3.29	-0.003	0.056
	(0.243)	(0.895)	(0.984)	(0.200)
NP	67.42	-3.29	0.156	0.013
	(0.243)	(0.895)	(0.508)	(0.829)
GP	67.42	-3.29	0.181	**-0.102***
	(0.243)	(0.895)	(0.296)	**(0.017)**

Source: CLE.

Note. Small project: approved amount less than 18.8 million of US$; Medium size: approved amount between 18.8 million of US$ and 49.2 million of US$; Large project: approved amount greater than 49.12 million of US$. Values are the difference between the average number of projects that implemented the type of innovation, minus the average number of projects that did not implement the type of innovation (yes-no). Unadjusted p-value in parentheses; * < 0.050; ** < 0.010; *** < 0.001.

Figure B6
Comparison between PCR and IOE ratings by pillar



Source: CLE.

Note. No of observations PCR + IOE ratings: value chain (refers to APVC)=107; socio-economic pillars=285; natural pillars=56; governing pillars=296. Some projects address more than one pillar in terms of innovations.

Table B9
Correlation between innovation rating and all other ratings (IOE ratings)

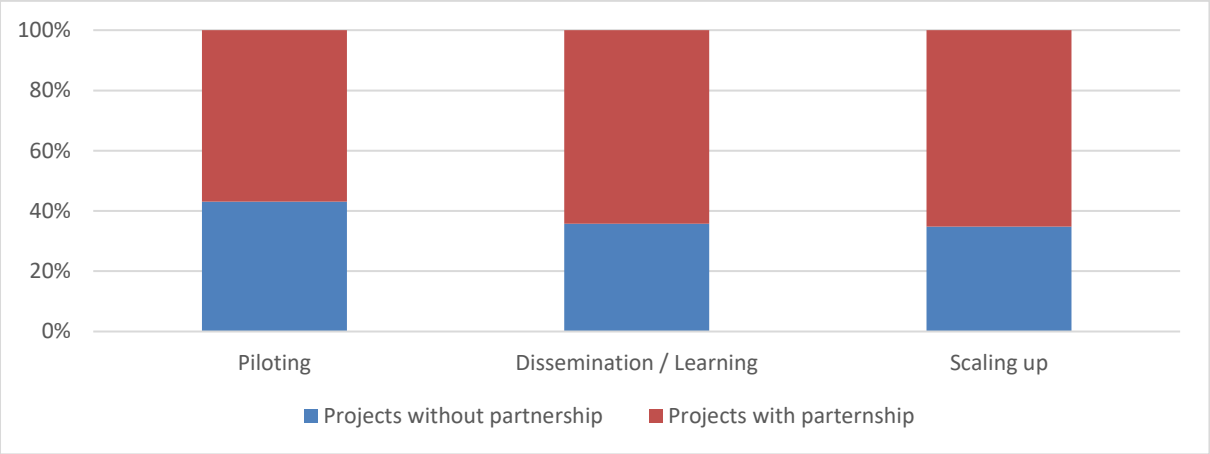
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
(1) Innovation	1.000					
(2) Relevance	0.305**	1.000				
	(0.005)					
(3) Effectiveness	0.569***	0.465***	1.000			
	(0.000)	(0.000)				
(4) Efficiency	0.481***	0.310**	0.668***	1.000		
	(0.000)	(0.005)	(0.000)			
(5) Sustainability	0.508***	0.362**	0.589***	0.463***	1.000	
	(0.000)	(0.001)	(0.000)	(0.000)		
(6) Rural poverty	0.573***	0.429***	0.726***	0.496***	0.574***	1.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

	(7)	*(8)*	*(9)*	*(10)*	*(11)*
(7) Gender equality	1.000				
(8) Environment and natural resources	0.376**	1.000			
	(0.001)				
(9) Climate change	0.306**	0.489***	1.000		
	(0.005)	(0.000)			

(10) IFAD performance	0.425***	0.334**	0.286**	1.000	
	(0.000)	(0.002)	(0.009)		
(11) Government performance	0.308**	0.407***	0.288**	0.665***	1.000
	(0.005)	(0.000)	(0.009)	(0.000)	

Note. Values are Spearman's rank correlation coefficient and p-value is in parentheses; * < 0.050; ** < 0.010; *** < 0.001.

Figure B7
Distribution of innovation stages for the type of partnership project



Source: CLE.

Table B10
Grants database reviewed by the CLE - Period 2009-2018

	No.	*% No.*	*Total Amount (US$)*	*% Total Amount*	*Average Amount (US$)*
Small grant	438	65%	112795487	23%	257524
Large grant	240	35%	382085006	77%	1592021
Sum	678	100%	494880493	100%	1849545

Source: CLE.

Table B11
Distribution of grants reviewed by categories of recipients - Period 2009-2018

Areas	*Count*	*%*
Farmer/producer organisation	28	4%
Government	20	3%
Governments	45	7%
NGOs/NPOs	222	33%
Other	42	6%
Private Sector	16	2%
Research	186	27%
UN/Multi-Lateral Organisations	119	18%
Grand Total	678	100.00%

Source: CLE.

Table B12
Distribution of approved of grants amount by type of grant

	No.	*% No.*	*Total Amount (US$)*	*% Total Amount*	*Average Amount (US$)*
Small grant	438	65%	112795487	23%	257524
Large grant	240	35%	382085006	77%	1592021
Sum	678	100%	494880493	100%	1849545

Source: CLE.

Table B13
Distribution of approved of grants amount by category of recipient

Recipient category	*Count of Recipient*	*Sum of Approved Amount*	*Sum of Approved %*
Government	20	33565000	8.9%
Farmers' organisation	4	6150000	1.6%
NGOs/NPOs	78	121692320	31.8%
Other	2	4440000	1.2%
Private Sector	7	14800000	3.9%
Research	100	158467816	41.5%
Multilateral	29	42969870	11.2%
Grand Total	240	382085006	100.00%

Source: CLE.

Table B14
Distribution of large grants by macro and specific domains
N=149 large Grants

Macro domain	*Specific domain*	*Mean*	*Std. Dev.*	*Min*	*Max*
Agricultural production and value chain (47%)	Production	87%	0.34	0	1
	Processing	3%	0.17	0	1
	Marketing	33%	0.47	0	1
	Consumption	1%	0.12	0	1
Socio economic pillar (73%)	Social capital	54%	0.50	0	1
	Economic capital	33%	0.47	0	1
	Human capital	49%	0.50	0	1
Natural pillar (28%)	Natural resources	54%	0.50	0	1
	Environment and CC	56%	0.50	0	1
Governance pillar (61%)	Strategies	34%	0.48	0	1
	PIPA	73%	0.45	0	1
	Regulations	4%	0.21	0	1

Source: CLE.
Total is not equal to 100% because, as for loans, supported innovations can address several domains

Table B15
Large grants supported innovations specific domains

Specific domain	*N Macro domain*	*Mean*	*N Specific domain*	*Std. Dev.*	*Min*	*Max*
PIPA	91	0.73	66	0.45	0	1
Production	70	0.87	61	0.34	0	1
Social capital	85	0.54	46	0.50	0	1
Human capital	85	0.49	41	0.50	0	1
Policy	91	0.34	31	0.48	0	1
Economic capital	85	0.33	28	0.47	0	1
Environment	41	0.56	23	0.50	0	1
Marketing	70	0.33	23	0.47	0	1
NRM	41	0.54	22	0.50	0	1
Regulation	91	0.04	4	0.21	0	1
Processing	70	0.03	2	0.17	0	1
Consumption	70	0.01	1	0.12	0	1

Source: CLE.
Total is not equal to 100% because, as for loans, supported innovations can address several domains.

Listing of case studies innovations

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
Bangladesh	National Agricultural Technology Project	Competitive grants for demonstration and early adoption of new technologies	PIPA, Production
	Finance for Enterprise Development and Employment Creation Project	New products in several new VCs	Processing, Social capital
		Demand driven public extension for community interest groups (CIGs)	Social capital
		Private or group-based extension and other service provision	Marketing, Economic capital
	Microfinance for Marginal and Small Farmers Project	Systematic provision of non-financial with financial services by MFIs/NGOS under the Palli Karma-Sahayak Foundation (PKSF)	Economic capital, PIPA
		Integrated promotion of technological packages for a large diversity of clusters and issues	Production
	Microfinance and Technical Support Project	Financial products tailored for farm and rural activities by MFIs/NGOS under apex PKSF	Economic capital, PIPA
	Haor Infrastructure and Livelihood Improvement Project- Climate Adaptation and Livelihood Protection	Locally accessible flash flood information system	Environment and CC, Economic capital
		Training women and youth with innovative curricula for developing off-farm activities in an expanding rural economy	Human capital
		Learning route	Social capital, PIPA
	Market Infrastructure Development Project in Charland Regions	Climate-resilient and connected market facilities + Women corner in markets	Marketing, Social capital
	Promoting Agricultural Commercialization and Enterprises Project	Improved technologies for sustainable beel management	NRM, Social capital
		Sustainable use of beel waters by poor fisher groups	NRM, Social capital
		Coupling cluster&VCD growth of crabs or fish with their domestication	Production, Marketing
		Mainstreaming women participation in Labour Contracting Societies for high intensity construction	Social capital, Economic capital
		Climate resilient infrastructures	Environment and CC, Economic capital
		Promotion of the mola fish in fish ponds	Consumption, Production
		Transformation of community interest groups in cooperatives operating in their value chain	Marketing, Social capital
		Securing land rights for women and men settling on accreted land in coastal areas	Policies, Social capital
Burkina Faso	Community Investment Programme for Agricultural Fertility	Research-development activities	PIPA, Production
		Self-targeting mechanism	PIPA, Social capital
		Participatory mechanism for microprojects validation / selection (Management committees)	PIPA, Social capital
	Small-Scale Irrigation and Water Management	Water and Soil Conservation techniques	Production
	Sustainable Rural Development Programme	Farmer Field School	PIPA, Social capital
		Community facilitators for capacity mobilization	PIPA, Social capital
		Participatory planning and M&E	PIPA, Social capital
	Agricultural Commodity Chain Support	Technological innovations for transformation	Processing

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
		Local advisors and Rural Entrepreneurship Resource Centres	PIPA, Human capital
		Fund remobilization strategy at GIE and FO level	PIPA, Economic capital
Cameroon	Commodity Value-Chain Development Support	Warrantage	Economic capital, Social capital
		Onion seeds certification and improved cropping techniques	Production
		Introduction of improved rice varieties and production techniques	Production
	Rural Microfinance Development Support	Medium term agricultural credit	Economic capital, PIPA
	Youth Agropastoral Entrepreneurship Programme	Youth incubation and promotion approach	Human capital, Economic capital
	Aquaculture Entrepreneurship Promotion Project	Introduction of improved aquaculture techniques	Production
Ecuador	Ibarra-San Lorenzo Corridor Territorial Development	Post harvest and transformation	Production
		Link with territorial actors and government programs	PIPA, Social capital
	Development of the Central Corridor	Good food	Processing, Consumption
		Good tourism	Social capital
		Good manufacturing and service	Economic capital, Social capital
	Programa del Buen Vivir en Territorios Rurales	Climate-friendly production technologies	Production, NRM
		Capacity development approach	Social capital, NRM
El Salvador	Alianza para el desarrollo	Use of independent brokers to establish 4P relationships	Marketing
	Expansion of economic opportunities for rural women	Time-saving technologies	Human capital
	Corporation for Regional Rural Development Training	Learning Funds for youth businesses	Social capital, Economic capital
		Learning Routes	Social capital, PIPA
		PROCASUR support	Social capital, PIPA
		Water Catchment and Storage	Production, NRM
	Programa de Dialogo Rural Centroamericana y Republica Dominica	Rural Dialogue Groups	Social capital
	Rural Development and Modernization for the Eastern Region	Involving beneficiaries in the recruitment and contracting of their TA	PIPA, Human capital
		Organisation of youth / Incorporation of youth in rural organisations	PIPA, Social capital
		Territorial approach for youth	PIPA, Social capital
		Bringing different project staff together on topics (internal networking)	PIPA
	Rural Territorial Competitiveness Programme	Rural Financial Services	Economic capital, Human capital
		Link producers to large markets	Marketing
		Involving indigenous groups	Social capital
		Business plans for producers / processors	Economic capital, Human capital
	Un Viaje en Comun	Strengthening capacities to use agro-climate information	Human capital
Ethiopia	Agricultural Marketing Improvement Project	Wholesale lending to MFIs and RUSACCOs	Economic capital
		Agricultural marketing information system	Marketing
	Community-Based Integrated NRM in Lake Tana Watershed	Watershed improvement and management committees	PIPA, NRM
		Small-scale irrigation in dryland areas	Production

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
	Participatory Small-scale Irrigation Development Program I	Biogas	NRM
		Water User Associations	PIPA, Social capital
		Value chain development	Marketing
		Home gardens demonstration	Consumption, Production
	Pastoral Community Development Project I	Community driven development (CDD) for pastoralists	PIPA, Social capital
	Pastoral Community Development Project III	Mobile or "rangeland support teams"	PIPA, Marketing
		Warehouse receipt system	Marketing, Economic capital
		Individual household approach of mentoring	Human capital, PIPA
	Rural Financial Intermediary Program I	Project implementation through decentralized government agencies	PIPA, Social capital
	Rural Financial Intermediary Program II	Establishing rural savings and credit cooperatives (RUSACCOs) within patoralist groups	Economic capital, PIPA
Indonesia	Coastal Community Development Project	Combining sustainable marine and coastal natural resource management with economic and livelihood development	PIPA, NRM
		New irrigated agriculture & maintenance models in rehabilitated schemes	PIPA, NRM
	Enabling the poor rice farmers to improve livelihoods and overcome poverty in South and Southeast Asia through the Consortium for Unfavourable Rice Environments	Farmer Participatory rice Variety Selection and cropping rice practices for 5 types of unfavourable environments (FPVS) in CURE2	PIPA, Production
	Food Resilience Through Root and Tuber Crops in Upland and Coastal Communities of the Asia Pacific	FoodSTART+ Farmer Business School for dissemination of Root and Tuber Innovations in the APR region	Human capital
	Integrated Participatory Development and Management of Irrigation Sector Project	KM center within the Directorate of Water Resources and Irrigation of the Ministry of Planning	PIPA, Policy
		Policy lab in the Ministry of Planning	Policies
	Measurable Action for Haze-Free Sustainable Land Management in Southeast Asia	Sustainable Management of Peatland Ecosystems in Indonesia	PIPA, Environment and CC
	Rural Empowerment and Agricultural Development Programme in Central Sulawesi	4Ps with MARS : the MARS Academy & cocoa village clinic approach	PIPA, Production, Marketing, Human capital, Economic Capital,
		"Coaching clinics" to bring expertise and develop products, business, certification for the SHGs requiring them	PIPA, Marketing
	Village Development Programme	Village economic opportunities introduced in local development planning facilitated by NGO facilitators	Marketing, Policies
		Performance based allocation for village/district planned activities	PIPA, Policies
	Smart Tree-Invest	Climate smart tree-based adaptation strategies developed and tested in learning groups	Human capital, Environment and CC
		Rewarding the Upland Poor for Ecosystem Services in a watershed	PIPA, Environment and CC
	FINPOWER	Innovative Value chain financing models for cocoa	Marketing, Economic capital
	Smallholder Livelihood Development Project in Eastern Indonesia	NGO facilitators to support common interest groups for diversified economic activities	PIPA, Social capital
		Support of development of nutrition-sensitive value chains in middle-income countries	PIPA, APVC

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
Kyrgyztan	Agricultural Investments and Services Project	Pasture Users Union (PUUs) & Pasture Committees (PCs)	Regulations, Social capital
	Livestock and Market Development Programme I	Private veterinary system	Regulations, Production
	Access to Market Project	Value chain approach (market-oriented sector)	Marketing
	Accelerating Progress towards the Economic Empowerment of Rural Women	GALS & Business Action Learning for Innovation (BALI)	Human capital, Economic capital, Social capital, PIPA
Madagascar	Rural Income Promotion Programme	Partnership Poles for local communities	Marketing, Economic capital
		Market Information System	Marketing
		Chain of solidarity plant	Production
		Demand driven approach in Farmer Field School	PIPA, Social capital
	Project to Support Development in the Menabe and Melaky Regions	Litchi micro irrigation system (through a partnership with a private actor)	Production, Marketing
		Rural Finance products	Economic capital
		Land regulatory framework	Regulations, Social capital
Malawi	Enhancing the Resilience of Agroecological Systems Project	Catchment management committees	PIPA, NRM
	Financial Access for Rural Markets, Smallholders and Enterprise Program	Formation of Village Savings and Loan Associations	Social capital, Economic capital
		Support to Financial Service Providers (FSPs) for servicing project beneficiaries	PIPA, Economic capital
		Financial services targeted to the ultra-poor	Economic capital
	Irrigation, Rural Livelihoods and Agricultural Development Project	Grant funds for communities and farmer organizations	PIPA, Economic capital
		Inputs for Assets (IAP)	Consumption, PIPA
		FBS to develop farm and nonfarm business skills	Human capital
	Program for Rural Irrigation Development	Land right management by WUAs	Social capital, PIPA
		Small-scale irrigation	Production
		Drought tolerant crops	Production, NRM
		Competitive challenge funds and matching grants to attract private sector involvement (4Ps model led by private sector)	Marketing, PIPA
	Rural Livelihoods and Economic Enhancement Program	Commodity and value chain focus	Marketing
	Rural Livelihoods Support Program	Project implementation through decentralized government agencies	PIPA, Social capital
		Improved crop production technologies.	Production
	Sustainable Agricultural Production Programme	Livestock pass-on-system	Production
		Conservation Agriculture (CA)	Production
		Rocket stoves	NRM
		Individual Household Approach (IHA)	PIPA, Human capital
		Model villages	PIPA
Moldova	Agricultural Revitalization Project	Credit for smallholder from Saving and Credit groups and their federations	PIPA, Economic capital
	Inclusive Rural Economic and Climate Resilience Programme	Farmer development of conservation agriculture and peer to peer training	Human capital, NRM
		Promotion of competitive horticulture VCs with technologies and VC linkages	Economic capital, Marketing

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
		Promotion of more pro-poor VCs and off-farm activities	Marketing, Economic capital
	Rural Business Development Programme	Matching grants and technical consultancies to support a large range of technologies at community level	PIPA, NRM
	Rural Financial Services and Agribusiness Development Project	Use matching grants to increase the attractiveness of investment loans from both lenders and banks	PIPA, Economic capital
		Loans combined with non-financial support supplied by private or NGO providers	PIPA, Economic capital
		Matching grants and technical consultancies to support a large range of technologies improving climate resilience among producers	PIPA, NRM
		Reliance on national banks to channel IFAD and own credit funds to rural entrepreneurs	PIPA, Economic capital
		Design of a credit guarantee fund for the SCAs	Economic capital, PIPA
	Rural Finance and Small Enterprise Project	Study tours for pioneer entrepreneurs	PIPA, Human capital
Nepal	Western Uplands Poverty Alleviation Project	Wealth-ranking	PIPA, Social capital
		Community Investment Plans (CIPs) and Community Investment Fund (CIF)	PIPA, Social capital
		FFS and IPM	PIPA, NRM
		Social mobilizers	PIPA, Human capital
		Service Excellence Challenge Fund	PIPA, Economic capital
	Leasehold Forestry and Livestock Programme	Leasehold Forestry and Group Formation	Production, Social capital
	High-Value Agriculture Project in Hill and Mountain Areas	Inclusive Value Chain	PIPA, Marketing
		Multi-stakeholder Platform	Marketing
		Business Literacy Training	Marketing, Human capital
Peru	African Cultural Assets	ACUA development – work with Afro-descendants	Social capital
	AGROSAVIA	Technology in Agriculture	Production, Processing
	Advancing Knowledge for Agricultural Impact	Development of Self-Assessment Tools on Agriculture for reporting SDGs	PIPA, Policy
	Development of the Puno-Cusco Corridor	CLAR (Local Resource Allocation Committees)	PIPA, Social capital
		Concursos (Contest methodology)	Social capital
	Proyecto de Fomento de la Transferencia de Tecnología a las Comunidades Campesinas de la Sierra	Rural Talents	Human capital, PIPA
	Project of Management of Natural Resources in the Southern Highlands	Mapas Parlantes / Talking or Cultural Maps	Social capital, PIPA
	Regional Programme for Rural Development Training	PROCASUR support	Social capital, PIPA
		Learning Funds for youth businesses	Social capital, PIPA
	Strengthening Local Development in the Highlands and High Rainforest Areas Project	Territorial development approach	PIPA, Social capital
		Learning Routes	Social capital, PIPA
		Payment/Reward for Environmental Services	NRM, Policies
	Strengthening of Markets, Diversification of Incomes and Improvement of Living Conditions in the Southern Highlands I	Designation of Origin for local products	Marketing, Regulations
		Financial inclusion & micro-insurance	Economic capital

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
	Cordillera Highland Agricultural Resource Management Project	NEC – Núcleo Ejecutor Central /Central Implementing Unit	PIPA, Policy
	UniAndes	Conditional Cash Transfers Research	Economic capital, PIPA
		Hackathon	Marketing, Social capital
Philippines	Cordillera Highland Agricultural Resource Management Project I	Covenant approach	Social capital, NRM
	Convergence on Value Chain Enhancement for Rural Growth and Empowerment Project	Convergence approach	PIPA, Policies
		Market-led value chain approach	Marketing, Social capital
		Farmer Business Schools	Marketing, Social capital
	Programme on Enabling Poor Rice Farmers to Improve Livelihoods and Overcome Poverty in South and South-East Asia through the Consortium for Unfavourable Rice Environments	IFAD Philippines Gender Network	PIPA, Social capital
		Community-based seed banks	PIPA, Production
		Geographic indication / trademarking of heirloom rice varieties	Marketing, Regulations
	Fisheries, Coastal Resources and Livelihood Project	Aquatic Business Schools	Marketing, Social capital
		Bay wide management approach	PIPA, Social capital
		Submerged Lobster cages	Production
		Mud crab fattening in separate composite cages	Production
		Seaweed farming lines and solar driers for seaweed	Processing, Production
	Irrigated Rice Production Enhancement Project	Young Farmers Irrigators Organisers	PIPA, Social capital
		Geo tagging to the Community Irrigation (CI) rehabilitation process and results	PIPA, Production
		Buffer stocking of certified seeds	PIPA, Production
	Northern Mindanao Community Initiatives and Resource Management Project	Revitalising indigenous leadership	Human capital, Social capital
		Certificate of land ownership award – CLOA	Economic capital, Regulations
	Rewarding Upland Poor for Environmental Services	Payment for Environmental Services (PES)	Environment and CC, Policies
Rwanda	Kirehe Community-based Watershed Management Project	Participatory approach for management of watersheds	PIPA, NRM
		System of Rice Intensification (SRI)	Production
		Flexi biogas systems	NRM
		Community cowsheds	Production, PIPA
		Hillside irrigation scheme, and organisations	Production, NRM, Social capital, Environment and CC, Policy
	Support Project for the Strategic Plan for the Transformation of Agriculture	Single project implementation unit	PIPA, Regulation
		Innovations community centres and community competition	Social capital
		Cow health insurance scheme	Economic capital, Production
	Post-Harvest and Agribusiness Support Project	Public – Private – and Producers partnerships (4Ps)	Marketing, Production
		Drying facilities for the reduction of post-harvest loss	Processing
	Project for Rural Incomes through Exports	Cocoon processing unit (silk production)	Processing
Senegal	Support to Agricultural Development and Rural Entrepreneurship Programme	National inter professional commodities platforms	PIPA, Social capital
		Endogenous farm business advisor	Human capital, Production

Country	*Project*	*Name of innovation*	*Specific domains (1&2, …)*
	Agricultural Value Chains Support Project	Improved poultry husbandry (AVA)	Production, Economic capital
		Wet millet sowing	Production
		Platform for weather and agricultural markets information diffusion via sms	Marketing, Environment and CC
	Agricultural Development Project in Matam	Rice intensive cropping system (SRI)	Production
		Participatory approach for managing pastoral units (UP)	PIPA, Social capital
		SIPA	Production, Processing, Human capital, Social capital, Economic capital, PIPA
		Drip irrigation system	Production
Sierra Leone	Rehabilitation and Community-based Poverty Reduction Project	Youth contractor strategy in Inland Valley Swamps (IVS)	PIPA, Social capital
		Property cadastral system for improving districts council revenues	PIPA, Policy
		Weather stations	Environment and CC, Production
	Rural Finance and Community Improvement Programme	Delivery of financial services in rural areas in a post-conflict situation through FSAs and CBs	PIPA
		Establishment of an apex bank for FSAs and CBs	Environment and CC, PIPA
Sudan	Butana Integrated Rural Development Project	Natural Resource Governance Framework (NRGF)	PIPA, NRM
		Community Networks	Social capital
		Young Professionals programme	Human capital
		Community forest reserves	NRM, Production
	Livestock Marketing and Resilience Programme	Response systems and innovative solutions for climate risk mitigation.	Environment and CC, PIPA
	Seed Development Project	New business model	Marketing, Economic capital
		Innovative participatory research approach	PIPA, Social capital
	South Kordofan Rural Development Programme	Readapted Islamic Finance mechanism	Economic capital
	Supporting Small-scale Traditional Rainfed Producers	Chisel ploughing	Production, Human capital
		Seasonal loan	Economic capital
	Western Sudan Resources Management Programme	Mobile extension teams	PIPA, Human capital
		Council of Implementing Partners	PIPA, Social capital
Tunisia	Agropastoral Development and Local Initiatives Promotion Programme in the South-East	Participatory planning approach	PIPA, Social capital
		Public-Private Partnerships	Marketing
	Integrated Agricultural Development Project in the Governorate of Siliana- Phase II	Creation and strengthening of grass-roots organizations	PIPA, Social capital
		Land consolidation	NRM, Economic capital
		Small-scale irrigation schemes	NRM, Production
Uruguay	Uruguay Rural	Strategic Investment Fund	Economic capital
		Rural Development Tables (RDT)	PIPA, Social capital
		Local Credit Committees	PIPA, Economic capital
		Directorate General for Rural Development	PIPA, Policy

Benchmark information of IFAD comparators

Criteria	*WB*	*ADB*	*AfDB*	*IDB*	*FAO*	*WFP*
Explicit definition	Innovation is the process by which individuals or organizations master and implement the design and production of goods and services that are new to them, irrespective of whether they are new to their competitors, their country, or the world. An innovation system is a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect their behaviour and performance. Agricultural Innovation Systems. An investment sourcebook (2012)	Innovation has as many definitions as knowledge, networks, and partnerships. It is considered to be any one of the following: • a totally new process or technology, unique and scalable to solve a problem; • the application of existing knowledge in new ways to solve problems; and • an incremental refinement. ADB guidelines for knowledge partnership (2011)	No explicit definition found, but the following Innovative technologies aimed at supporting 'climate-smart' agricultural approaches that build resilience to climatic and socioeconomic shocks. (Feed Africa - Strategy for agricultural transformation in Africa 2016–2025)	Innovation comes from a fresh way of thinking that can introduce new products, services, and processes to improve the ability of governments, the private sector, and NGOs to better address the needs of society. Technology can also play a major role in providing the mechanisms to allow people to communicate the challenges they face which, in turn, will contribute to their solutions. These challenges will turn into inspiration, and creative thinkers will soon see them as opportunities to design and develop high-impact innovations. (Social Innovation - The Experience of the IDB's Innovation Lab, 2013)	Innovation is usually perceived as related to technology. In fact, innovation is broader than that. Agricultural innovation is the process whereby individuals or organizations bring new or existing products, processes or ways of organization into use for the first time in a specific context, to increase effectiveness, competitiveness and resilience with the goal of solving a problem. FAO plays a key role in promoting the importance of innovation in agriculture to increase food security, sustainable development and promote rural development. http://www.fao.org/innovation/en/	What "innovation" truly means is the establishment of a new idea or an improvement on an old one. The last part of this definition is important because nowadays talks of "innovation" focus only on the establishment of new ideas and not on improvements on old ones. In contrast, WFP has become one of the world's leading humanitarian organisations because of its amenability to "innovation" both as the creation of new ideas and an improvement on old approaches—with a clear vision on the most cutting-edge approach to serving poor and hungry people around the world. Innovations at the World Food Programme Published by: The World Food Programme Alumni Network, 2018
Integration in strategic documents	The Country Engagement Guidelines in 2018 defined the Country Partnership Framework as the central tool of Management and the Board for reviewing and guiding the WBG's country programs and gauging their effectiveness. New WBG engagement in such Country Partnership Frameworks will include areas such as innovative solutions to poverty and interventions that catalyse private sector solutions, foster innovations,	2018 Strategy 2030: Innovative technology is part of the Vision, Value addition and guiding principles through: • Strong links to agricultural production, food security and value chains. • Promoting rural development and food security. ADB will support efforts to improve market	AfDB Strategy 2013-2022. The Bank will create a Governance Framework to support education, emphasizing innovation and entrepreneurship. New approaches will focus on better education and better matching the supply and demand for skilled workers to address youth unemployment.	The IDB strategy document (2003) on Poverty Reduction and Promotion of Social Equity highlighted (p.9) "the need to promote innovative approaches to the sustainable management of ecosystems that are the site of economic activity and home to poor populations such as indigenous communities and other marginalized	The FAO's 2017 review of the Strategic Framework: Under the Strategic Objective 2 (Make agriculture, forestry and fisheries more productive and sustainable), the transition to sustainable agriculture, forestry and fisheries, in order to sustainably increase production and productivity and address climate change and environmental	The Strategic Framework in WFP Strategic Plan for 2017-2021 identified innovation as one of the main vehicle to implement effective operations that would contribute to not only end hunger and develop sustainably, but also to do so in ways that leave no one behind, strengthening capacities and building resilience along the way.

	promote inclusion, strengthen domestic capital markets and support resource mobilization.	connectivity and agricultural value chain linkages. It will help developing member countries increase agricultural productivity and food security by boosting farm and nonfarm incomes, promoting the adoption of advanced technologies and climate-smart agricultural practices, and supporting the improvement of natural resource management standards. It will also help developing member countries enhance food safety.	The Bank needs to market itself more prominently in RMCs as a development-financing institution that promotes innovative and sustainable solutions to support Africa's transformation in general and the agriculture sector in particular. (Feed Africa - Strategy for Agricultural Transformation in Africa 2016-2025.)	ethnic groups (for example through sustainable crop practices, eco tourism, and the use of medicinal plants)". In the Update of the IDB Institutional Strategy (2010-2020) innovation was identified as one of challenges to address, in addition to social exclusion and inequality, and limited economic integration	degradation issues, requires an effective enabling environment and one area of focus refers to sustainable production systems, practices and related innovations. FAO will be supporting producers, as key partners, with emphasis on gender equality to become agents of change and innovators, enabling them to achieve higher production and productivity in a sustainable way	The main five core functions of the WFP Innovation Accelerator: (i) innovation challenge: identifying ideas, internal and external in origin; (ii) innovation boot camps: developing human-centered design/lean start-up projects; (iii) sprint programme: supporting teams from prototype or early proof-of-concept to scale over 3-6 months; (iv) thought leadership: exploring longer-term technologies and business model innovations; and (v) innovation fund: identifying funds and networks to support project scale-up.
Guidelines available	Innovation policy : a guide for developing countries : Main report (English) published in 2010 A Practitioner's Guide to Innovation Policy Instruments to Build Firm capabilities and Accelerate technological Catch-Up in Developing Countries published in 2020	ADB and Climate Investment Funds: Innovation and Action on Climate Change in Asia and the pacific published in 2014 ADB guidelines for knowledge partnership (2011)	None found	Several guidance documents are available on the dedicated website (http://www.bidinnovacion.org/en/)	Several guidance documents can be found on the website (http://www.fao.org/innovation/en/), e.g.: Innovation Niche Partnerships – A guide to the coaching process Unlocking the potential of agriculture innovation for family farmers: A thematic catalogue of successful innovations Innovations in financing mechanisms for demand-driven agricultural advisory services - Framework for analysis and synthesis of experiences Etc.	Only accessible to suscribers of the website

136

Dedicated website	The Innovation Policy Platform, developed by the World Bank Group and the Organisation for Economic Cooperation and Development, is a web-based interactive space that provides easy access to knowledge, learning resources, indicators and communities of practice on the design, implementation, and evaluation of innovation policies. www.innovationpolicyplatform.org	Energy Sector Technology Innovation Challenge https://challenges.adb.org/en/challenges/ technology -innovation-challenge?lang=en	Corporate website https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships	INNOVATION LAB The Innovation Lab (I-Lab) promotes the generation of social innovations when the problem is not defined and the demand is not structured, involving multiple actors in the process: citizens, public institutions, academia and private sector. http://www.bidinnovacion.org/en/	http://www.fao.org/innovation/en/	https://innovation.wfp.org/ The WFP Innovation Accelerator sources, supports and scales high-potential solutions to hunger worldwide. We provide WFP staff, entrepreneurs, start-ups, companies and non-governmental organizations with access to funding, mentorship, hands-on support and WFP operations.
Dedicated funds Amount of dedicated funds and period	Consultative Group to Assist the Poor (CGAP) Develops innovative solutions through practical research and active engagement with financial service providers, policy makers, and funders to enable approaches at scale to advance financial inclusion. The infoDev Multi-Donor Trust Fund (MDTF) infoDev was founded as an ICT-for-development research leader in 1995. program contributes to the mission and goals of the Finance, Competitiveness and Innovation (FCI) Global Practice under the Equitable Growth, Finance and Institutions Vice Presidency at the World Bank Group	Technology Innovation Challenge (Energy) Funds Launched in 2019 (The objective of the Technology Innovation Challenge (Energy) is to award three grants, maximum of US$500,000, to proposals demonstrating innovative technology solutions to address energy-related development challenges that ADB has published.) ADB digital Innovation Challenge funds (https://digital.adb.org/about) Launched in 2019 (Three challenges, prizes worth up to 10,000 US$, more than 700 youth and startup participated)→ https://www.adb.org/news/adb-launches-new-	Youth Entrepreneurship and Innovation (YEY) Multi-donor Trust Fund in the African Development Bank Launched in 2017 (From an initial funding at inception of US$ 4.4 million with contributions from Denmark and Norway, the YEI MDTF has since grown to US$ 40 million in commitments with additional contributions from the founding donors and also from Italy, Sweden, and The Netherlands.) https://www.afdb.org/en/documents/youth-entrepreneurship-and-innovation-multidonor-trust-fund-yei-mdtf-appraisal-reports The YEI Trust Fund is intended to help implement the goals of the Jobs for Youth in Africa initiative, which are to create 25 million jobs and equip 50 million young men and women of working age with the skills they need to help them join the formal sector,	Some funding windows INNOVATION LAB The Innovation Lab (I-Lab) promotes the generation of social innovations when the problem is not defined and the demand is not structured, involving multiple actors in the process: citizens, public institutions, academia and private sector. https://www.iadb.org/en/financial-innovation-lab/financial-innovation-lab Since 1993, more than 2 billion US$ invested (https://bidlab.org/en/about) COMPETE CARIBBEAN The Compete Caribbean program provides technical assistance grants and investment funding to support productive development and innovation policies, business climate reforms, clustering initiatives and SME development activities in the Caribbean.	FAO has mobilised its partners to finance initiatives, e.g.: Innovation Fund for Digitisation of Agricultural Value Chains (Up to eight grants of £220,000 each are being made available to support projects of 24 months duration.) (Launched in 2019, during the 2020 Q1 assignation of grants). aims to scale digital solutions for the agricultural last mile and improve smallholders' financial inclusion, livelihood and climate resilience. Financed by DFID-UK and GMSA Multiple partners funding mechanism	Innovation Accelerator Funds, financed by Germany Launched in 2016, 63 US$ million co-financing raised (2017,2018) (https://sway.office.com/ozuWibTKDPtKTnlo)

137

		partnerships-support-innovative-solutions	by 2025.--> https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/jobs-for-youth-in-africa/the-youth-entrepreneurship-and-innovation-multi-donor-trust-fund	Close to 25 million US$ by 2017 for the phase I (2012-2016) (https://competecaribbean.org/wp-content/uploads/2019/10/Update-on-results-end-of-program-Compete-Caribbean-and-full-list-of-projects-with-links.pdf)		
Dedicated unit No. of staff	Thematic group: Finance, Competitiveness & Innovation Global Practice (FCI GP) FCI comprises close to 800 staff working across more than 120 countries (https://www.worldbank.org/en/about/unit/fci)	No thematic group directly related to innovation	No thematic group directly related to innovation	Competitiveness Technology and Innovation Division (no information found) But for IDB Lab, 8 people involved (CEO, Principal Advisor, Finance and Administration, Institutional Engagement, Strategy and Impact, Investment, Knowledge, Discovery) https://bidlab.org/en/about	Research and Extension Unit 8 persons (http://www.fao.org/fileadmin/user_upload/common/Part_III_Organizational_Directory_01.pdf)	WFP Innovation and Change Management Division at HQ: 3 staff in 2018, according to the update on the WFP Management Plan (2019–2021) WFP, Innovation accelerator team based in Munich, Germany (about 11 staff)

List of key persons met

IFAD-HQ

Name	*Function / organisation*
Oscar Garcia	Director of IOE
Fabrizio Felloni	Deputy Director IOE
Gerli Beatrice	Gender and social inclusion, ECG division
Rota Antonio	Lead global livestock technical specialist, PMI division
Catrina Perch	Former IOE Staff member
Custudio Mucavele	Country Officer for Mozambique
Kossivi Balema	IOE Consultant
Prashant Kotturi	IOE Staff member
Paolo Silveri	Regional Economist, LAC Division
Marco Marzano De Marinis	Special Advisor
Robert Delve	Lead Global Technical Advisor, Agronomy
Maria Elena Mangiafico	Knowledge Management and Grants Officer; PMI Division
Alessandra Garbero	Senior Econometrician
Helen Gillman	Senior Knowledge Management Specialist
Federica Alfani	Analyst, RIA Division
Fabrizio Bresciani	Regional Economist; APR Division
Abdelkarim Sma	Regional Economist; NEN Division
Ms Sara Mbago-Bhunu	Director, ESA
Mr Nigel Brett	Director, APR
Mr Michael Carbon	Senior Evaluation Officer, IOE
Ms Sara Savastano	Director, RIA
Philippe Remy	Country Programme Manager, NEN
Edward Heinemann	Lead Policy and Technical Advisor
Sylvie Marzin	Lead Portfolio Advisor, WCA
Roberto Longo	Senior procurement officer
Edward Gallagher	Lead officer CDI Unit
Rebecca Slocum	CDI unit

Bangladesh

Name	*Function / organisation*
	IFAD Decentralised Staff
Nabil Rahaman	Country Programme Assistant
Sherina Tabassum	Country Programme Officer
Omer Zafar	Country Programme Manager
	Country Government
Gopal Chandra Sarker	Project Director, HILIP HILIP/LGED

Iqbal Ahmed	Executive Engineer, LGED
Md. Anowar Hossain	Senior Assistant Engineer, LGED
Md.Ariful Islam	Assistant Engineer, LGED
Mohammad Mizanur Rahman Khan	District Project Coordinator, LGED
Dhruba Kanta Kundu	Community Resource Management Coordinator, LGED
Arif Robbany	District Livelihood Coordinator, LGED
Ahamed Sharif Mishu	Sub Assistant Engineer, LGED
Md. Humayun Kabir	Sub Assistant Engineer, LGED
Mr.Nayan kumer Sarker	Upazila Project Coordinator Sadar Unit, LGED
Md. Sirajul Islam	Social Organizer (Fish), HILIP
Md. Aktarul Islam	LCS Organizer, HILIP
Md. Mizanur Rahman	Work Assistant, HILIP
Md, Sajal	Sub Assistant Engineer, HILIP
Md.Iftker Ahmed	Upazila Engineer
Mohammad Abu Kauser	Upazila Project Coordinator, HILIP
Md. Hasirul Islam	Sub Assistant Engineer, HILIP
Md. Kamrul Hasan	Social Organizer (Fish), HILIP
Md. Habibullah	Social Organizer (Fish), HILIP
Md Abdus Satter	Upazila Engineer
Md. Rukon Uddin	LCS Organizer, HILIP
Mr. Biplob Chandra paul	LCS Organizer, HILIP
Md.Ziaur Rahman	Trained Beneficiaries, HILIP
Mrs. Reshmi	Trained Benificiaries, HILIP
Sukumar Das	President, Mehgna Baroghar Village Slope Protection, LCS
Mr. Srihari Chakrabarty	Secretary, Meghna Natunpara Village Slope Protection Work, LCS
Mrs. Shika Rani	President, Beheli Village Internal Services, LCS
Mr. Saddak Ali	President, Village User Group of Gujauni Beel, LCS
Ruhel Kabir	Director,IFSP, FIVDB
Dr.Md.Sanaul Hossain Sony	Project Manager –Duck Value Chain, FIVDB
Dr.Farhana Akthar	Livestock Manager, FIVDB
Bozlur Rahman	RM-IFSP, FIVDB
Md.Nazrul Islam	BM-IFSP, FIVDB
Sadikur Rahman	Assistant Value Chain Facilitator, FIVDB
Miah Hossain	Assistant Value Chain Facilitator, FIVDB
Reazaul Karim	Land settlement Adviser, CDSP4
Fazlul Kader	Deputy Managing Director, PKSF
Md. Habibur Rahaman	Assistant General Manager, PKSF
S.M. Faruku-Ul-Alama	Value chain specialist, PACE
Luthfur Rahman	CCRIP Project PD and superintend engineer, CCRIP/LGED
Dr.Abdur Razzaque	Advisor, NATP2

Dr. Shatana Haldar	M&E specialist, NATP2
	Country Partners
A.K.M Firoz Khan	Project Leader, World Fish
Md. Mizanur Rahman	Research Assistant, World Fish
Md. Shamim Hossain	Program Officer, World Fish
Zahir Uddin Ahmed	Team Leader,Water Resources Management Bangladesh Resident Mission, ADB
Samina Yasmin	Agriculture Specialist, World Bank
Christian Berger	Agriculture Task Team Leaders, World Bank

Cameroon

Name	*Function / organisation*
	IFAD Decentralized Staff
Hien Bernard	Directeur FIDA – Cameroon
Lemdja Djomo, Francine	Bureau pays Cameroon
	Country Government
Ngou Tamdem Gilberte	Chef cellule promotion des investissements MINADER
Adamou Ibrahim	Point focal FIDA au MINEPIA
Ndongo Joseph Andela	Chef service coopération multilatérale MINADER
Dr Seini Boukar	Délégué Régional MINEPIA
Nozana Nduga	Coordonnateur, programme de finance inclusive
Nenwala Djidimbele	CSRPAIH / Littoral
Ngouande Beyeme F.	Vulgarisateur PPEA / Littoral
Saidou	Vulgarisateur PPEA / Littoral
Tekeng Simplice Olivier	Vulgarisateur PPEA / Littoral
Mme Fokam Tenguh	Chef Service Régional du Développement des Produits
Ayissi Crescencine	Conseillère suivi – accompagnement PEA Jeunes
Marigoh Bouquet Hélène	Coordonateur PADFA
Momo Gilbert	R/SE PEA Jeunes
Finla Theophida Bongaba	R/SE PADMIR II
Ngouanfo Serges Elie	Ingenieur polyvalent PADFA
Chindap Chourupono	RSE/PPEA
Menounga Alain	Stagiaire PEA-Jeunes (Youth Agro-pastoral Entrepreneurship Programme)
	Country Partners
Alphonse Kananura	FAO Operations specialist, FAO- Cameroun
Armand Asseng Ze	FAO: appui à la mise en œuvre des projets Forêts
ESSOME BANG Gabel	ISH / Université de Douala
BOH Michel Patrick	CP-F IAO
ZOYUIM André Marie	CP-F IAO
MEVOUNGOU ELOUNDOU Flavien	CP-F IAO
MINKAME AKONO Symplice Modeste Junior	Conseiller Principal-Point Focal Responsable de la Cellule d'Incubation IAO

BIKELE MVOUDA Daniel Patrick	CSA PEA jeunes / IAO
MBOH Michael	RDCA-SAPEP
BEUHIM Elodie	RDCA - SAPEP
	Country Beneficiaries
Woukam Martin	Président AQUACOTE-COOPCA
Matiegam Tewane Arlette	Vice-Présidente AQUACOTE-COOPCA
Tchippe Roger	Secrétaire AQUACOTE-COOPCA
Majoumouo épouse Tchouoateun Dorcas	Jardin des Planteurs Assis (JDPAT)
Fotsing Stéphane Cabrel	FSC Poivre Production
Tchounkeu Célestin	Trésorier RITOCOOP/CA
Yenga Roger	Membre CA
Nya Joseph	R du ConseilSub
Biamou Raphäel	PCA Président RITOCOOP/CA
Mekam Zangue Gladice	Entrepreneure / Fruzam
Djaleu Angèle Nicole épouse Ayodjeu	Conseiller Entreprise URAC - Centre
Nyoung Charlie Carim	Directeur Général M5 NOVATO
Goula Gansa épouse Donkou	Secrétaire comptable M5 NOVATO
Mapoure Olivier	Promoteur Ets Mapoure Agribusiness
Makamte Talla Christelle	General Manager / Royal Restaurant

El Salvador

Name	*Function / organisation*
	IFAD Decentralized staff
Oscar Roberto Grajeda Solorzano	Country Programme Officer
Rosa Amelia Campos De Martinez	Contact Person for IFAD El Salvador
Juan Diego Ruíz Cumplido	Country Programme Office El Salvador, and Sub-Regional Coordinator
Grayson Ferrari dos Santos	ex-CPM El Salvador (by Skype)
Maija Peltola	ex-IFAD and ex-PROCASUR Director (by Skype)
	Country Government
Amílcar Landaverde	Director General of Rural Development, Ministry of Agriculture and Livestock, DGDR-MAG
Beatriz Alegría	Head of the Agribusiness Division of the Ministry of Agriculture and Livestock, AGRONEGOCIOS-MAG
Jerson Posada	Director de Investments and Public Credit, Ministry of Finance
Moises Salvador Cabrera Alvarenga	Head of Strategic Debt Management, Ministry of Finance
Cecilia Martinez	ex-Team Leader, Amanecer Rural
Daniel A Rivas	ex-agribusiness advisor Amanecer Rural (now consultant Agrifresh)
Calvin Saravía	Manager of Projects and International Cooperation, National Youth Institute, INJUVE
Hector Borja	Team Leader, PRODEMOR Central Ampliación
	Country Partners

José Emilio Suadi	Executive Director, National Centre of Agricultural, Livestock and Forestry Technology (CENTA)
Walter Torres	Advisor, CENTA
Francisco Alfredo Torres	Manager, Technology Transfer, CENTA
Francisco Antonio Parker	Director General, National School of Agriculture (ENA)
Wilber Campos Nolasco	Technical Manager, ENA
Luis Felipe Torres	Planning, ENA
Haydee de Trigueros	Executive Director, Fundación Empresarial para la Acción Social (Business Association for Social Action), FUNDEMAS
Carlos Alfredo Monterrosa Vasquez	President, FEDECOOPADES (Federation of Agricultural Cooperatives) Representative to PDRR - Programa Diálogo Rural Regional – Centroamérica y República Dominicana
Claudia María Najarro	Contact point, SNV-El Salvador
Ana Iris Martinez	Manager of Lobbying, Campaigns and Communication OXFAM, and Coordinator within PDRR
Roberto Rodríguez	Executive Director - FUNDESYRAM
Juan Antonio Ruíz	Technician, FUNDESYRAM
Ileana Gómez	Member of the Leadership Team of PRISMA, and Coordinator PDRR/CNAF
Betty Pérez	Coordinator, Nacional Indigenous Salvadoran Coordinating Council, CCNIS
Jesús Amadeo Martinez	General Coordinator, Indigenous Forum Abya Yala, FIAY – and CICA
	Country Beneficiaries
Wiliam Armando Landaverde	President Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Nery Andrea Flores Cardoza	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Juan Francisco Beltrán	Treasurer Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Jose Martin Hernandez	worker Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Marta Lidia Villeda	Vice President Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Jesús Elias Mena Chacón	Legal Representative Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Efrain Mena Hernandez	Member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Elmer Yovani Chacón	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Mirna Tamith Mejía Salguro	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.

Katerine Mejía Salguro	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Armando Chacón Vasquez	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Mirna Yumiluth Lemio	aspiring member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Alex Chacón Vasquez	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Armando Rivera	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Fernando Chacón	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Juan Pablo Salguero	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Marcos Gosales	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Wilma Armando Chacón	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Isabel Yamileth Lopez	member Asociación Cooperativa de Producción Agropecuaria Aguacate Hass de la Zona Alta de R.L. – ACOPAHAS – Production of vegetables in greenhouses, processing and packing.
Country Others	
Enmer García	Purchasing Manager, Agricultural Division, Mexico and Central America, Walmart
Hugo Marín Brenes	Deputy Manager, Provider Development, Central America, Walmart
Alberto Pereira	Supplies Manager, Central America, Walmart

Ethiopia

Name	*Function / organisation*
IFAD Decentralized staff	
Helen Teshome	Rural financial specialist
Ulac Demirag	Head of IFAD's Sub-regional Hub
Yawo Jonky Tenou	Task Manager, Integrated Approach Program (IAP)
Country Governments	
Nuredin Asaro	National program coordinator for PASIDP II, Ministry of Agriculture, PASIDP II team
Eshetu Wohku	Environmental safeguard specialist, Ministry of Agriculture, PASIDP II team
Kefyalew Tsegaw	M&E specialist, Ministry of Agriculture, PASIDP II team
Nigist Kebede	Senior agricultural specialist, Ministry of Agriculture, PASIDP II team
Bimrew Mossie	Irrigation agronomist, Ministry of Agriculture, PASIDP II team
Yaregal Zelalem	Gender and nutrition specialist, Ministry of Agriculture, PASIDP II team
Melkie Fenta	Senior climate change and watershed specialist, Ministry of Agriculture, PASIDP II team

Seid Omar	National program coordinator for PCDP III, Ministry of Peace, PCDP III team
Mr. Kasseye	M&E officer, Ministry of Peace, PCDP III team
	Country Partners
Behailu Kassaye	National program coordinator for RUFIP II, Development Bank of Ethiopia, RUFIP II team
Samson Alemayehu	Finance team manager, Development Bank of Ethiopia, RUFIP II team
Tefera Befekadu	M&E team manager, Development Bank of Ethiopia, RUFIP II team
Dawit Mekonnen	Research Fellow, IFPRI, Addis
Dr. Amare Haileslassie	Head of office, IWMI East Africa
Esayas Gebremeskel,	Sr. livestock and pastoral specialist, World Bank
	Country Others
Heather Oh	Deputy Country Director & Program Development Director, Technoserve

Indonesia

Name	*Function / organisation*
	IFAD Decentralized staff
Nicolas Syed	Programme Officer of the Sub-Regional Office for South East Asia and the Pacific Asia and the Pacific Division (APR)
Anissa Lucky	Country Programme Officer Indonesia
	Country Government
Rahmawan Bayu	Rural Empowerment and Agricultural Development Scaling-Up Initiative (READ-SI) Agency for Agricultural Extension and Human Resource Development, Ministry of Agriculture Djakarta
Wiweko Setiawan	Staff of Bureau for Agricultural Training, Agency for Agricultural Extension and Human Resource Development, Ministry of Agriculture Djakarta
Ms Yayuk	Staff of Bureau for Agricultural Training, Agency for Agricultural Extension and Human Resource Development, Ministry of Agriculture Djakarta
Samy Uguy Leroy	Director of the Utilization of Natural Resources and Appropriate Technology, Ministry of Village, Development of Disadvantaged Regions and Immigration Djakarta
Khalid	Village development program consultant, Ministry of Village, Development of Disadvantaged Regions and Immigration Djakarta
Arli	MDE specialist, Ministry of Village, Development of Disadvantaged Regions and Immigration
Amrullah Rayid	Sekretaris Dinas Pertanian kab, Luwu Timur, South Sulawesi
Muh. Rizak Bachrie SP	Extension worker Tomoni
H. Darsono SP MM	Extension worker Kalaena
Hasan SP	Extension worker Wotu
Hadijah SP	Extension worker Burau
Jasmaniar	Fungsional Kabupaten, Luwu Timur
Akmaluddin SPt	Pejabat Pembuat Komitmen READSI Bab, Luwu Timur
Mr Damawan	Extension worker Lera (subdistrict Wotu), Luwu Timur

Anang Noegroho	Director for Food and Agriculture Development, Ministry of National Development Planning, National Development Planning Agency (BAPPENAS)
Diding	Former READ director, Ministry of Agriculture
	Country Partners
Eric Quincey	Senior water resources specialist, Asian Development Bank, Djakarta
Fasar Paulus Niong (Fasar.Paulus.Niong@effem.org)	Mars cocoa academy, Tarrenge, Wotu, South Sulawesi; Manager
Erwin Yuniarso	Mars cocoa academy, Agronomy trainer coordination
Agus Y Salim	Mars cocoa academy, Business trainer coordination
Adi Purwirawan	Mars cocoa academy, Supplier development supervisor
	Country Beneficiaries
Said Hasan	Leader of the farmers' group Bersatu in Lera, Wotu, Luwu Timur, Sulawesi
Wiwid Darsono	Secretary of the farmers' group Bersatu in Lera, Wotu, Luwu Timur, Sulawesi
Wifita	Treasurer of the farmers' group Bersatu in Lera, Wotu, Luwu Timur, Sulawesi
Suwardi	Cocoa doctor in Bali Kembara, Tomoni, Luwu

Kyrgyzstan

Name	*Function / organisation*
	IFAD Decentralized staff
Kauttu Mikael	Kyrgyzstan country direction, NEN division
Kubanychbek Ismailov	National consultant IFAD representative in Kyrgyzstan
	Country Government
Aitkaziev Mirlan Aitkazievich	Coordinator of ATMP, Agricultural Project Implementation Unit (APIU), Ministry of Agriculture and Melioration, Kyrgyzstan
Aldasheva Anara	Chief M&E and gender specialist, Agricultural Project Implementation Unit (APIU), Ministry of Agriculture and Melioration, Kyrgyzstan
Oskonbaev Majit	Chief M&E and knowledge management specialist, Agricultural Project Implementation Unit (APIU), Ministry of Agriculture and Melioration, Kyrgyzstan
Sharshenbek Uulu Elzarbek	Coordinator of LMDP I, Agricultural Project Implementation Unit (APIU), Ministry of Agriculture and Melioration, Kyrgyzstan
Tynaev Saparbek Mamberovich	Acting director, Agricultural Project Implementation Unit (APIU), Ministry of Agriculture and Melioration, Kyrgyzstan
Mamytkanov Bakytbek Nurmanbetovich	Director, Department of Pasture, Livestock and Fisheries Kyrgyzstan
	Country Partners
Kuttubaeva Asel	Programme manager, Community Development Alliance (CDA)
Asanaliev Urmat	Social mobilization specialist, Community Development and Investment Agency (ARIS)
Dosuev Mirbek	Social mobilization specialist, Community Development and Investment Agency (ARIS)
Isabekov Nurlan Nazarbekovich	Coordinator of ATMP, Community Development and Investment Agency (ARIS)
Nurzhanov Bakytbek Kachkynbaevich	Coordinator of LMDP I, Community Development and Investment Agency (ARIS)
Sardarbekov Emil	Social mobilization specialist, Community Development and Investment Agency (ARIS)

Mambetov Omurbek	Agronomist national consultant, FAO responsible for “Mobilizing public-private partnerships in support of women-led small business development”
Egemberdiev Abdimalik Abdykaarovich	Chairman, National pasture users association of Kyrgyzstan "Kyrgyz Jaiyty "
Usubaliev Baibek	Regional Coordinator for establishing and developing CSF, National pasture users association of Kyrgyzstan "Kyrgyz Jaiyty "
	Country Beneficiaries
Abdilova M.	Member of Pasture Committee, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast), Kyrgyzstan
Alybaev J.	ARIS expert, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Asanov K.	ARIS expert, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Battalov u. S.	Deputy of the local council, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Batyrov M.	Regional coordinator of local ARIS representative, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Mavlyankulova B.	Member of Pasture Committee, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Turdubekov T.	Head of Aiyl Okmotu, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Turusbekova G.	Member of Pasture Committee, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Uktyev B.	Chair of Pasture Committee, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Usubaliev I.	Regional technical consultant, Pasture community of Ak-Kyia rural community (aiyl okmutus - AO), Kara-Suu village, Kochkor district (raion), Naryn region (oblast)
Asanova G.	Accountant of Pasture Users Union, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Dyushebaev T. A.	Regional technical consultant of Pasture Department, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Kaldybaev B. Z.	ARIS Regional Coordinator in Issyk-Kul, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Kulchaev K.	ARIS Expert, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Kydyraliev S.	Private veterinary and chair of Pasture Users Union, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Tyulegenov K.	Head of Kara-Oi village, Pasture community of Kara-Oi rural community (aiyl okmutus - AO), Kara-Oi village, Issyk-Kul district (raion) Issyk-Kul region (oblast)
Kaldybaev B. Z.	ARIS Regional Coordinator in Issyk-Kul, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Mambetov D.	Farmer, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Mamitimjanov	Chair of Pasture Committee, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)

Urseitov R.	Chair of animal health sub-committee and private veterinary, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Usenaliev T. A.	Head of the village, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Usenbaev C.	ARIS expert, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Kadyrov N.	ARIS expert, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Saliev A.	Member of Pasture Committee, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Samidinov N.	Deputy head of SVPI in Ton, Pasture community of Orgochor rural community (aiyl okmutus - AO), Orgochor village, Jeti-Oguz district (raion), Issyk-Kul region (oblast)
Asanaliev D. M.	Head of Village, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Asanova G.	Chair of Pasture Users Union, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Baymyrzaeva	Female farmer, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Isaeva A. K.	Member of animal health sub-committee, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Kaldybaev B. Z.	ARIS Regional Coordinator in Issyk-Kul, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Mamaeva S. S.	Secretary of village, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Turdubekova N. D.	Income Specialist, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Usenbaeva K. O.	Chief specialist of village, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Usupbekov N.	Private veterinary, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
Uzbekov G. K.	ARIS expert, Pasture community of Sary-Bulak rural community (aiyl okmutus - AO), Balbay village, Tyup district (raion), Issik-Kul region (oblast)
	Country Others
Jumakanov Kalysbek	Director, State Inspectorate on Veterinary and Phytosanitary Security
Asankojoev D.	Private veterinary, State Veterinary and Phytosanitary Inspectorate (SVPI) of Ton district (raion), Bokonbaevo village (AO), Issyk-Kul region (oblast)
Esengulov N.	Private veterinary, State Veterinary and Phytosanitary Inspectorate (SVPI) of Ton district (raion), Bokonbaevo village (AO), Issyk-Kul region (oblast)
Jenishbekov T.	Private veterinary, State Veterinary and Phytosanitary Inspectorate (SVPI) of Ton district (raion), Bokonbaevo village (AO), Issyk-Kul region (oblast)
Jumakadyrov S.	Head of SVPI in Ton, State Veterinary and Phytosanitary Inspectorate (SVPI) of Ton district (raion), Bokonbaevo village (AO), Issyk-Kul region (oblast)
Kachkynov A.	Private veterinary, State Veterinary and Phytosanitary Inspectorate (SVPI) of Ton district (raion), Bokonbaevo village (AO), Issyk-Kul region (oblast)

Malawi

Name	*Function / organisation*
	Country Government
Dixon Ngwende,	National Program Coordinator, FARMSE, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Manuel Manganya,	M&E, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Alfrey Kamenya,	CPO, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Rodgers Mbekeani,	RFMS, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Golie Nyirenda,	KM & KO, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
O'Brian Mandala,	CBFOS, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Munday Makoko	National Project Coordinator, PRIDE, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Ernest Msuku	Assistant Procurement Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Bryson Msiska	Environmental Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Gloria Livata	Water Users' Association Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Lauryn Nyasulu	Assistant M&E Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Tsilizani Mseu	M&E Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Kelvin Chitsulo	Intern - Administration, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Hendricks Mlendo	Procurement Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Benjamin Kamanga	Regional Environmental Expert, Ministry of Finance, Economic Planning and Development (MOFEPD) Malawi
Babettie Juwayeyi	Value Chain Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Chipaso Nkhonjera	Gender & Targeting Specialist, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Limbani Gomani	Irrigation Engineer, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Eric Chiwala	Accountant, Ministry of Finance, Economic Planning and Development (MOFEPD), Malawi
Rex Baluwa,	National Program Coordinator, SAPP, Ministry of Agriculture, Irrigation and Water Development, Malawi
Mathews Kanyenga	M&E Officer, Ministry of Agriculture, Irrigation and Water Development Malawi
Upile Muhariwa	Knowledge Management and Communication Officer, Ministry of Agriculture, Irrigation and Water Development Malawi
Yakosa Tegha,	PEMO, Ministry of Agriculture, Irrigation and Water Development Malawi
Pemphero Chawinga,	NSO, Ministry of Agriculture, Irrigation and Water Development Malawi
Ganizani Nkhwazi,	Planner,Ministry of Agriculture, Irrigation and Water Development Malawi
Kenneth Chaula,	ACAEO-IEP,Ministry of Agriculture, Irrigation and Water Development Malawi

Christopher Amoni,	PAGO-C, Ministry of Agriculture, Irrigation and Water Development Malawi
Enford Kanyimbo,	DADO-LLE,Ministry of Agriculture, Irrigation and Water Development Malawi
Godfrey Liwewe,	Agribusiness Officer,Ministry of Agriculture, Irrigation and Water Development Malawi
Noel Limdori,	ACAEO,Ministry of Agriculture, Irrigation and Water Development Malawi
Nelson Mataka	Director Malawi National Investment Plan
Anderson Chikomola	Deputy Director,Malawi Department of Agricultural Extension Services
Yakosa Tegha	Extension methods,Malawi Department of Agricultural Extension Services
Pemphero Chawinga	NSO, Malawi Department of Agricultural Extension Services
Canizani Nkhwazi	Planner, Malawi Department of Agricultural Extension Services
Kenneth Chaula	ACAEO-IEP, Malawi Department of Agricultural Extension Services
Christopher Amoni	PAEO-C, Malawi Department of Agricultural Extension Services
Enford Kanyimbo	DADO-LLE,Malawi Department of Agricultural Extension Services
Godfrey Lwene	Agricultural business officer, Malawi Department of Agricultural Extension Services
Noel Limboru	ACAEO, Malawi Department of Agricultural Extension Services
Ketulo Salipira	Senior Deputy Director, Malawi Department of Agriculture Research Services
Lawrent Pungucani	Chief Agricultural Scientist, Malawi Department of Agriculture Research Services
Kondwani Makoko	Planning Economist, Malawi Department of Agriculture Research Services
	Country Partners
Matthews Kanyenga	Managing Officer, Total Land Care (TLC)
Sam Kainja	Total Land Care (TLC)
Isaac Nyirongo	Total Land Care (TLC)
Titus Kavalo	Program Analyst, Economic Competitiveness & Private Sector Development, UNDP, Malawi Innovation Challenge Fund (MICF)
Chionetsero Chingoli	UNDP, Malawi Innovation Challenge Fund (MICF)
Blessings Botha	Senior Agriculture Economist, World Bank
Bob Baulch	Director, Malawi Strategy Support Program, International Food Policy Research Institute (IFPRI)

Moldova

Name	*Function / organisation*
	IFAD Decentralized staff
Victor Rosca	Country director, Moldova
Tatiana Mindru	Senior M&E specialist
Alexandru Gronic	M&E specialist
Vitalie Ababii	Climate resilience specialist IFAD
Elena Burlacu	Credit manager and rural management
Marcela Vatamaniuc	Climate resilience specialist IFAD
Ghenadie Sandy	Value Chain Development specialist
	Country Government
Mr. Iurie Usurelu	General Secretary, Ministry Agriculture, Regional Development and Environment

Stefan Birca	Major of the Verejeni communal authority, protective shelterbelt
	Country Partners
Maxim Pocaznoi	WB Moldova Agricultural Competitiveness project, consultant in grant program "access"
Igor Bujor	WB MAC-project, consultant in grant program "sustainable land management"
George Panfil	Agropanfil LLC and, Donduseni, farmer and expert in conservation agriculture
Lesnic Tudor and son	Orchards and Dolce Frutto LLCs, Briceni, super-intensiv orchard + grassland restoration
Zosim Serghei	Servest Agro LLC (cucumber production, harvest and processing), Corjeuti
Corian Novac and Viorel	Hazelnut plantation, Telenesti
Mircea Elade	"Voicu Mihail PF" Ecotourism combined with walnut, vegetable and beekeeping, and solar panels for irrigation
Mihail Leșan/ Viorel Bezman	Pergola grapes orchards, Vadul lui Icas, Cahul
Eugeniu Adam	Open fields LLC + conservation agriculture+ FFS "Roua Piersicului", Leova
Anna Pancrat	Milk producers' association and milk producers, Chisinau

Peru

	IFAD Decentralized staff
Jesús Quintana	Head of the Lima Hub / IFAD
Graciela Hijar	Country Operations Analyst / IFAD
Michele Pennella	Programme Officer / IFAD
Gladys Triveño	Consultant – reviewing results
	Country Government
Noemí Marmanillo	Director of the Office of International Cooperation / MINAGRI
Janette Pacheco Santos	MINAGRI
Antonieta Noli	ex Coordinator of Sierra Norte Project (also worked in MARENAS and other projects)
Marco Felix	Team Leader / Ministerio de Economía y Finanzas (MEF), Dirección de Créditos, Dirección General de Endeudamiento y Tesoro Público
César Castro Vargas	Subdirector of the Unit of Programmes, Projects and Cooperation, Planning and Budget Office, AGRORURAL, MINAGRI
Yesegia Cornejo	Programme Officer / Unit of Programmes, Projects and Cooperation, Planning and Budget Office, AGRORURAL, MINAGRI
Jerónimo Chiarella	Project Coordinator / GEF-MERESE Project, Ministry of the Environment (MINAM)
Mayra Asmat Marin	Project Officer / GEF-MERESE Project, Ministry of the Environment (MINAM)
Marinés Sanchez Griñan	Advisor / Centro Nacional de Planeamiento Estratégico (CEPLAN)
José Sialer	Coordinador Ejecutivo / Proyecto de Mejoramiento de los Servicios Públicos para el Desarrollo Territorial Sostenible en el Área de Influencia de los Ríos Apurímac, Ene y Mantaro (Proyecto de Desarrollo Territorial Sostenible) / Public Services Improvement for Sust. Territorial Development in the Apurimac, Ene, and Mantaro River Basins (NEC - PDTS – VRAEM), AGRO RURAL - MINAGRI
Luis Saez	Coordinador Ejecutivo / Proyecto Fortalecimiento del Desarrollo Local en Áreas de la Sierra y la Selva Alta (PSSA), AGRO RURAL - MINAGRI
Manuel Angel Fenco Periche	Component Leader / PSSA, Agrorural, Cajamarca
Nilton Eugenio Saucedo	Component Leader / PSSA, Agrorural, Cutervo

Carmen Fernandez	Administrator / PSSA, Agrorural, Cutervo
Antonio Montalvo Montalvo	Manager / Tocmoche Municipality
	Country Partners
Lilia Salinas	International Potato Center (CIP) - (Programme for Strengthening Innovation to Improve Income, Food Security and Resilience of Potato Producers)
Barbara Wells	Director General / CIP
Oscar Ortiz	Deputy Director for Research and Development / CIP
Flor Romero	Leader, Contracts and Donations / CIP
Cristina Fonseca	Senior Associate Researcher / CIP
André Devaux	Consultant (former LAC Regional Leader) / CIP
Guy Hareau (by Skype)	Leader, Department of Social Sciences and Nutrition /CIP
Paolo Flores (by Skype)	Consultant, Project ISSANDES / CIP
Miguel Ordinola (by Skype)	Consultant / CIP
Binolia Porcel	Helvetas
Maritza Paliza	Helvetas - (Development Of Self-Assessment Tools of In Country Results Based Management Capacity In Agriculture) - AVANTI
Emperatriz Arango	Fundación ACUA (based in Colombia) – by Skype
	Country Beneficiaries
José Mautista Vazquez	Asociación Virgen del Cisne Masannique, Tomoche (goats)
Laura Torres Zuaro	Member / Asociación Virgen del Cisne Masannique
Silia Rojas Gonzales	Member / Asociación Virgen del Cisne Masannique
Guevara Rojas Shon Seiner	Member / Asociación Virgen del Cisne Masannique
Roman Aldui Fernandez	Member / Asociación Virgen del Cisne Masannique
Segundo Aldui Fernandez	Member / Asociación Virgen del Cisne Masannique
Alberto Pinedo Rojas	Member / Asociación Virgen del Cisne Masannique
Roman Aldui Quiroz	Member / Asociación Virgen del Cisne Masannique
Vilma Aldui Fernandez	Member / Asociación Virgen del Cisne Masannique
Luisa Fernandez Llenper	Member / Asociación Virgen del Cisne Masannique
Gisella Veeda Martinez	Member / Asociación Virgen del Cisne Masannique
Juan Deza Manay	Member / Asociación Virgen del Cisne Masannique
Rolando Alvarado Purihuaman	Technical Assistant / Asociación Virgen del Cisne Masannique
Lenin Paul Torlwofavur Benavides	President / Asociación Agropecuaria San Francisco de Asis, Tocmoche (ducks and guinea pigs)
Jeannete Clay Solano Coronel	Asociación Agropecuaria San Francisco de Asis
Griceitio Ruiz Condor	Asociación Agropecuaria San Francisco de Asis
Vanessa Estefani Quiroj Rociones	Asociación Agropecuaria San Francisco de Asis
Celindo Benaindez Rodiego	Asociación Agropecuaria San Francisco de Asis
Martin Cordozo Cubos	Asociación Agropecuaria San Francisco de Asis
Jose Corchueparei M.	Asociación Agropecuaria San Francisco de Asis
Domitila Vasquez Cordova	President / Asociación Los Emprendedores de Chacon, Tocmoche (ducks)

Carlos Jair Bautista Paz	Treasurer / Asociación Los Emprendedores de Chacon
Edgar Huamón Bustamente	President / Asociación de Técnicos Agropecuarios El Granjero, La Ramada (pigs)
Honorato Váquez Estela	Treasurer / Asociación de Técnicos Agropecuarios El Granjero
Elita Díaz Díaz	Asociación de Técnicos Agropecuarios El Granjero
Dina Bustamente Arévalo	Asociación de Técnicos Agropecuarios El Granjero
Adelaida Huimán Bustamente	Asociación de Técnicos Agropecuarios El Granjero
Edister Ilatomo Delgado	Asociación de Técnicos Agropecuarios El Granjero
Maria Reina Fernandez Martinez	President / Asociación de Productores Agropecuarios El Valle Socotino, Socoto, Cutervo (guinea pigs)
José Sanlor Fernandez Martinez	Treasurer / Asociación Agropecuaria San Francisco de Asis
Maria Felix Chuquimanyo Ruiz	Asociación Agropecuaria San Francisco de Asis
Aleida Tantaleón Cerna	Asociación Agropecuaria San Francisco de Asis
Emilia Chiquimanjo Ruiz	Asociación Agropecuaria San Francisco de Asis
Hormecuido Delgado Diaz	Asociación Agropecuaria San Francisco de Asis
Martirea Miduia Sanchez	Asociación Agropecuaria San Francisco de Asis
Javier Hugo Olano Curinamba	Asociación Agropecuaria San Francisco de Asis
Flavio Hurearte Bargo	Asociación Agropecuaria San Francisco de Asis
Maria Alcero Marties Pardo	Asociación Agropecuaria San Francisco de Asis
Floridoro Vasquez Cieza	Asociación Agropecuaria San Francisco de Asis
Ubalduia Carrosco Ramos	Asociación Agropecuaria San Francisco de Asis
Dorilla Saldonia Irigairi	Asociación Agropecuaria San Francisco de Asis
Milton Munoz Fernandez	Asociación Agropecuaria San Francisco de Asis
José Tito Carrero Delgado	President / Asociación de Productores Agropecuarios Los Sauces, Cutervo (laying hens)
Marina Delgado Contreras	Secretary / Asociación de Productores Agropecuarios Los Sauces
Dolita Carrero Delgado	Member / Asociación de Productores Agropecuarios Los Sauces
Aurora Salazar Segura	Treasurer / Asociación de Productores Agropecuarios Los Sauces
Ukaldina Delgado Contreras	Member / Asociación de Productores Agropecuarios Los Sauces
Santo Delgado Contreras	Fiscal / Asociación de Productores Agropecuarios Los Sauces
Milucelina Salazar Gonzales	Member / Asociación de Productores Agropecuarios Los Sauces
Moio Carildo Carrasco Sanchez	Member / Asociación de Productores Agropecuarios Los Sauces
Asunciona Tello Contreras	Member / Asociación de Productores Agropecuarios Los Sauces
Maria Nelva Roees Sanchez	Treasurer / Asociación de Productores Agropecuarios Los Emprendedores del Norte, Cutervo (milk and cheese production)
Yery Campos Mauquis	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Kelly Piedra Flores	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Ana Celinda Sanchez Flores	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Amado Flores Tello	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte

Diego Sanchez Castro	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Hilda Noemi Perez Toro	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Ismael Degado Sausedo	President / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Yainely Emcalada Cubas	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Marta Nelsa Guerrera	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Agustín Flores Medina	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Aida Flores Medina	Member / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Lorenzo Flosc Telo	Vice President / Asociación de Productores Agropecuarios Los Emprendedores del Norte
Aurora Comanzo Goyzochea	Secretary / Asociación de Productores Agropecuarios Los Emprendedores del Norte

Philippines

Name	*Function / organisation*
	IFAD Decentralized staff
Alessandro Marini	Country director, Philippines
Jerry Pacturan	Country programme officer, Philippines
Vivian Azore	Country programme assistant
Bernard Adrien	Fisheries and Rural Development Consultant, 4Winden Consultancy
Yolando C. Arban	Special Advisor-ICO Philippines, IFAD
Sakwsa Tubuna	CPO, Fiji Office of IFAD
	Country Government
Jerry T. Clavesillas	Director, Department of Trade and Industry (DTI)
Edwin O. Banquerigo	IFAD Project Director – DTI
John William R. Lucero	Chief Trade and Industry Development Specialist – DTI
May P. Cruz	Resource Generation and Management Service - DTI
Emellie Tamayo	First Vice President of our Lending Program Management Group, Land Bank
Gliceria B. Angeles	Program Officer, Programs Management Department, Land Bank
Rommel S. Herrera	Director IV, International Finance Group, Department of Finance
Nelson A. Ambat	Financial Advisor, International Finance Group, Department of Finance
Cameron P. Odsey	Regional executive director, Department of Agriculture (DA) Cordillera Administrative Region (CAR), Coordinator – CHARMP-2
Michele Mendoza Camilo	Executive assistant, DA-CAR
May Rose Busacay	CHARMP-2
Nympha Akilith	CHARMP-2
Michael G. Umaning	National commission for indigenous people – CAR
Isabel B. Tejo	CHARMP-2

Daniel D. Dalilis	CHARMP-2
Arthur C. Baldo	Mayor. Municipality of Sablan
Michelle A. Busacay	Monitoring and Evaluation, Local government unit -, Sablan
Brielgo O. Pagaran	Oil Palm – National Industry Cluster Coordinator, Regional Director, Caraga Regional Office, Department of Trade and Industry
Susana G. Perez	Project Development Officer/ Desk Officer for IFAD-assisted Projects, Project Management Service, Department of Agrarian Reform
Celerina G. Afable	Director, Project Management Service & Deputy PIO, Foreign Assisted Projects Office, Department of Agrarian Reform
Jose T. Baron	Officer in Charge, Project Director, DTI, Butuan City
Brilgo O. Pagaran	Regional Director, DTI
Rolando Ignacio	Coordinator Rural Agro Enterprise for Inclusive Development (RAPID)
Nenee C. Dalagan	Trade and Industry Development Specialist, DTI
Sama P. Estrade	DTI
Marinely R. Caer	Trade and Industry Development Specialist, DTI
Celestino Megapatan	Provincial Director
Stephen Kintanar	Trade and Industry Development Specialist, DTI
Paulita Ong	Woman President, Butuan City
Restituto Marilla	Provincial Coordinator, Department of Agrarian Reform, Surigao del Sur
Anthony Fuentes	Gender, Institutional Development Specialist, DAR
Annelyn Chan	Project Coordinator, DAR; Agusan del Norte
Engr. Daylinda Narisma	Assistant Regional Director, DAR
Leomides Villarial	Regional Director, DAR
Antonio Miso	Project Regional Coordinator, DAR
Hermegina Gabor	M&E Coordinator, DAR
Andre Atega	Provincial Agrarian Reform Program Officer, Agusan del Norte, DAR
Alfredo Alvarez	Comprehensive Agrarian Reform Program Officer, DAR, Surigao del Norte
Gudy Centina	Provincial Coordinator, DAR, Agusan del Sur
Ma. Susan Perez	Desk Officer, IFAD CONVERGE
Forcep Chris de la Torre	Value Chain Specialist, Project CONVERGE, DAR
Ma. Elizabeth de Guzman	Provincial Agrarian Reform Program Officer, Surigao del Norte, DAR
Kenberley Labucay	Regional Administrative Assistant, FishCORAL, BFAR
Loida Arreglado	Coordinator, FishCORAL, BFAR
Noel Pugoy	Officer in Charge, Provincial Fisheries Officer, Agusan del Norte, BFAR
Rustico Ranoco	Officer in Charge, Provincial Fisheries Officer, Surigao del Sur, BFAR
Antonio Regis Jr	Coastal Resource Management Officer, BFAR
Elvera Sayas	Officer in Charge, BFAR
Niña Marie Dionaldo	Regional Finance Officer, BFAR
Maria Clarita Limbaro	Municipal Mayor of Bayabas, Surigao del Sur / Chairperson of Coastal Community Alliance Unified for Sustainable Ecosystems (CCAUSE)
Baby Niel Quiñonez	Technical Working Group Chair of CCAUSE
Glenfhy Hablo	FishCORAL M&E Officer, BFAR

Vanessa Cemanes	FishCORAL Community Facilitator of Cagwait, Surigao del Sur
Jonalyn Naive	FishCORAL, Community Facilitator of Cabadbaran City
Vanessa Vingua	FishCORAL Livelihoods Officer
Marisol Tuso	FishCORAL Institution and Gender Officer
Rolando Leopoldo	FishCORAL Regional Project Manager
Ronald Camba	FishCORAL Livelihood and Enterprise Development Officer
Pedrito Nalam	Municipal Agriculturalist of Tubay
Arvin Sanoria	FishCORAL Regional Management Information Systems Officer
Zenaida Silao	Planning Officer, FishCORAL
Carina Advincula	Livelihood Specialist PSCO
Catherine Bucay	National Economic and Development Authority (NEDA)
Elpidio D. Lucernas Jr	Project in Charge, IRPEP
Renato P. Manantan	National Program Coordinator
Marilyn R. Platero	National Program Coordinating Officer, M&E Officer
Sarah S. Ramos	National Irrigation Administration (NIA), Reg. X – IA Strengthening Coordinator Regional
Bito P. Zamora	Project in charge
Armando E. Arizala	NIA Region X – Infra Project Coordinator
Vicente G. Haraja	NIA – Project in Charge, BIMU
Arnel T. Cativo	NIA – Project in Charge, Northern Leyte
Melinda E. Rigos	Regional IA Strengthening Coordinator, Reg. XIII
Presentacion L. Yee	M&E Officer, Region XIII
Monalisa J. Cuna	Provincial IA Strengthening Coordinator, Reg. XIII
Rizalina B. Gallarde	Provincial M&E Officer, NIA Reg. XIII
Ma Elena T. Basco	Regional Coordinator, Infrastructure, NIA Reg. VI
Joy A. Babiera	Regional IA Strengthening Coordinator, NIA Reg. VI
Mae Gwendolyn D. Opina	Irrigation Development Officer, NIA Reg. VI
Marcelino V. Castillon	Project in Charge, NIA Reg. VI
Arsenia A. Perez	Project Coordinator, DA PCO
Leo Gallegas	National Coordinator of Institutional Development Program
	Country Partners
José Luis Fernandez	FAO Representative
Tamara Jean P. Duran	Assistant FAO Representative – Programme
Maria Ruzella Quilla	Project development and coordination specialist – FAO
Alberto C. Aduna	Emergency coordinator & OiC Mindanao Emergency Response Preparedness team – FAO
Akmal Siddiq	Chief of Rural Development and Food Security Thematic Group – Asian Development Bank
Simona Somma	ADB IED Evaluation Specialist, ADB
Cynthia Sajol	Campus Director, Surigao del Sur University
Melinda Limlengco	Manager, Business Development, International Rice Research Institute (IRRI)

Jocelyn Amarante	Portfolio Manager, IRRI Portfolio Management Office, IRRI
Tri Deri Setiyono	Scientist/Crop Modeler, Sustainable Impact Platform, IRRI
Pauline Chivenge	Senior Scientist, Soil and Nutrient Management, Sustainable Impact Platform, IRRI
Diego Naziri	Value Chain / Post Harvest Specialist, International Potato Centre (CIP)
Arma Bertuso	Senior Research Associate, CIP
Camille Joy Enalbes	Communication Specialist, CIP
Rodel D. Lasco	Senior NRM Scientist / Country Coordinator, ICRAF Philippines
Glenn B. Gergorio	Director, Southeast Asia Regional Center for Graduate Study and Research in Agriculture (SEARCA)
Pedcris M Orencio	Program Head for Research and Development, SEARCA
Bernice Anne C. Darvin	Program Specialist, Research and Development Department, SEARCA
Glen A. de Castro	Project Coordinator, SAAS, SEARCA
Sarah Grace L. Quiñones	Project Associate, SAAS, SEARCA
Loise Ann M. Carandang	Project Associate, ATMI-ASEAN, SEARCA
Karen Quilloy	Co-Project Leader RRT, Associate Professor CEM-UPLD, SEARCA
Ana Kristina M. Aquino	Project Associate, SAAS, SEARCA
Pedro A. Alviola IV	Dean, School of Management, UP Mindanao
Jimmy B. Williams	ATMI Coordinator, SEARCA
Nancy M. Landicho	Program Specialist, SEARCA
Ispelda L. Batongontary	Program Specialist, SEARCA
Mags Catindig	Program Manager Asia DHRRA
Gudrun Cartuyvels	Regional Director, Trias Southeast Asia
Jessica Umanos Soto	Country Director, We Effect Philippines
	Country Beneficiaries
Lilibeth S. Arce	Chairperson TARBECO
Alicia Paglinawan	Owner, Sunrise Corn Coffee
Alfreda Elejorder	Rural Improvement Club
Jose Panganeron	Vice Chairman, PSFA
Emma D. Estrella	Estrella Aqua Farm / BCCAFI
Julia O. Jose	General manager – Community Financial Institution
Santiago M. Bartolome	Chairman – Community Financial Institution
Niña Busa Burdeds	National Council of Indigenous Persons (NCIP) & Geodectic Engineer
Randy D. Rosas	TMSD Chief, NCIP, Region XIII
Nilo Ghinalubahan and other members (68)	Bangayan Lakeview Association & Zapanta Valley Association
Leonora Mila and other members (22)	San Isidro Upland Farmers Multipurpose Cooperative (SIUFMULCO), Agusan del Norte
Edilberto N. Bayot	Mushroom producer and trainer
Maria Clara T. Sacro	Kathreese Arts and Crafts, Butuan City
Epimaco M. Galero Jr. (June)	Deputy Executive Director, Foundation for Rural Enterprise and Ecology Development of Mindanao, Inc.
Rudy Balaba	Tolosa Fisherfolks Association

and other members (20)	
Gilbert S Badillo	Chairman, La Union Mangrove Fisherfolk Association, Caraga
Anthonnet Delapeña	Group member, La Union Mangrove Fisherfolk Association, Caraga
	Country Others
Simon Bakker	President and CEO, Kennemer Foods Inc.
May Lynn Lee	Vice President, Kennemer Foods Inc.

Rwanda

Name	*Function / organisation*
	IFAD Decentralized staff
Francesco Rispoli	Country Director, IFAD Rwanda
Aimable Ntukanyagwe	Country Programme Officer, IFAD Rwanda
	Country Government
Amb. Bill Kayonga	Chief Executive Officer, National Agricultural export Board (NAEB), Rwanda
Habiyambere Maurice	NAEB / PRICE
Gusasira Emmanuel	CEO Adviser – NAEB
Munyaneza Jean marie Vianney	Emerging commodities Division Manager, NAEB
Charles Bucagu	Deputy Director General – Agriculture and Animal Resources Development Board (RAB)
Nkundanyirazo Elvis Blaise	Operations Manager, Single Project Implementation Unit (SPIU) – IFAD Funded Projects in Rwanda
Ndagidimana G. André	Cooperative development specialist and value chain expert, SPIU
Nagaramber Michel	SPIU
Gasagara Emmanuel	Access to finance specialist, SPIU
Louis Munyemanli Ndagimana	Head of finance and fiduciary aspects, SPIU
Mundahunga Jean Claude	Head of planning and M&E, SPIU
Kamugisha Jean Baptiste	Sector animal resources
Viviane Musabyimana	Post-harvest handling and storage officer, PASP
Ntagungira Emmanuel	Branch Manager / Business Development Funds Gatsibo branch
Rimenyande Désiré	Project officer PASP Kayonza
	Country Partners
Ammar Kawash	Head, smallholder farmer unit, WFP Rwanda
Mukamwiza Matuje Jeanne d'Arc	Programme associate, FAO Rwanda
Cosmas Ntare	RDDP project manager, Heifer International
Thomas M. Semahoro	Monitoring, learning and Evaluation Manager, Heifer
Akwiyimana Theophile	Community mobilisation officer PASP/Heifer
	Country Beneficiaries
Hategekimana Jean Baptiste	Chairperson, Rwanda Youth in Agriculture Forum
Dushimiyimana Déogratias	Chair, Water users association of Sagatare
Mukashyata Julienne	Treasurer, Water user association of Sagatara

Bitegeko Imu	Water user association of Sagatara
Mukanbanyama Blandine	Water user association of Sagatara
Karyongo Saïdi	Water user association of Sagatara
Murenzi Gilbert	Water user association of Sagatara
Ndatimana Jean Bosco	Individual beneficiary of IFAD's support
Mukampanzi Pélagie	Vice president, Kabuye cowshed association
Hagumakubatia Jean Pierre	Member, Kabuye cowshed association
Lurinda Faustin	Member, Kabuye cowshed association
Namutaga Marguerite	Member, Kabuye cowshed association
Nkuranga Peter	Chairman, milk collection centre of Gatsibo
Muniyasulango Emmanuel	Cooperative of milk collection centre Gatsibo
Nduguteyi William	Cooperative of milk collection centre Gatsibo
Musimsinda Emmanuel	Cooperative of milk collection centre Gatsibo
Murunyi Moses	Cooperative of milk collection centre Gatsibo
Gaio Kabera John	Cooperative of milk collection centre Gatsibo
Habiyamenye Eli	President cooperative KOPUAM
Siborurema Teniyasi	Vice president, cooperative KOPUAM
Kanyarwanda Eric	Cooperative KOPUAM
Ndungutse Auguste	Cooperative KOPUAM
	Country Others
Bahati Wenslars	Project Manager, 4B Holdings Kayonza
Yeon Seok-Weon	Managing Director, HEworks Rwanda – Silk Ltd
Chang Byung-Chae	CTO, HEworks Rwanda – Silk Ltd

Senegal

	IFAD Decentralized staff
Mbaye, Mame Awa	Responsable des finances, Bureau sous régional de Dakar
Helene Aminatou Ba	Analyste – Programme du pays
Arnaud Rouillard	Consultant FIDA
Maria Camila Caicedo	Consultant FIDA
Dounamba Konare	Assistante de programme
	Country Government
Tanor Meïssa Dieng	Conseiller – Cabinet du Ministère en charge de l'agriculture.
Mamadou Ousséouni Sakho	Secrétaire Général – Ministère en charge de l'élevage
Souleymane Diop	Directeur départemental du développement rural – Kaolack
	Coordonnateur par intérim du PAFA
Thierno Ba	Coordonnateur PRODAM
Pouye Ibrahim	Spécialiste chargé de la professionnalisation, PAFA
Ibrahima Ndiaye	Responsable Suivi – Evaluation PAFA
Saboury Ndiaye	Responsable Suivi – Evaluation PRODAM

Mountaga Kande	Chef d'Antenne PADAER MATAM
Alioune Diouf	Conseiller agricole rural
	Country Partners
Mariama Drame	Directeur Général, Agence Nationale de Conseil Agricole et Rurale (ANCAR)
Ousmane Fall	Secrétaire Général ANCAR
Cheikh Oumar BA	Directeur exécutif, Initiative Prospective Agricole et Rurale (IPAR)
Ibrahima Hathie	Directeur de recherches, Initiative Prospective Agricole et Rurale (IPAR)
Abdoul Mbaye	Représentant du Directeur, Institut Sénégalais de Recherches Agricoles (ISRA)
Papa Aly Diop	Chef d'agence, Institution mutualiste communautaire d'épargne et de crédit, Kaolack
Bassirou Fall	Gérant Mutuelle d'Epargne et de Crédit, Bilbace
	Country Beneficiaries
Diop Huguette	Président, comité de gestion aviculture villageoise améliorée (CG-AVA), Thiawando
Ndao Marie	Vice-présidente, CG-AVA
Apithy Aïda	Secrétaire Général adjointe CG-AVA
Dione Fatou	SG Comité de gestion
Dine Manème Faye	Présidente centrale d'achat agricole (CAA) Keur Soce
Samba KA	Membre centrale d'achat agricole (CAA) Keur Soce
Pape Pen	Relais communautaire
Mariam An	Présidente groupement maraîcher de Taïba Nianguène
Fall Mor Serigne	Secrétaire exécutif, Cadre Interprofessionnel des filières Niébé
Ibrahima Ndiagne	Président, Cadre Interprofessionnel des filières 'Mil et Sorgho
Abdoulaye Sarr	Secrétaire adjoint, Cadre Interprofessionnel des filières Niébé
Boubacar Sidibé	Cadre Interprofessionnel des filières, Niébé
Binta Hanne	Présidente Société d'Intensification de la production agricole (SIPA) de Thiambe
Banna Ba	Présidente, Unité vache laitière de Ourossogui
Haby Sow	Unité vache laitière de Ourossogui
Abou Edy Ba	Président, Fédération Union des Unités Pastorales de la région de Matam
Hamidou Damba Sall	Président, Fédération des organisations de producteurs Association Kaworal Nguenare Bossea (AKNB)
Bisane Hanneth Diouf	Vice-président AKNIB
Mamadou Cissé Fall	Superviseur AKNIB
Yaya Ndongo	Superviseur AKNIB
Falif Thioub	Secrétaire général AKNIB
Samba Sall	Paysan consultant AKNIB
Daouda Thian	Paysan consultant AKNIB
Abdoulaye Seidou Diaw	Paysan consultant AKNIB
Demba Louti Soumav	Paysan consultant AKNIB

Bibliography

Selected IFAD Documents

Not included: COSOPs, Projects related documents (design, supervision, midterm review and completion), Country programme and project evaluations reports, etc.

International Fund for Agricultural Development. 2000. IFAD-5 Action Plan (2000-2002). Rome.

_____. 2001. Evaluation of IFAD's capacity as a promoter of replicable innovation. Rome.

_____. 2001. IFAD's Strategic Framework for 2002-2005. Rome.

_____. 2001. Progress Report on the IFAD V: Plan of Action (2000-2002). Rome.

_____. 2005. Independent External Evaluation of IFAD's operations. Rome.

_____. 2005. Report on the Independent External Evaluation of IFAD. Rome.

_____. 2006. Madagascar Country strategic opportunities programme.

_____. 2006. IFAD Strategic Framework 2007-2010: Enabling the rural poor to overcome poverty. Rome.

_____. 2006. Innovations challenges for the rural poor. Issue paper for the Governing Council – Twenty-ninth Session. Rome.

_____. 2007. Annual Report on the Results and Impact 2007. Rome.

_____. 2007. IFAD Innovation Strategy. Rome.

_____. 2007. IFAD Strategy for Knowledge Management. Rome.

_____. 2007. Quality Enhancement for Project Design, Guidelines for Internal Project Review. Rome.

_____. 2007. Supervision and implementation support Policy. Rome.

_____. 2009. IFAD Policy for Grant Financing. Rome.

_____. 2009. Revised IFAD Policy for Grant Financing. Rome.

_____. 2010. Corporate-Level Evaluation, IFAD's Capacity to Promote Innovation and Scaling up. Rome.

_____. 2011. IFAD Strategic Framework 2011-2015. Rome.

_____. 2011. IFAD's Environment and Natural Resource Management Policy: Resilient livelihoods through the sustainable use of natural assets. Rome.

_____. 2011. Progress report on the implementation of the IFAD Strategy for Knowledge Management and the innovation agenda. Rome.

_____. 2012. Gender equality and women's empowerment Policy. Rome.

_____. 2014. Corporate-level Evaluation on the IFAD Policy for Grant Financing. Rome.

_____. 2014. IFAD Private Sector Engagement Strategy 2014-2019. Rome.

_____. 2014. Rural Youth Evaluation Synthesis. Rome.

_____. 2015. IFAD Policy for Grant Financing. Rome.

_____. 2015. IFAD's operational framework for scaling up results. Rome.

_____. 2015. IFAD Evaluation Manual. Independent Office of Evaluation. Rome.

_____. 2015. Policy for Grant Financing. Rome.

_____. 2016. Corporate-level evaluation of IFAD's Decentralization Experience. Rome.

_____. 2016. IFAD Rural Development Report 2016. Rome.

_____. 2016. IFAD Strategic Framework 2016-2025: Enabling inclusive and sustainable rural transformation. Rome.

_____. 2016. IFAD's Approach to South-South and Triangular Cooperation. Rome.

_____. 2016. IFAD's Engagement with Indigenous Peoples: Evaluation Synthesis. Rome.

_____. 2017. IFAD's Country-level Policy Dialogue Evaluation Synthesis. Rome.

_____. 2017. IFAD's Social Environmental and Climate Assessment Procedures – SECAP.

_____. 2017. IFAD's Support to Scaling Up of Results Evaluation Synthesis. Rome.

_____. 2017. Report on IFAD's Development Effectiveness 2017 (RIDE). Rome.

_____. 2017. What works for gender equality and women's empowerment – a review of practices and results Evaluation Synthesis. Rome.

_____. 2017. IFAD's experience in scaling up in Asia and the Pacific region. Lessons learned from successful projects and way forward. Occasional Papers. Knowledge for development effectiveness.

_____. 2017. Country-level policy engagement in IFAD Guide book. Rome, IFAD.

_____. 2018. Annual Report on the Results and Impact 2018. Rome.

_____. 2018. Building partnerships for enhanced development effectiveness – a review of country-level experiences and results. Rome.

_____. 2018. Policies and Criteria for IFAD Financing. Rome.

_____. 2018. Revised Guidelines and Procedures for Results-based Country Strategic Opportunities Programmes. Rome.

_____. 2019. Corporate-level evaluation of IFAD's support to innovations for inclusive and sustainable smallholder agriculture. Approach paper (EB2019/105/W.P.).

_____. 2019. Corporate-level evaluation on IFAD's Engagement in Pro-poor Value Chain Development. Rome.

_____. 2019. IFAD Private Sector Engagement Strategy 2019-2024. Rome.

_____. 2019. Inclusive financial services for the rural poor Evaluation synthesis. Rome.

_____. 2019. Technical Innovations for Rural Poverty Reduction Evaluation synthesis. Rome.

_____. 2019. The Indigenous Peoples Assistance Facility (IPAF), Assessment of the performance of the fourth IPAF cycle. Rome.

_____. 2019. Update on Change, Delivery and Innovation, and IFAD's Decentralization. Rome.

Other Documents *(selected)*

African Development Bank Group. 2008. Revised Bank Knowledge Management and Development Strategy 2008-2012.

_____. 2013. Private Sector Development Policy of the African Development Bank Group.

_____. 2016. Strategy for Agricultural Transformation in Africa 2016-2025 – Feed Africa.

Aga Khan Foundation. 2017. Mobilizing public-private partnerships in support of women-led small business development Project Completion Report.

Anderson J, Moler A and Kretchun N. 2016. National Survey and Segmentation of Smallholder Households in Bangladesh. Understanding Their Demand for Financial, Agricultural, and Digital Solutions.

APRACA. 2008. Financial Access and Inclusion in Agricultural Value Chain. 2008/1, FinPower Program. Bangkok, Thailand: Asia-Pacific Rural and Agricultural Credit Association (APRACA).

Arntraud Hartmann, Homi Kharas, Richard Kohl, Johannes F. Linn, and Barbara Massler. 2010. Scaling Up the Fight Against Rural Poverty: An Institutional Review of IFAD's Approach.

Asian Development Bank. 2009. Operational Plan for Sustainable Food security in Asia and the Pacific.

_____. 2010. Bangladesh: Participatory Small-Scale Water Resources Sector Project. Mid-term Review Report. Administration for Cofinancing.

_____. 2018. STRATEGY 2030 Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific

Beintema N, Stads G-J, Fuglie K, et al. 2012. ASTI global assessment of agricultural R&D spending: developing countries accelerate investment.

Berdegué (2005). Pro-Poor Innovation Systems. Rome, IFAD

Canford Chiroro. 2015. Innovations to Promote Growth in Small-Scale Irrigation in Africa: Malawi report.

Community Development Alliance. 2018. Gender Action Learning for Sustainability (GALS) in the Kyrgyz Republic. Internal Evaluation Report. Bishkek: CDA.

Cornell University, INSEAD and WIPO. 2018. The Global Innovation Index 2018: Energizing the World with Innovation.

DigitalGreen, USAID, IFPRI, et al. 2017. Bangladesh: Desk Study of Extension and Advisory Services.

Escobal, Javier & Carmen Ponce (eds.). 2016. Combinando protección social con generación de oportunidades económicas: una evaluación de los avances del programa Haku Wiñay.

Escobal, Javier, Carmen Ponce, Ramón Pajuelo & Mauricio Espinoza. 2012. Estudio comparitivo de intervienciones para el desarrollo rural en la Sierra Sur de Perú. GRADE.

European Commission. 2016. Peer Review of the Moldovan Research and Innovation system. Horizon 2020 Policy Support Facility. Bruxelles, Belgique: EC Directorate-General for Research and Innovation.

FAO. 2013. Review of Strategic Framework 2010-2019.

_____. Marco de Programación de País de la Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO) en El Salvador 2016-2020.

_____. Mid-term Evaluation of the Project "Capacity Development for Agricultural Innovation Systems" (CDAIS).

_____. 2017. The Director-General's Medium Term Plan 2018-21.

Fukugawa N, Ambashi M and Suhud Y. 2018. Division of Labour Amongst Innovation Intermediaries in Agricultural Innovation Systems: The Case of Indonesia. ERIA Discussion Paper Series (6): 54.

Government of the People's Republic of Bangladesh. 2015. Seventh Five Year Plan.

_____. 2018. Bangladesh Economic Review 2018.

Hartmann, Arntraud, Kharas, Homi, Kohl, Richard, Linn, Johannes, Massler, Barbara, Sourang, Cheikh. 2013. Scaling Up Programs for the Rural Poor: IFAD's Experience, Lessons and Prospects (Phase 2).

Helena Posthumus, Gerard Baltissen, Raphael Mweninguwe, Gert Jan Veldwisch and Wouter Beekman. 2014. Final Report. Documenting lessons learnt of the Irrigation, Rural Livelihoods and Agricultural Development Project.

ICARDA. 2013. Programme on Improving Livelihoods of Small Farmers and Rural Women through Livelihoods of Small Farmers and Rural Women through Value-added Processing and Export of Cashmere, Wool and Mohair. Final Technical Report.

IFAD and ICRAF. 2018. Climate-smart, Tree-based, Co-investment in Adaptation and Mitigation in Asia (Smart Tree-Invest). Grant results sheet.

IFAD and IDS. 2015. Brokering Development: Enabling Factors for Public-Private-Producer Partnerships in Agricultural Value Chains. Summary of Indonesia case study.

IFAD and World Bank. 2019. Aide Memoire, Eighth Joint Implementation Support Mission.

IFAD and World Bank. 2019. Pastoral Development in Ethiopia: Trends and the Way Forward.

IFAD, European Union and Swiss Agency for Development and Cooperation. 2016. Asia-Pacific Farmers' Forum. IFAD's Medium-term Cooperation Programme with Farmers' Organizations Phase Two (MTCP2).

IFAD, Government of the Netherlands and Government of Bangladesh. 2018. Char Development and Settlement Project Phase IV Bangladesh. Technical Report N°20, Project Completion Report.

IFAD, International Network for Family Poultry Development and FAO. 2012. Development of Value Chain: An Effective Way of Profitable Duck Farming in Haor Areas of Bangladesh. Good Practices for Family Poultry Production.

IFAD, PKSF and PROCASUR. 2010. Crab Culture Value Chain Development under FEDEC Project The Case of Crab Culture in Satkhira, Bangladesh.

Instituto Nacional de Economía Popular y Solidaria Ecuador. 2014. Proyecto de Desarrollo del Corredor Central. Informe Final del Proyecto.

Inter-American Development Bank. 2003. Poverty Reduction and Promotion of Social Equity.

_____. 2010. Institutional Strategy.

_____. 2015. Update to the Institutional Strategy 2010-2020.

International Food Policy Research Institute. 2016. Policies for accelerating growth in agriculture and agribusiness in Malawi: Background paper for the 2016 Malawi Country Economic Memorandum.

_____. 2019. Bangladesh ASTI Country Brief.

Kyrgyz Republic. 2013. National Strategy for Sustainable Development 2013 – 2017. Bishkek: Kyrgyz Republic.

_____. 2017. National Agricultural Development Programme 2017 – 2020. Bishkek: Kyrgyz Republic.

_____. 2018a. National Strategy for Sustainable Development 2018 – 2040. Bishkek: Kyrgyz Republic.

_____. 2018b. The Development Program of the Kyrgyz Republic for the period 2018 – 2022. Bishkek: Kyrgyz Republic.

LGED. 2016. Participatory Small-Scale Water Resources Sector Project. Impact Evaluation Study for Benefit Monitoring and Evaluation.

Malawi Government. 2018. National Agricultural Investment Plan (NAIP): Prioritised and Coordinated Agricultural Transformation Plan for Malawi: FY 2017/18-2022/23.

Massler, Barbara, 2012. 'Scaling Up in Agriculture, Rural Development and Nutrition. Empowering Local Communities in the Highlands of Peru'. 2020 Vision for Food, Agriculture and the Environment.

Massler, Barbara. 2012. Scaling Up of IFAD Programs in Peru. Background Paper, IFAD Institutional Scaling Up Review, Phase 2.

Ministerio de Agricultura, Ganaderia Ecuador. 2018. Informe de Terminación del Proyecto. Proyecto para el Desarrollo Territorial del Corredor entre Ibarra y San Lorenzo y Programa para el Buen Vivir en Territorios Rurales.

Ministerio de Ganadería, Agricultura y Pesca Uruguay. 2011. Proyecto Uruguay Rural. Informe de Cierre. Volumen I, II y III.

Ministry of Agriculture, Irrigation and Water Development. 2016. Malawi National Agriculture Policy.

Ministry of Federal Affairs, Federal Democratic Republic of Ethiopia.2008. Implementation Completion Report (Draft).

Ministry of Peace, Federal Democratic Republic of Ethiopia. 2019. 5-Year Consolidated Performance Report.

Nikola M. Trendov, Samuel Varas, and Meng Zeng. 2019. Digital Technologies in Agriculture and Rural Areas, Briefing Paper.

OCDE. 2019. Répartition Géographique Des Ressources Financières Allouées Aux Pays En Développement 2019.

Philippines Statistics Authority. 2018. Performance of Philippine Agriculture, October to December 2018.

Rashid S, Minot N and Lemma S. 2019. Does a "Blue Revolution" help the poor? Evidence from Bangladesh.

Romero, Guiselle & Micaela Reátegui. 2019. Gobiernos locales rurales: acciones que pueden realizar para promover el desarrollo de los jóvenes, con énfasis en su inclusión económica.

UN Environment (2018). TEEB for Agriculture & Food: Scientific and Economic Foundations. Geneva: UN Environment.

UNDP. 2018. Human Development Indices and Indicators.

_____. 2019. United Nations Development Programme. Human Development Reports 2018.

WEF. 2019. The Global Gender Gap Report 2018.

World Bank and CIAT. 2016. Climate-Smart Agriculture in Moldova. CSA Country Profiles for Africa, Asia, Europe and Latin America and the Caribbean Serie.

World Bank. 2005. Irrigation, Rural Livelihoods and Agricultural Development Project IRLADP) Project Appraisal Document Report No. 33957-MW.

_____. 2008. Kyrgyz Republic: Agricultural Investments and Services Project. Project Appraisal Document.

_____. 2008. PCDP-II Project Appraisal Document.

_____. 2012. Agricultural Innovation Systems: an investment sourcebook. Washington DC: The World Bank.

_____. 2013. Corporate Procurement Policy Summary. Washington DC: The World Bank.

_____.2013. PCDP-III Project Appraisal Document.

_____. 2014. Kyrgyz Republic: Agricultural Investments and Services Project. Implementation Completion and Results Report.

_____. 2015. Implementation Completion and Results Report. Revitalizing the Sudan Gum Arabic Production and Marketing Project.

_____. 2015a. National Agricultural Technology Program - Phase II Project (NATP-II). PAD1146, Project appraisal document.

_____. 2015b. National Agricultural Technology Project in support of the first phase of the National Agricultural Technology Program. ICR00003351, Implementation, completion and results report.

_____. 2016. Project Performance Assessment Report, Phases I and II.

World Bank. 2016. Structural Transformation of Moldovan Smallholder Agriculture: Implications for Poverty Reduction and Shared Prosperity. Moldova Poverty Assessment 2016.

_____. 2018. Country Engagement. Washington DC: The World Bank.

_____. 2018. Malawi Systematic Country Diagnostic: Breaking the Cycle of Low Growth and Slow Poverty Reduction.

_____. 2019. Project Appraisal Document. Lowlands Livelihood Resilience Project.

World Food Programme. 2014. WFP Corporate Partner Strategy (2014-2017).

_____. 2017. WFP Strategic Plan for 2017-2021.