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FAO INNOVATION SURVEY

Synthesis of results



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EXECUTIVE SUMMARY

The Office of the Chief Scientist is leading the development of FAO's first ever Science and Innovation Strategy, to give more focused direction to its work on science and innovation and help guide the Organization's strategic choices. Innovation calls for culture change and strengthening inclusive planning processes. The FAO Innovation Survey responded to this call. The survey was carried out to understand the extent of knowledge and expertise on innovation among staff at a critical turning point in the Organization's approach to innovation as well as to identify where improvements might be made to ensure that through innovation FAO is able to exert a positive impact on agrifood systems in the future. The focus of this report is innovation (rather than science), a broad concept that can be interpreted in different ways.

Interviews on the status and future of innovation in FAO were conducted with Core Leadership and Regional ADGs. Subsequently, through the Office of the Chief Scientist, an online questionnaire comprising 34 questions, in all FAO official languages, on innovation was made available to all FAO staff.

The main issues covered by the survey included:

1. *What is innovation?*
2. *Why focus on innovation?*
3. *Innovation for sustainable agrifood systems.*
4. *FAO as an innovative organization.*
5. *Future priorities.*

This report represents an analysis and discussion of the results of those investigations. A total of 3 390 responses to the online questionnaire were received, representing a response rate of about 30 percent. There were few differences in response associated with gender and although there were regional differences in response, particularly in comparisons made between headquarters and the Regions, they did not detract from the conclusions reached.

Detailed responses were given during the interviews and in answering the questionnaire, but the main findings were that:

- Innovations should solve problems experienced by the most vulnerable communities.
- Innovations should be situation specific.
- Innovating involves taking risks.
- Views were evenly split on the question of whether innovations are always beneficial, indicating a need to develop a more shared understanding.
- Innovation in sustainable management of natural resources should be a priority.
- To move forward successfully with innovation, FAO needs to solve problems of compartmentalization and fragmentation, referred to as a 'silo mentality'.
- Uptake or scaling of innovations represents a major challenge.
- Science and technology are important components of innovation, but FAO cannot address them optimally by itself.
- Partnerships are essential to achieving the Organization's goals. Partnerships with the research community and producers' organizations are key. The private sector is, in many

instances, able to deliver innovations but partnerships with the private sector should not compromise FAO's position as a neutral platform/convener.

- FAO can work within its mandate to facilitate and advocate for innovations and make contributions with its normative and policy work.
- Trade-offs, particularly in terms of production increases in agrifood systems versus maintenance of the natural resource base, need to be investigated carefully.

INTRODUCTION

The FAO Strategic Framework 2022-31 prioritizes building an agile organization that harnesses expertise throughout the Organization. Innovation is one of the four accelerators in FAO's Strategic Framework and is recognized as being key to increasing the effectiveness of FAO's programmes. Through the newly created Office of the Chief Scientist, FAO intends to investigate and strengthen innovation in agrifood systems. This will include influencing the mindset of FAO staff throughout the Organization with a view to encouraging and supporting innovation in all their work and activities. The focus on innovation will be heavily reliant on partnerships with a range of actors from outside the Organization but will also require increased cooperation and communication among FAO staff. FAO is also developing a Science and Innovation Strategy to give more focused direction to its work in these areas and help guide the Organization in its strategic choices.

Given that the general understanding of the term innovation differs considerably among people, a shared understanding of the concept among FAO staff and partners represents an essential starting point in the process of transforming agrifood systems such that they become more efficient, more inclusive, more resilient and more sustainable. Only then will the required production increases be realized and food security for the world's most vulnerable communities be increased.

To provide the necessary groundwork for promoting and developing innovation in FAO, the opinions of all FAO staff were canvassed on some of the essential aspects of innovation. Core Leadership and Regional ADGs were interviewed at length on a range of important issues related to innovation and FAO's capacity to pilot new approaches and technologies, scale-up impacts through investment and provide an enabling environment through provision of policy advice. Subsequently, a questionnaire asking for similar information was designed and made available online to all FAO staff.

This report represents an analysis of all the data and information gathered during the interviews and from the responses to the questionnaire. It also provides conclusions from this work that should help FAO move forward in its efforts to advance innovation and ultimately enhance the resilience and sustainability of agrifood systems.

The working definition of innovation was suggested to be *doing something differently than you did before*.

METHODS

The interviews

Consolidated bilateral interviews were held with FAO Core Leadership and Regional ADGs (eleven individuals in total). The interviewees answered several questions under a range of broad headings on innovation:

1. *What do you think Members expect from FAO with regard to innovation?*
2. *How can FAO make sure that innovations work for sustainability and inclusiveness, as well as competitiveness and economic growth?*
3. *Where does FAO need to strengthen its work on innovation: Piloting new approaches and technologies (innovations); scaling up (investments); and providing an enabling environment (policy advice)?*
4. *Some innovations are controversial. What do you think FAO's role should be in navigating controversial issues in support of its Members?*
5. *What in your view should be the function of the Chief Scientist and the Office of Innovation to add value to the work of the Organization?*
6. *What approach do you think FAO should take to secure resources for its work on innovation?*

The questionnaire

An online questionnaire (see Appendix 1), comprising 34 questions, produced in the six official languages of FAO, was made available to all 13 000 FAO staff members, including professional and senior staff, general service staff, consultants and volunteers/interns. Questions on innovation were asked under five main headings (provided in the Results and Analysis section) after gathering some background information on the respondent in terms of unit, grade, gender and years working for the Organization.

Disaggregated data were analysed to probe regional differences in response to questions and a similar approach was used to highlight any differences related to gender. These are mentioned in the text only where considered important and where an explanation can be given for differences. Comparisons were also made between responses from headquarters' staff and staff from the Regions to establish if there were significant differences in understanding and priorities. Again, these are referred to only where considered relevant.

RESULTS AND ANALYSIS

The main points arising from the responses to the questionnaire are presented and discussed under the headings provided in the questionnaire. The principal results from the interviews with Core Leadership and Regional ADGs and are given separately. The implications for FAO arising from the interviews and responses to the questionnaire are detailed in the Conclusions.

THE INTERVIEWS WITH CORE LEADERSHIP AND REGIONAL ADGs

Responses of Core Leadership and Regional ADGs converged on many questions posed during the interviews. It was emphasized that FAO should build on what it is able to do

based on its mandate and expertise, considering that FAO operates in a competitive environment, there being numerous other actors that can provide better technical support to countries and at a lower cost than can FAO. It was suggested that FAO was not a research and development organization and had to partner with those that were technical innovators, acting as a magnet to attract technologies, while focussing on policies and processes in line with its mandate as a neutral platform and convener. Not itself being a technological innovator would not, however, impede FAO from facilitating and leading in the application of innovations. There was wide agreement on FAO's role as a neutral platform for discussing scientific issues and enabling Members to make informed decisions. However, the Organization would have to avoid conflicts of interest and thus would have to be particularly careful in allying itself with private sector organizations, which might have short-term objectives not in alignment with those of FAO. Moreover, it would have to be appreciated that innovation should be directed at poorer communities, the wealthier ones, in many instances, being adequately catered for by private interests. There was wide agreement that scaling was a very high priority for FAO. The considerable challenges that FAO faces in scaling innovative solutions were widely emphasized.

It was pointed out that each of the Regions comprises an array of very diverse countries with heterogeneous needs and priorities. Although all countries and Members expect FAO to innovate in how it conducts its own work, there were regional differences in attitudes to innovation and identification of priority areas. For instance, it was suggested that there is relatively greater interest in innovation in Latin America than elsewhere. It was also pointed out that in some countries innovations in productivity will be prioritized over those directed at environmental protection. A unifying factor is, however, that innovations must represent solutions to current and future problems. The diverse requirements of countries will necessitate that to satisfy Members' interests in the governance of natural resources, bridges must be built between those countries that demand specific innovations and those that are able to supply them. FAO is well positioned to promote mechanisms to support such innovation generation and transfer through its work on policy development in partnership with national ministries and organizations of higher education.

It was stressed that innovation must link with the Strategic Framework of FAO and the SDGs, ensuring integration of social, economic and environmental objectives, and that it must be embedded in the Organization and not be addressed as a separate issue. It was recognized that there were instances of a 'silo mentality' and compartmentalization in FAO that would have to be overcome for innovation to flourish. This would likely require mechanisms to be introduced to support innovation as a process and to ensure FAO staff are able to work together as a single team, without undue fear of failure. It was suggested that a working definition of innovation was necessary for the Organization to move forward as a single, united entity.

THE RESPONSES TO THE QUESTIONNAIRE

Response rates

The number of responses to the online questionnaire totalled 3 990, representing a response rate of 30.3 percent.

A breakdown of responses revealed that there was no significant gender divide. In terms of absolute numbers, responses from consultants represented 52 percent of the total, senior and professional staff 26 percent, and general service staff 20 percent, with volunteers and interns contributing 2 percent of the responses. These figures represent 80 percent of director level or above, 50 percent of professional level, 65 percent of general service staff, 22 percent of consultants and 9 percent of volunteers and interns. Most respondents (34 percent) had worked in FAO for 2–5 years and the least (8 percent) for 20 or more years. In terms of regional feedback, headquarters' staff were by far the most responsive, their responses representing 33 percent of the total. It might be expected from an international organization with a global mandate that the differences between headquarters and the regional, country and field operations are sizeable given the distances and varying strengths of linkage. Without making too much of these data, they do point towards FAO needing to communicate and cooperate more to break down any compartmentalization that exists.

The qualitative responses to many questions included in the questionnaire indicated differences according to location, often between headquarters and the Regions. While differences among Regions likely reflect differences in circumstances and priorities, headquarters is largely an administrative centre and it might not be unexpected that the views of its staff would differ from those of offices nearer to the sites of implementation of the work of the Organization. However, where there were apparent differences in response between headquarters and the Regions, the ranking of responses to questions frequently remained similar even if the absolute values differed.

MAIN ISSUES COVERED BY THE SURVEY

1. *What is innovation?* There are many different interpretations of, and approaches to, innovation – including within FAO. The survey explored different aspects of the concept of innovation as a stepping-stone to fostering a shared understanding of the term.
2. *Why focus on innovation?* This section sought to understand the views of staff on why innovation is important for FAO, and what role FAO should play in the landscape of innovation in agrifood systems.
3. *Innovation for sustainable agrifood systems.* It is critical for FAO to decide where it should focus its innovation efforts (including issues such as relevant types of innovation, managing trade-offs arising from the impacts of innovations, etc.).
4. *FAO as an innovative organization.* Innovation in culture, mindset and ways of working is crucial to delivering FAO's reinvented business model and bringing innovation to FAO's programmes. This could entail innovation in workflow, communication, human resources, etc. The survey asked about FAO's strengths and weaknesses in terms of making FAO more innovative as an organization.

5. *Future priorities.* Building on the previous sections, the survey closed with questions about priorities for FAO's future work on innovation, principles that should provide a foundation for its innovation work, emerging issues – particularly those raised by new innovations, and the partnerships that would be needed for the Organization to reach its objectives.

1. *What is innovation?*

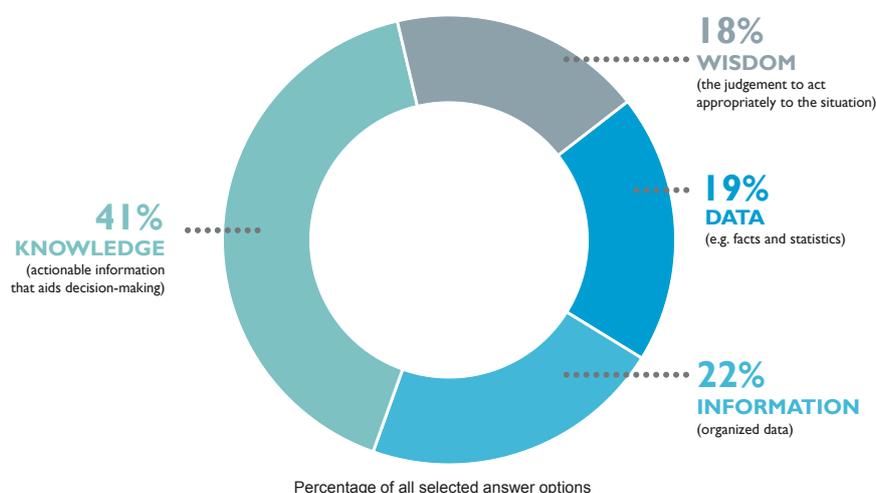
Eleven questions attempted to explore different aspects of the concept of innovation. There was consensus that innovation is a process (64 percent) and not a product (5 percent), although some considered it to be an idea (21 percent) or an invention (11 percent). A large majority of respondents thought that innovation brought progress (59 percent) and female respondents were overall more positive in this regard than male respondents. The importance of science was emphasized by 32 percent of staff, indicating that innovation was associated with the words 'science and technology'. The importance of the farming community was also considered to be important – 22 percent of answers cited 'local knowledge and know-how' as being words associated with innovation and 12 percent identified family farmers as being the most important agricultural innovators. Only 4 percent of respondents believed that financial incentives drove innovation.

There was an even split on whether innovation is always beneficial, but it was agreed (89 percent) that innovations that worked well in one place would not necessarily work well in another – innovation must be new in the context of introduction. This again points to it being necessary to identify and promote innovations that are largely context specific. However, this does not imply that FAO's own systems of operation, on a global scale, would not benefit from some general innovations. Seventy-six percent of respondents thought that innovation involves both small/incremental steps and radical/disruptive changes, neither of which are without inherent risk of failure. It was suggested during the interviews that FAO should be less risk averse than is currently the case.

Regarding the types of knowledge most relevant to agrifood systems, the responses are given in Figure 1, where actionable information that aids decision-making was deemed to be most important. This is an area where FAO should have an advantage over many other organizations because one of its main roles is in information and data collation. It is a knowledge-based organization.

Figure 1.

Responses to Question 13: Learning is a key component of innovation. Select the types of knowledge that are most relevant to innovation for agrifood systems.



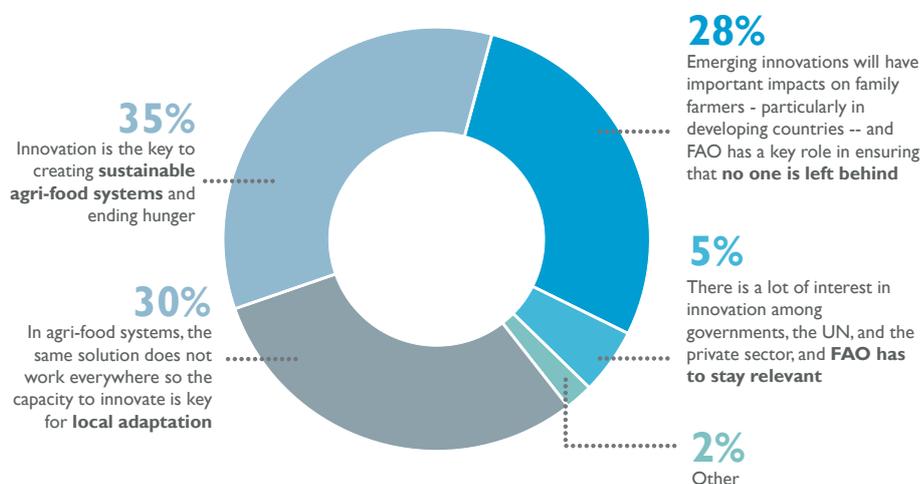
The importance of codified, technical and scientific knowledge was rated highly (average 80 percent) by staff throughout the Regions and among all grades. The acknowledgment of the importance of science and technology indicates that FAO will need partners if it is to harness innovations. There was no gender divide regarding the importance of scientific knowledge. With respect to the importance of informal processes of learning and experience-based know-how, the situation was identical.

2. Why focus on innovation?

Two questions tackled the issue of FAO's role in innovation. The question of why innovation is important to FAO elicited similar responses from staff with respect to it creating sustainable agrifood systems, the importance of local adaptation and ensuring that no one is left behind. This detailed in Figure 2.

Figure 2.

Responses to Question 16: Why is innovation important for FAO?



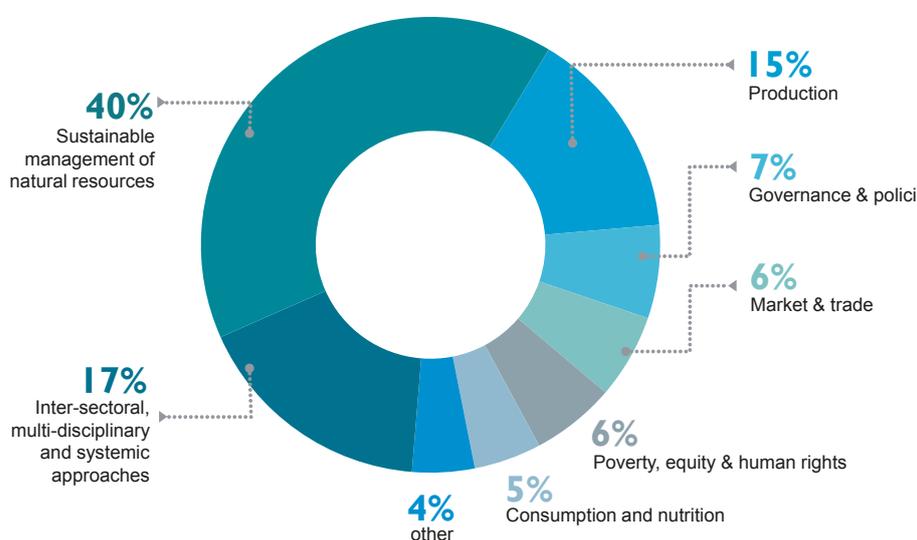
The desired role of FAO in innovation was largely seen to be as being one of a matchmaker, linking countries that develop innovations with those that need them (49 percent of respondents). Fewer thought FAO should be a laboratory that develops innovations (28 percent) and fewer still believed FAO should be a midwife for innovations created by other organizations (17 percent). Use of these metaphors may have been confusing for some of the respondents, but it is evident that a minority thought that FAO should generate innovations itself.

3. Innovation for sustainable agrifood systems

Five questions addressed issues of where in agrifood systems it is most important to innovate. The breakdown of responses is presented in Figure 3.

Figure 3.

Responses to Question 18: In which area of agrifood systems is it most necessary to do things differently (i.e. to innovate)?



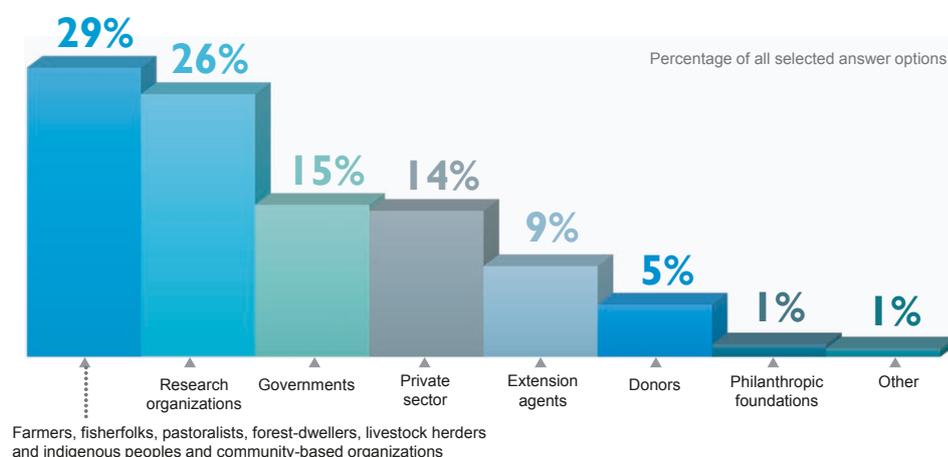
Forty percent of respondents identified sustainable management of natural resources to be the most deserving area of attention in terms of innovation. This echoes some of the comments made during the interviews of senior staff and is obviously foremost in the minds of all staff in the Organization. However, there will inevitably be trade-offs between sustainable management and increased production that will have to be balanced. The second most necessary interventions were determined to be in intersectoral, multidisciplinary and systematic approaches (17 percent), which, as with responses to other questions, reiterates the need for FAO staff and their partners to work together as teams, making full use of all the knowledge and expertise available. Although 15 percent of respondents felt that production required attention, relatively few respondents thought that governance and policies, markets and trade, poverty equity and human rights, and consumption and nutrition merited support. This is, in a way, surprising given that FAO is very active in several of these fields and has developed considerable expertise in them over a long period of time.

When asked what types of innovation were most relevant for building sustainable agrifood systems, as with previous similar responses, respondents opted for technological ones in the main (30 percent), with social and policy innovations both being selected by about 20 percent

of respondents. Institutional (16 percent) and financial innovations (12 percent) were the least favoured options. Again, this points to the need for FAO to form strong partnerships outside the Organization to be able to harness the benefits of technological advances made in agrifood systems.

Regarding the actors playing the most significant roles in innovation in agrifood systems, it was the local communities and community-based organizations that attracted most support, as shown in Figure 4.

Figure 4.
Responses to Question 20: Which actors play the most important role in innovation in agrifood systems?

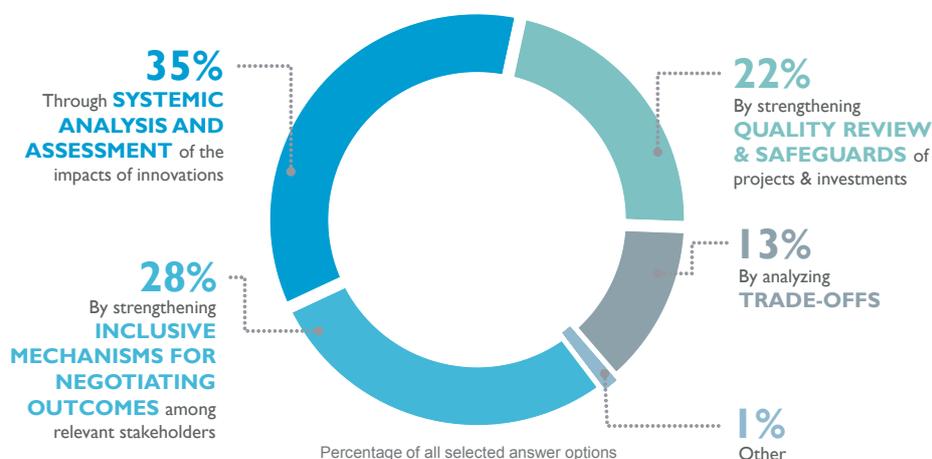


Governments and the private sector were diagnosed as playing relatively minor roles (15 and 14 percent respectively). However, in terms of uptake, it would be the farmers, fisherfolk, pastoralists, forest-dwellers, livestock herders, indigenous peoples and community-based organizations that would be most deserving of, and would ideally stand to benefit most from, innovations. Somewhat surprisingly, given the influence and financial resources of some foundations, donors were only identified by 5 percent of the respondents as playing a significant role in innovation in agrifood systems and philanthropic organizations received only one percent of responses.

When answering a question about how FAO should ensure that innovation is beneficial for the economic, environmental and social dimensions of sustainable development, and that no one is left behind, respondents favoured systemic analysis and assessment of the impacts of innovation (35 percent) over other choices. This is detailed in Figure 5.

Figure 5.

Responses to Question 21: How should FAO ensure that innovation is beneficial for the economic, environmental and social dimensions of sustainable development, and that no one is left behind?



Trade-offs received least support (13 percent). This subject was discussed during the interviews with senior staff, where there were several different viewpoints expressed. It was considered that FAO was unable to identify and quantify trade-offs when it operated in a compartmentalized fashion. The trade-off between increased production and environmental protection was particularly sensitive because increased production was necessary, but it could come about through damage to the natural resource base. Moreover, it would be ethically questionable to deny small-scale producers access to modern technologies because they were not in line with the green agenda. Furthermore, innovations promoting agricultural modernization can have adverse effects on food security. Addressing some of the apparent paradoxes associated with trade-offs will be difficult.

FAO staff were asked an open question on their views on the most important innovation that the Organization had ever developed or supported, and what had made it successful. This question elicited over 3 400 responses. Many respondents appeared unable to name a single innovation, but of those that were able, the range of answers was considerable. Many cited FAO's global data systems, flagship reports, early warning systems, management of various platforms and other very general activities. Others identified very specific activities and projects, many of which were local and reflected the notion already expressed that many successful innovations were likely to be location and context specific. One such project was a rainwater collection initiative in Monte Plata, in the Dominican Republic. The importance of digital technologies and e-agriculture was highlighted because they increased the capacity of poorer farmers to access important information. Forest monitoring methodology and work on agricultural marketing were also suggested to represent good innovations. The Codex Alimentarius Commission was also a very popular choice. Such was the diversity of views that it was difficult to identify and easily explain FAO's most successful innovations. However, numerous respondents suggested that Farmer Field Schools had been innovative and successful. The reasons given for their success were many and varied but essentially centred on the simplicity of the concept, adaptability, the participatory approach, local ownership and being able to incorporate elements from, for example, business training and other important agriculture-related themes.

The most apparent conclusion that could be reached from the responses to this question was that there was an enormous diversity of opinion, much of it case-specific, based on individual problems and solutions.

4. *FAO as an innovative organization*

Five questions explored various dimensions of FAO as an innovative organization. When asked how they would rate FAO's capacity to innovate, 44 percent considered it to be medium and 43 percent considered it to be high. There was range in response, from 50 percent at headquarters to 68 percent from the Regional Office for the Near East and North Africa. Nonetheless, this optimistic response does not explain how FAO might live up to these expectations when science and technology were identified as underpinning innovation. This information must be considered with the acknowledgment that to move towards making an impact on agrifood systems with innovations will require strong partnerships to be developed within FAO and between FAO and external bodies.

When asked about organizational factors that had motivated innovation among FAO staff, the respondents suggested people (52 percent), knowledge (25 percent) and ways of working (16 percent) to be important and rules and processes less important (7 percent). When asked what would help FAO become a more innovative organization, the majority (27 percent) opted for better coordination and collaboration across the Organization, in keeping with previous comments from questionnaire respondents and senior staff interviewed in person. Nearly as many (25 percent) opted for creating safe spaces for staff to innovate and experiment, but this was not elaborated on, although appears to have been a suggestion for a time allocation in which to work freely. Perhaps it was a call for establishment of think-tanks for various priority issues, but without additional explanation it is difficult to know what this would mean in practical terms. More science was only selected by 12 percent of respondents, which presumably is a suggestion that science should be left to scientists in organizations other than FAO with whom FAO might form partnerships (which were called for by 17 percent of respondents).

In terms of challenges to strengthening coordination and collaboration across the Organization, equal numbers (27 percent) suggested competition for resources and lack of incentives. Large numbers also cited lack of trust (19 percent) and lack of capacity (17 percent) in the Organization. These numbers suggest that improvements might be made to recruitment and staff management. Regarding gaps in FAO's expertise and capacities, again the majority (31 percent) cited coordination and overcoming silos and compartmentalization. About 20 percent of respondents suggested that documenting and sharing knowledge, project cycles and management and human resources represented gaps. These suggestions also point towards possible improvements being necessary in human resource recruitment and administration for FAO to become more innovative.

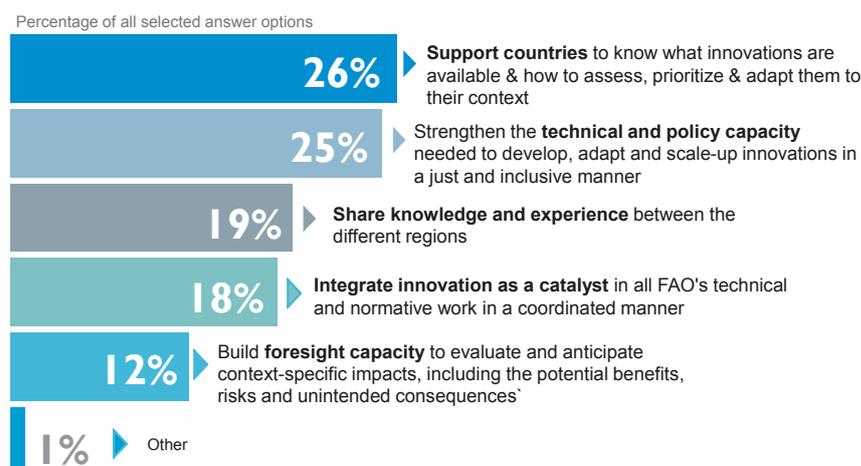
5. *FAO's future priorities*

The survey closed with five questions about FAO's future priorities regarding innovation. The most appropriate objectives for FAO's work on innovation are detailed in Figure 6, where respondents suggested that it was necessary to strengthen the technical and policy capacity needed to develop, adapt and scale-up innovations in a just and inclusive manner, and support countries to know what innovations are available and how to assess, prioritize

and adapt them to their context. These findings are in line with those previously discussed. The interviews with senior staff provided information on scaling up, suggesting that FAO theoretically had a comparative advantage, but until now lacked a strategy for doing it and its capacity for undertaking it would need to be strengthened. An example was provided of FAO's current lack of capacity and expertise to support those interested in digital agriculture – experts in very focussed areas are needed in the Organization. It was suggested in the interviews that expertise might be sought through partnership with development organizations and agencies, or private business.

Figure 6.

Responses to Question 28: Select the most appropriate objectives for FAO's work on innovation.

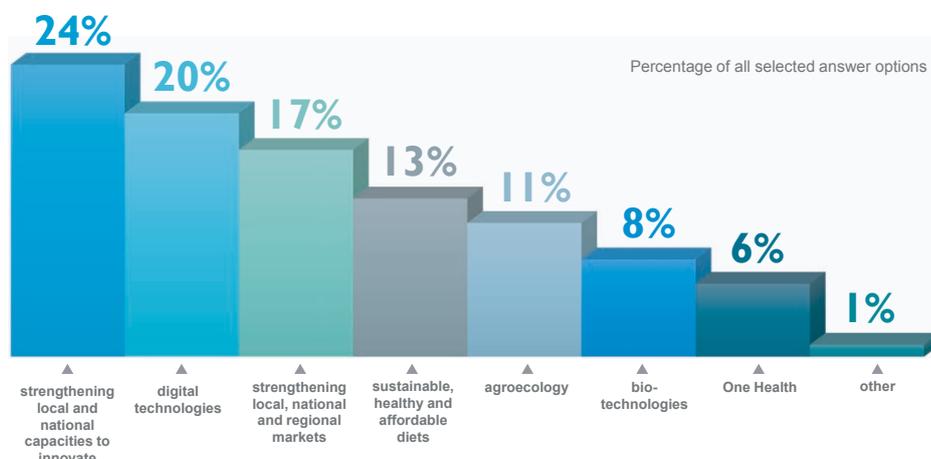


When asked about the principles that should provide the foundation for FAO's approach to innovation, a majority of respondents (30 percent) opted for innovations that were accessible to small-scale producers and which were also environmentally sustainable. Support for a country-led, demand-driven approach to innovation was suggested to be a basic principle in 21 percent of cases and strengthening partnerships with the private sector was opted for by 16 percent of respondents. Transparency and accountability, closing yield gaps and delivering public goods were less important principles for providing a foundation for the Organization's approach to innovation according to staff responses. This question addressed FAO's priorities for future work, where it has already been established that trade-offs between increases in productivity and protection of the natural resource base will be important considerations in application of any innovations in a field setting, and the importance of a country-driven approach to innovation based on linking those countries that are able to supply innovations and those that demand them. The case of partnerships with the private sector is acknowledged to be sensitive in that FAO must maintain its position as a neutral platform/convener and must steer clear of conflicts of interest that could easily taint its reputation.

"Best bet" innovations that would benefit all regions are illustrated in Figure 7, where 24 percent of respondents opted for strengthening local and national capacities to innovate. Digital technologies attracted 20 percent of responses but biotechnologies only 8 percent.

Figure 7.

Responses to Question 30: Assuming that there will be national and regional variation in priority innovations, but also that some innovations will be relevant to all regions, what do you think are the innovation “best bets” that would be relevant to all regions?

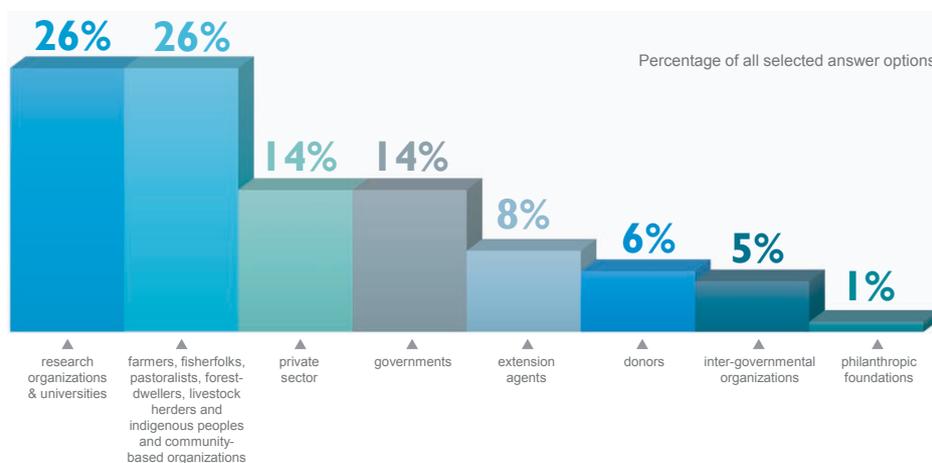


The key emerging issues that FAO will need to confront include access to innovation (25 percent), impact of new technologies on the role of public and private sectors (20 percent), exacerbating inequality (19 percent), data ownership and control (17 percent) and the need for regulations regarding new technologies (17 percent). While these issues will become important in FAO’s work in the future, the list is not comprehensive, and many additional important emerging issues have been discussed already in relation to other questions posed in the questionnaire and during the interviews with senior staff members. The recognition that access to technologies is important reaffirms the need for FAO to embrace partnerships with external expert organizations.

The final question asked of FAO staff was about which organizations it must prioritize in its partnerships in terms of innovation. This question mirrored a previous question on which actors play the most important role in innovation in agrifood systems. The responses to the questions matched approximately, as indicated in Figure 8, where equal priority (26 percent) was afforded to farmers, fisherfolk, pastoralists, forest-dwellers, livestock herders, indigenous peoples and community-based organizations, and research organizations and universities.

Figure 8.

Responses to Question 32: Which organizations/actors must FAO prioritize in its partnerships in terms of innovation?



The responses to this final question reemphasized the need for FAO to forge strong contacts with the prospective clients for innovations and those from outside the Organization that might supply them. As with the previous question concerning major actors, private sector partnerships were favoured over those with donors and philanthropic organizations. This could reflect opinions that donors and philanthropic organizations are at least as likely as the private sector to have objectives that are not necessarily in line with FAO's priorities in addressing the needs of the poorest sections of communities.

CONCLUSIONS

Several major conclusions can be reached from the responses of senior staff to questions posed during interviews and those of staff responding to the online questionnaire. The responses of both groups were largely in accordance with each other.

1. *For FAO to become better able to innovate itself and take on board innovations developed from outside the Organization, and use and promote them, coordination and collaboration within the Organization need to be improved and strengthened.*
2. *Issues of compartmentalization and fragmentation must be addressed and the ‘silo mentality’ that exists in some parts must be broken down in the interests of improving efficacy and efficiency of operations. This will inevitably reinforce the sense of affiliation among FAO staff and will promote staff morale.*
3. *FAO needs to form strong partnerships to become a more innovative organization. These will, to a large part, be in the field of science and technology. Such partners might not only be sources of scientific and technological innovations, but they might also assist in piloting projects that would allow FAO to use its expertise and capacity in normative and policy issues to maximum effect.*
4. *Partnerships with the private sector would have to be established with care so as not to weaken the role of FAO as a neutral convener and potential conflicts of interest would have to be fully appraised.*
5. *Staff recruitment and human resource management in FAO require attention and possibly revision to ensure that the Organization is staffed and managed to be able to recognize, adapt and promote innovations that will impact positively on agrifood systems.*
6. *Issues surrounding trade-offs need to be carefully reviewed with a view to the differing needs and capacities of FAO’s clients at regional, national and community levels, with particular respect to the management of natural resources versus the needs for production increases. National demands for innovative solutions to problems and national capacities to deliver such solutions will have to be explored.*
7. *FAO has designed and implemented numerous very successful innovations. These could usefully be listed and characterized with a view to establishing the features that made them successful. These could serve as useful pointers for future work in the Organization.*

NEXT STEPS

Following the successful canvassing of FAO staff on key aspects of innovation, it would be useful to probe the most important suggestions and observations in greater detail. Partnerships and trade-offs represent issues that require more discussion for appropriate strategies on innovation to be developed. The contribution of all FAO staff to this initial investigation into innovation is appreciated and further opportunities to strengthen the sense of affiliation in the Organization should be taken. There were many useful free-text responses to important questions asked in the online questionnaire that could not be included in this report, but which indicate that FAO staff have some good ideas on partnerships and trade-offs, in addition to other aspects of innovation. Those could be explored in greater detail to help decision-making and policy formulation in the future.

APPENDIX I

The electronic questionnaire

FAO Innovation Survey

FAO INNOVATION SURVEY

Introduction

FAO is gearing up for innovation in agrifood systems, ways of working, partnerships and mindset. The Chief Scientist, Ismahane Elouafi, would like to invite you to be part of that process. Innovation is relevant to every single person in FAO. Without innovation in how FAO works, it will be difficult to bring innovation to our programmes.

Please take a few moments to complete this survey, which will enhance understanding of innovation in FAO, as well as how innovation can be strengthened to support the transformation to more efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment, and a better life, leaving no one behind.

While there are many different approaches to innovation, it is important for FAO to develop a shared understanding of the concept, and this survey represents one step in that process. We therefore invite you to approach this survey with the following basic definition: *innovation is doing something differently than you did before.*

FAO Innovation Survey

Getting started

The survey has 6 parts:

1. What is innovation?
2. Why focus on innovation?
3. Innovation for sustainable agrifood systems
4. FAO as an innovative organization
5. FAO's future priorities
6. Final thoughts

There are 34 questions (mostly multiple choice and scoring questions) and we estimate that it will take you 15-20 minutes to complete the survey.

You can change your responses as many times as you want until you click **DONE** at the end of the questionnaire.

The results of the assessments will be analyzed by the Office of the Chief Scientist to enhance understanding of innovation in FAO, and how it can be strengthened.

To get started, please provide the following information about yourself (all fields required). The information below will be used to analyze the survey results, but all results will be anonymous.

1. Unit (acronym in FAO email address, e.g. LEGA, PSUR, OCB, FAOLON, FAONI)

2. Grade

Other (please specify)

3. Gender

4. How many years have you been working for FAO?

FAO Innovation Survey

What is innovation?

5. Do you usually think of innovation as (select one):

- a product
- a process
- an invention
- an idea
- other (please specify)

6. Which statement do you most strongly agree with? (select one)

- The more financial incentives you have, the more you innovate.
- The most successful innovations are based on science.
- Family farmers are the most important innovators in agriculture.
- Innovation brings progress.
- Innovation is risky and innovations must be introduced responsibly.

7. Which words do you associate with "innovation"? (select up to three options)

- science and technology
- local knowledge and know-how
- economic growth
- autonomy
- adaptation
- risk
- other (please specify)

8. Is innovation always beneficial?

- yes
- no

9. Does an innovation that works in one place, necessarily work in another?

- yes
- no

10. Innovation must be new:

- to the context where it is introduced
- in the world
- both

11. Innovation involves:

- radical/disruptive changes
- small or incremental changes
- both

12. A successful innovation has impact:

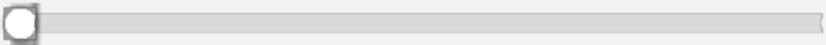
- on a very small scale
- on the whole of society
- both

13. Learning is a key component of innovation. Select the types of knowledge that are most relevant to innovation for agrifood systems. (select up to two options)

- Data (e.g. facts and statistics)
- Information (organized data)
- Knowledge (actionable information that aids decision-making)
- Wisdom (the judgement to act appropriately to the situation)

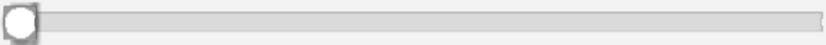
14. How important is codified, scientific and technical knowledge for sustainable agrifood systems?

Not at all important Average Extremely important



15. How important are informal processes of learning and experience based know-how for sustainable agrifood systems?

Not at all important Average Extremely important



FAO Innovation Survey

Why focus on innovation?

16. Why is innovation important for FAO? (choose one)

- Innovation is the key to creating sustainable agrifood systems and ending hunger.
- There is a lot of interest in innovation among governments, the UN, and the private sector, and FAO has to stay relevant.
- In agrifood systems, the same solution doesn't work everywhere so the capacity to innovate is key for local adaptation.
- Emerging innovations will have important impacts on family farmers -- particularly in developing countries -- and FAO has a key role in ensuring that no one is left behind.
- Other (please specify)

17. What metaphor best describes the role you would like to see FAO playing with regard to innovation: (choose one)

- FAO is a match-maker, linking countries that develop innovations with countries that need them.
- FAO is a midwife for innovations that are created by other actors.
- FAO is a lab where innovations are developed.
- Other (please specify)

FAO Innovation Survey

Innovation for sustainable agrifood systems

18. In which area of agrifood systems is it most necessary to do things differently (i.e. to innovate)? (select one option)

- production
- consumption and nutrition
- markets and trade
- sustainable management of natural resources (soil, water, biodiversity, climate)
- poverty, equity and human rights
- governance and policies
- inter-sectoral, multi-disciplinary and systemic approaches
- other (please specify)

19. What types of innovations are most relevant for building sustainable agrifood systems?

(select up to three options)

- social innovation
- institutional innovation
- technological innovation
- financial innovation
- policy innovation
- other (please specify)

20. Which actors play the most important role in innovation in agrifood systems? (select up to three options)

- research organizations and universities
- extension agents
- farmers, fisherfolks, pastoralists, forest-dwellers, livestock herders and indigenous peoples and community-based organizations
- private sector
- philanthropic foundations
- governments
- donors
- other (please specify)

21. How should FAO ensure that innovation is beneficial for the economic, environmental and social dimensions of sustainable development, and that no one is left behind? (choose more than one, if applicable)

- by analyzing trade-offs
- by strengthening quality review and safeguards of projects and investments
- through systemic analysis and assessment of the impacts of innovations
- by strengthening inclusive mechanisms for negotiating outcomes among relevant stakeholders
- other (please specify)

22. What is the most important innovation that FAO has ever developed or supported? What made it successful? (please explain)

FAO Innovation Survey

FAO as an innovative organization

23. How would you rate FAO's capacity to innovate?

low medium high

24. Thinking back over your career to a period when you and/or your team were particularly innovative, what organizational factors made the context ripe for innovation? (select one option)

- people (how people are motivated within an organizational setting to explore new ideas and experiment with new approaches)
- knowledge (issues related to the collection, analysis, sharing and communication of information, knowledge development and learning)
- ways of working (the way work is structured within and across the organization)
- rules and processes (including the legal/regulatory framework, budgeting, and approval processes)

25. What would help FAO be a more innovative organization? (select more than one, if applicable)

- more science
- better partnerships
- better coordination and collaboration across the organization
- creating safe spaces for staff to innovate and experiment
- accepting to fail sometimes
- other (please specify)

26. What challenges do you see in terms of strengthening coordination and collaboration across the organization? (select more than one, if applicable)

- lack of incentives
- lack of capacity
- competition for resources
- lack of trust
- other (please specify)

27. What gaps do you see in FAO's expertise and capacities? (select more than one option, if applicable)

- documenting and sharing knowledge
- coordination and overcoming silos and fragmentation
- human resources
- project cycles and management
- other (please specify)

FAO Innovation Survey

FAO's future priorities

28. Select the most appropriate objectives for FAO's work on innovation (select up to three options)

- Support countries to know what innovations are available and how to assess, prioritize and adapt them to their context
- Share knowledge and experience between the different regions
- Integrate innovation as a catalyst in all FAO's technical and normative work in a coordinated manner
- Build foresight capacity to evaluate and anticipate context-specific impacts, including the potential benefits, risks and unintended consequences
- Strengthen the technical and policy capacity needed to develop, adapt and scale-up innovations in a just and inclusive manner
- Other (please specify)

29. What principles should provide the foundation for FAO's approach to innovation? (select up to three options)

- support a country-led, demand-driven approach to innovation
- prioritize innovations that are accessible to smallholders and are environmentally sustainable
- prioritize innovations that close yield gaps
- focus on delivering public goods
- strengthen partnerships with the private sector
- ensure transparency and accountability
- other (please specify)

30. Assuming that there will be national and regional variation in priority innovations, but also that some innovations will be relevant to all regions, what do you think are the innovation "best bets" that would be relevant to all regions? (select up to three options)

- digital technologies (including Artificial Intelligence)
- biotechnologies
- strengthening local, national and regional markets
- sustainable, healthy and affordable diets
- agroecology
- One Health
- strengthening local and national capacities to innovate (e.g. through Agricultural Innovation Systems and Farmer Field Schools)
- other (please specify)

31. What are the key emerging issues that FAO will need to confront? (select multiple options, if applicable)

- access to innovations
- exacerbating inequality
- the need for regulations regarding new technologies
- data ownership and control
- impact of new technologies on the role of public and private sectors
- other (please specify)

32. Which organizations/actors must FAO prioritize in its partnerships in terms of innovation?

(select up to three options)

- research organizations and universities
- extension agents
- farmers, fisherfolks, pastoralists, forest-dwellers, livestock herders and indigenous peoples and community-based organizations
- private sector
- philanthropic foundations
- governments
- donors
- inter-governmental organizations
- other (please specify)

FAO Innovation Survey

Final thoughts

33. Any final thoughts? Do you have any suggestions or concerns? Please feel free to upload or share links to documents that you find particularly relevant and important.

34. File Upload (optional)

Choose File

Choose File

No file chosen

Thank you very much for your contribution!

