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Evaluation of the Information on Nutrition, Food Security and Resilience for Decision Making (INFORMED) Programme

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Abstract

The Information for Nutrition, Food Security and Resilience Decision Making (INFORMED) programme, implemented by FAO from 2015 to 2019, was designed to contribute to "increasing the resilience of livelihoods to threats and crises and contributing to the reduction of food insecurity and malnutrition".

The programme's increased focused on Early Warning for Early Action (EWEA) was very relevant to fill existing gaps with a comparative advantage for FAO in slow onset and food chain crises contexts. Promoting the use of pre-agreed plans and pre-identified anticipatory actions, the project effectively improved risk analysis and decision making, including through the Global Report on Food Crises, and increased access to appropriate financing instruments, while the EWEA country toolkit initial positive spinoffs remain to be built on.

Efforts to support resilience measurement and analyses by applying the resilience index measurement and analysis (RIMA) methodology are relevant given the significant investments in resilience programming and the continuing methodological gaps. However, although RIMA provides a basis for creating evidence on resilience investments, and FAO has been an important pioneer in resilience measurement, a wider system supporting resilience analysis is needed, based on a range of methodologies, responding to the information needs of decision-makers. Also, RIMA baseline lacks sufficient detail to allow articulating the feasibility of possible response options and have a practical impact on planning decisions; it has not demonstrated its added value over pre-existing food security, nutrition and risk indicators to help target interventions, and is not well adapted as an impact evaluation tool.

Assessing INFORMED results against its intention to support knowledge production and sharing, to promote the replication of good practices and circular learning, the evaluation questioned the choice of creating a new knowledge management platform versus adopting a collaborative approach building on similar initiatives' strengths. Poor strategic choices represented a fundamental constraint to reach intended objectives, such as, an insufficient understanding of users explaining the difficulty to trace the uptake and use of knowledge products. Nevertheless, the evaluation recognized the progressive investments in knowledge management and sizeable accomplishments of a relatively small team.

The evaluation suggests strengthening capacities for the production and dissemination of forecast, scenario-based early warning as a basis for early action; developing a corporate strategy for partnering to strengthen early warning system capacities at various levels; promoting the use of a toolkit of approaches and investing in a knowledge management function dedicated to capturing and disseminating lessons on the effectiveness of EWEA and resilience interventions.

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The evaluation benefited from the inputs of many other stakeholders, including government officers, farmers' organizations and the staff of other United Nations (UN) agencies, research centres and private sector. Their contributions were critical to the team's work and are deeply appreciated.

Acronyms and abbreviations

CILSS Permanent Interstate Committee for drought control in the Sahel

DfID Department for International Development

EMPRES Emergency Prevention System

EWEA Early Warning Early Action

FAO Food and Agriculture Organization of the United Nations

FSIN Food Security Information Network

GNAFCPP Global Network Against Food Crises Partnership Programme

GIEWS Global Information and Early Warning System on Food and Agriculture

GRFC Global Report on Food Crises

IASC Inter-Agency Standing Committee

IFRC International Federation of Red Cross and Red Crescent Societies

IGAD Intergovernmental Authority on Development

INFORMED Information for Nutrition Food Security and Resilience for Decision Making

IPC Integrated Food Security Phase Classification

KORE Knowledge Sharing Platform on Resilience

NGO Non-governmental organization

OCHA United Nations Office for the Coordination of Humanitarian Affairs

RIMA Resilience index measurement and analysis

SICA Sistema de la Integración Centroamericana

UNICEF United Nations Children's Emergency Fund

USAID United States Agency for International Development

WFP Word Food Programme

Executive summary

Introduction

- 1. This report presents the results of the final evaluation of the project 'Information on Nutrition, Food Security and Resilience for Decision Making' (INFORMED). The INFORMED programme was designed to contribute to "increasing the resilience of livelihoods to threats and crises and contributing to the reduction of food insecurity and malnutrition". It was intended to achieve this through the specific outcome of "improved availability of regular, timely and early warning information as well as evidence-based analysis regarding the food security, nutrition and resilience situation for decision-making".
- 2. The programme provided technical, analytical and capacity development support to institutions and decision makers including international, regional and national organizations, governments and institutions, and FAO country offices. The programme budget of approximately EUR 33.5 million was supported by a voluntary contribution from the European Union Directorate-General for International Cooperation and Development (DG DEVCO) of approximately EUR 21 million.
- 3. The evaluation examined the relevance and appropriateness, use, utility and sustainability of the INFORMED project. The scope of the evaluation included the entire period of implementation, from 2015 to 2019, and covered activities at global, regional and country levels. The evaluation focussed on Output 1 (analysis of food crisis situations) and Output 3 (measurement of resilience and knowledge sharing mechanisms). Output 2 on the Integrated Food Security Phase Classification (IPC) was recently evaluated separately.¹
- 4. This evaluation pursues the dual objectives of accountability and learning. The evaluation aimed at informing and refining under the new collaboration between the Food and Agriculture Organization of the United Nations (FAO) and the European Union in the Global Network Against Food Crises Partnership Programme (GNAFCPP). The principal users of the evaluation are the project donor European Union DEVCO and FAO.
- 5. Methods employed by the evaluation included a review of secondary information, semistructured interviews with project stakeholders, seven country case studies and two online surveys. Due to travel restrictions related to the COVID-19 pandemic, the interviews were conducted almost entirely by virtual means.

Main findings

6. The main findings of the evaluation are presented below, grouped by the main output areas.

Early Warning Early Action

7. Most of the activities for Programme Output 1 fell under the banner of Early Warning Early Action (EWEA), with additional activities oriented to enhancing data collection. Activities

¹ A final evaluation of the Global Strategic Programme (GSP) of the IPC was finalized in 2019 and therefore to avoid duplicating it, this evaluation rather examined the coherence and synergies between the IPC and other INFORMED Outputs. Annex XX of this report references the recommendations from the 2019 evaluation of this important component of INFORMED.

included the production of a global quarterly Early Warning Early Action report (QEWEAR) on food security and agriculture, support to countries to access FAO's Special Fund for Emergency and Rehabilitation Activities (SFERA) Early Action window, country level pilot programmes, developing an EWEA Country Toolkit and impact studies. The production of a Global Report on Food Crises (GRFC) was added from 2017.

- 8. The increasing focus on EWEA within INFORMED was found to be highly relevant given persistent gaps between early warning and timely action, and the mandate of FAO. Critically INFORMED went beyond improved risk analysis for decision makers, with attention to improving access to appropriate financing instruments and the definition of pre-agreed plans and pre-identified anticipatory actions.
- 9. In terms of EWEA, FAO was found to have a comparative advantage in focusing on slow onset crises and food chain crises. Other agencies provided a strong complementary focus on EWEA in relation to rapid onset hazards, while FAO corporate systems are less agile in responding to rapid onset crises, due to the inherent limitations of corporate systems. Other agencies also generally had the mandate and skills for conflict early warning, although FAO could do more to anticipate and respond to small-scale conflicts.² The FAO approach to EWEA was de facto limited by the realities of its resource constraints.
- 10. Improving the quality and availability of food and nutrition statistics remains a high priority for many stakeholders, but this was not prioritized during implementation and the reasons for this decision were not entirely clear to the evaluators.
- 11. The quarterly EWEA report was judged by stakeholders to be concise and well presented. The quarterly EWEA report supported advocacy and encouraged investments in EWEA, and served as an important coordination tool. However, given limitations of timeliness, the process of compiling the EWEA report, rather than the report itself, was most helpful in supporting programming decisions and there was a desire to move towards a dynamic version of the report.
- 12. The EWEA Country Toolkit has helped to guide the development of country EWEA plans. It was still early to assess the effectiveness of the country plans as many are yet to be activated. Learnings from EWEA pilots including Return on Investment studies have encouraged further investment in EWEA but more learning is needed to improve the design and delivery of EWEA programmes.
- 13. The Global Report on Food Crises is widely viewed as an important and valuable additional source of information. The publication and launch events kept acute food insecurity high on the global agenda and assisted in the prioritization and allocation of resources by donors. However, several stakeholders reported concerns about the uneven quality of the country level analyses and decision makers asked for more timely information. (see finding 10)
- 14. A major constraint to EWEA is the capacity of FAO and other early warning systems including IPC, Global Information and Early Warning System on Food and Agriculture (GIEWS) and Emergency Prevention System (EMPRES) to provide predictive forecasts. The

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² On this question, the evaluation of the Humanitarian-Development-Peace Nexus (HDPN), also carried out in 2020, should provide useful complementary views. At the time of finalising the present report, the HDPN evaluation was yet to be finalized.

evaluation found a strong consensus on the limitations of IPC projections as an early warning tool – as opposed to the IPC core function in analysing the current food security situation. Very few stakeholders (from donors, non-governmental organization (NGOs), United Nations agencies or governments) mentioned the early warning role of the IPC as a particular strength or value added. EWEA products do not so far analyse the needs of – or suggest tailored actions for - vulnerable groups including women.

- 15. Defining thresholds and triggers for early action is critical for timely action, but experience demonstrated the need to combines 'hard' thresholds with qualitative information and expert judgement that are contextualized to individual agencies.
- 16. Internal financing by the FAO SFERA window has been essential in enabling FAO to pilot early actions. The ability to access such funds was seen as essential in allowing FAO to operationalize early actions. SFERA funds have only been sufficient to pilot small-scale projects in selected countries and are not currently sufficient to either meet demand from a larger number of countries, or to bring the approach to scale.
- 17. There is a lack of clarity between early action as "rapid response" and as "forecast based anticipatory action". Most EWEA practitioners shared a common vision on the importance of actions prior to a shock or before a shock translates into acute impacts ,but some staff understood it more like preparedness or early response.
- 18. In spite of limited resources allocated to this component, FAO has contributed strongly to the promotion and sustainability of EWEA at global level and the EWEA team was viewed as credible and "a thought leader" by the main collaborating institutions. This had tangible results, including contributing to the establishment of the Risk-informed Early Action Partnership (REAP). Through appropriate partnerships, including with the World Bank Famine Action Mechanism and the United Nations Central Emergency Response Fund, FAO has supported efforts to develop and institutionalize system level financing for EWEA.
- 19. The EWEA pilot phase has created a solid basis to move towards embedding the initiative within corporate structures and processes. However, progress towards institutionalizing EWEA within FAO is partial and incomplete. The accountability of field offices for EWEA was low and internal standard operating mechanisms for logistics and procurement are ill-suited to early action. Collaboration with the global Food Security Cluster (gFSC) on EWEA remains nascent and weakly developed at implementation level.
- 20. EWEA has also contributed to capacity building, although national ownership of EWEA processes is so far very limited. FAO has a well-established and generally effective strategy of working through the various Regional Economic Communities (RECs) as an entry point for analytical support to food and nutrition security, but this channel has so far been little used for capacity building on EWEA. The new GNAFCPP aims to build capacity for carrying out EWEA work at regional and country levels.

Resilience analysis

21. INFORMED supported regional and national technical capacities to conduct resilience measurement and analyses by applying the resilience index measurement and analysis (RIMA) methodology. This methodology has been simplified and improved to support resilience programming, monitoring and impact evaluation. This included the rollout of the "RIMA II" methodology, the introduction of RIMA "Excel" to replace the use of STATA

- software and the RIMA "Short" questionnaire to reduce data requirements. Optional "modules" have also been added to gather data on: subjective perceptions of resilience; conflict; social protection; local economy; and other context-specific features.
- 22. Following the conclusion of INFORMED, support to RIMA has continued under component II of the Global Network Against Food Crises Partnership Programme. RIMA provides the basis, both as data collection and analytical instrument, for creating evidence on European Union resilience investments in a number of PROACT projects.
- 23. Support to resilience analysis is highly relevant given the significant investments in resilience programming and the continuing methodological gaps. In recent years, large-scale investments in resilience programmes have been made by both governments and development partners to reduce food insecurity and malnutrition, but verifiable evidence of the impact of these investments remains scarce. There is still a need for a robust system for effective measurement to help generate evidence for informed decision-making and further investment.
- 24. The understanding of decision makers needs was weak in the initial design of RIMA, but efforts made during implementation have partially addressed users' concerns. The origins of RIMA was driven by an academic approach to conceptualizing and measuring resilience. The INFORMED programme was intended to be paired with the European Union-funded Food and Nutrition Security, Impact, Resilience, Sustainability and Transformation (FIRST) policy support programme, but in practice both programmes lacked a comprehensive approach linking evidence to policy and programming. FAO has acknowledged this gap and there were evident efforts to orient RIMA studies to respond to the specific research questions that countries were interested in. However, to some extent decision maker needs remain unmet.
- 25. For many stakeholders the objective of building resilience to food insecurity emerged from a humanitarian perspective and the rationale for resilience under INFORMED has been aligned to managing risk, through building resilient livelihoods. Interpreting resilience purely from a risk reduction perspective could lead to "resilient but poor". Stronger links could identify policy and programmatic options to address poverty and resilience that integrate risk management into development plans.
- 26. It is difficult if not impossible to build resilience without considering the impact of conflict and political shocks. A conflict module has been added to RIMA as a descriptive and explanatory variable Other FAO tools have been developed to provide the primary analysis to support conflict sensitive programming, including the FAO Guide to Context Analysis and the Programme Clinic. Gender is routinely included in all RIMA analyses in line with FAO policy commitments. The data is analysed by the gender of household heads and all reports included gender-disaggregated recommendations.
- 27. The potential uses of RIMA included: planning of projects, programmes, strategies and policies; targeting interventions; evaluating impact; and trend monitoring. In terms of planning the Resilience Capacity Index (RCI) (based on the pillars of access to basic services; household assets; household social safety nets; and household adaptive capacity) helped to describe the factors contributing to resilience capacities. This helped to explain the concept of resilience as a holistic approach spanning multiple sectors and brought attention to the contribution of social protection and basic services. However, the RIMA

baseline analysis lacked sufficient detail to have a practical impact on concrete planning decisions with a deeper analysis required to understand the feasibility of possible response options.

- 28. Where context specific food security and nutrition data was collected through the RIMA process, this was valued by planners. In data poor environments, users credited RIMA with playing an important role in expanding the availability of information beyond the immediate planned purpose of resilience analysis.
- 29. RIMA results have not been used to target interventions to areas or groups of low resilience. In practice this has not happened as RIMA has not demonstrated a compelling added value for targeting over more readily available food security, nutrition and risk indicators.
- 30. RIMA is not well adapted as an impact evaluation tool. The RIMA I analysis demonstrated aggregate changes in resilience capacity but did not attribute the role of specific project interventions; nor are users able to conclude whether an adequate level of resilience had been achieved. RIMA II is currently used as part of the evaluation framework (with control groups) in Pro Act programmes. The baselines are currently being conducted and it will be sometime before the performance of RIMA II as an evaluation tool in this context can be properly assessed.
- 31. The RIMA tool specifically the RCI within RIMA is being increasingly applied for policy monitoring. It is attractive to users as it provides a single figure that simplifies reporting on a complex concept. It does not require an analysis of causality and is much less demanding on the skills of analysts as it can be conducted using RIMA Excel. Existing datasets can be used to conduct RIMA analysis at this level, reducing cost and data demand as in Niger or Senegal.
- 32. RIMA has benefitted from strong technical collaboration in developing the methodology, and from inter-agency coordination in implementation. However, the knowledge of RIMA is centred amongst a small group of technical specialists. Many key decision makers were found to be largely unaware of the RIMA process and products. INFORMED has invested in significant efforts to improve communication with decision makers. However, overly technical reports were judged as inaccessible by many decision makers. Consequently, users lacked a solid understanding of the tool and felt unable to challenge or critique the results.
- 33. Methodologically there are still clear challenges. There was surprisingly little testing of the relationship between RIMA's calculated "resilience capacity" and the actual ability of households to weather shocks and stresses. To those more involved in the technical detail, there is a concern around insufficient critical examination and validation of the index. Resilience is best understood by drawing on a diverse range of methodologies including qualitative and participatory approaches and requires understanding the perspective of affected populations and individuals. FAO programme staff also asked for FAO be more open to promoting the use of a toolkit of approaches, so that the most relevant mix of methods could be matched to a specific context and purpose.
- 34. INFORMED collaborated with regional institutions (including the Intergovernmental Authority on Development, IGAD; African Union; Permanent Interstate Committee for

drought control in the Sahel (CILSS) and Sistema de la Integración Centroamericana, SICA) and national governments to establish and enhance resilience analysis capacities. This included the creation of two main regional hubs in Africa (Dakar and Nairobi) and Resilience Measurement Units (RMU) at country level (including Uganda and South Sudan). However, no specific institutionalization strategy for RIMA was found to guide the activities conducted under this work area at global, regional or country level. The primary focus was on supporting and producing RIMA analyses rather than institutionalization.

- 35. Regional and national authorities remained dependent on FAO's technical and financial support to conduct RIMA analyses. In some cases this collaboration has continued for over a decade. There has been collaboration with other agencies in piloting RIMA, but no United Nations agencies or international NGOs have adopted the tool. All partners reported that they lacked the technical capacity or resources to use RIMA.
- 36. FAO has organized a large number of trainings at various levels to support the implementation of RIMA studies. RIMA trainings were well received but only a small number of professionals are capable of independently conducting a RIMA analysis as the approach demands a strong statistical background. This situation was exacerbated by a deficit of suitable RIMA guidance.
- 37. Stakeholders routinely referred to the heavy data demands of the RIMA tool as a major barrier to the sustainability of the approach. RIMA requires multi-dimensional, high-frequency, longitudinal data. In the majority of cases, RIMA analysis required the costly collection of panel survey data.

Knowledge management

- 38. In 2016, FAO established a Knowledge Sharing Platform on Resilience (KORE), initiated as an additional component of INFORMED. The intention was to support resilience building by developing guidance and facilitating the production and dissemination of knowledge products to help field practitioners share their practices and promote replication.
- 39. Establishing KORE within INFORMED responded to a rationale of systematically documenting and sharing lessons from experience to improve resilience building programmes. Various other institutions, such as IGAD or the United States Agency for International Development (USAID), also considered resilience building as a programmatic area with high action-learning potential, which motivated these institutions to invest in resilience knowledge management. The creation of a new resilience knowledge management platform was not necessarily the most appropriate action to take to fulfil needs expressed by practitioners. The community advocated for adopting a collaborative 'and partnership-driven' approach and warned against the risk of duplicating efforts.
- 40. The initial strategy underpinning KORE was not founded on clearly defined knowledge needs and users. This represented a fundamental constraint to manage the initiative effectively. However, regular user consultations helped improve the relevance of knowledge products to potential users.
- 41. KORE delivered a well thought and structured approach to knowledge management. The processes, tools and efforts of the KORE team led to the production of a number of outputs. This included: documenting good practices; webinars; a quarterly newsletter; and a web portal for resilience. A structured process was established to collect good practices.

- Figure 7 shows the stepped approach to developing good practices. KORE's engagement with partners such as IGAD and CILSS during regional knowledge share fairs supported the dissemination of good practices and knowledge.
- 42. The use of knowledge products appears to be patchy with mixed levels of awareness and appreciation of KORE products. Stakeholder interviews conducted by the evaluation, from within and outside FAO, showed a generally low level of familiarity with KORE products. At the field level, evidence of use is quite uneven. More needs be done to support replication, for which dedicated capacity is necessary. The uptake and use of the knowledge products was not monitored, limiting the opportunities for learning and adjustment.
- 43. Having strategic management decisions made by programme managers lacking comprehensive knowledge management expertise affected KORE effectiveness in generating knowledge and learning. With a reduced power on budget management, the KORE team, exclusively working from temporary consultancy contracts, was not in an advantageous position to influence strategic decisions.
- 44. Despite a positive evolution of human resources dedicated to knowledge management over time, the resources available to KORE remained limited and insufficient, especially at field level. Limited partnerships and coordination with internal and external platforms due to competition over content (with the exception of few institutions) constrained outreach and the efficient use of knowledge.
- 45. KORE was anchored in INFORMED, a time-bound project, and was not connected to knowledge management as a core function of FAO. A Strategic Programme (SP) 5 MEAL team has been formed in recent years. However, there has been little collaboration between the two teams until recently. There are obvious opportunities to establish synergies with knowledge management; however, a dialogue between the two teams only started recently.
- 46. The creation of a dedicated knowledge management platform for resilience-related knowledge management and limited engagement with others, and the lack of anchoring in a broader knowledge management function in FAO, was not conducive to institutionalization. The choice to set-up a standalone platform was less sustainable than joining forces with existing stakeholder institutions and build a joint platform.

Conclusions

- 47. The main outcome areas of the INFORMED programme promoting early warning early action, resilience analysis and knowledge management are key gaps for food security and nutrition decision makers, and should remain priorities for FAO. While IPC activities were mainly out of the evaluation scope, these were also undoubtably highly relevant as confirmed by the IPC evaluation. These demands remain strong and have not diminished, and the need for programming in these areas should remain a priority for FAO. However, FAO should do more to advocate for and support improved data streams to support these analyses.
- 48. Overall many sound choices were made in the INFORMED design. However, the initial understanding of the detailed needs of potential users or the operating context was insufficiently developed. Consequently, it has taken time for the programme to develop a

- proper understanding of user needs and there is an outstanding demand to base the design of products and processes on the needs of decision-making.
- 49. To its credit, INFORMED managers recognized this deficit and the programme has been strongly adaptive over the implementation period as it has strived to improve its specific relevance to decision makers. However, it has taken time for the programme to reorient itself to better address user demands and it is evident that there are still important gaps in both resilience analysis, EWEA and knowledge management tools.
- 50. The Early Warning Early Action initiative has been highly effective at the global level. It has positioned FAO as a key player in the main coordination forums and the Organization has used this platform to effectively advocate for the promotion of EWEA with significant results. FAO effectiveness as an advocate is given significant credibility through its comparative advantage in generating key evidence and learning around anticipatory action rooted in its experience of implementation.
- 51. There is an opportunity to more explicitly link the GRFC and the quarterly EWEA to further highlight opportunities while the GRFC provides a backward looking view on the recent food security situation, this could be linked to the forward looking view on emerging crises.
- 52. The implementation of pilot EWEA activities at country level provided important learning opportunities and highlighted a number of constraints. At an operational level, there is the need for sustained investment to enable effective anticipatory action systems to be established, both internally in FAO and amongst partners. Key areas include improving the forecasting ability of early warning, improving access to finance and forging strong and inclusive partnerships at national level.
- 53. Through INFORMED support to RIMA FAO has been an important pioneer in resilience measurement. However, detailed findings on the use and utility of RIMA analyses found that the current tool is not widely used in planning, targeting or assessing the impact of resilience policies or programmes. Furthermore the appropriateness and added value over existing food security and nutrition indicators and approaches can be questioned for some applications. RIMA does demonstrate more relevance to policy monitoring.
- 54. The tool in its current form unlikely to be independently sustained in national systems and the further evolution of resilience methodologies is inevitable. The cost and technical complexity of the method challenge prospects for institutionalization within Government or other partners. RIMA analyses remain largely dependent on FAO technical and financial support.
- 55. Given a continued strong demand for information and analysis to support resilience policies and programming, there is a need for continued methodological innovation. This demand is to support decision-making across a wide range of purposes including advocacy, learning and accountability.
- 56. It would be desirable to unpack RIMA into a number of differentiated tools to be used for different and specific purposes. In particular, there is a clear demand for understanding community level perspectives on resilience and more open, participatory discussions on pathways to achieving resilience.

- 57. The various INFORMED outcomes areas developed largely in isolation. Recent attempts to explore and develop synergies between the different analyses have had limited results. However, there are strong arguments that all data collection efforts emphasized by INFORMED should be integrated and linked, providing a fuller understanding of the multi-sectoral nature of food insecurity and malnutrition that can then inform both national and regional policies around food and nutrition security.
- 58. While tools, guidance and services developed and capacities established under KORE constitute useful building blocks, promoting knowledge exchange for learning and programme improvement requires more investment and giving staff skilled on knowledge management the appropriate decision-making power to steer their mission.
- 59. The scope of evidence needs to be expanded. In the case of EWEA, information collected so far has concentrated on supporting advocacy, principally by assessing the economic benefits of acting early. However, programme staff responsible for both EWEA and resilience need much more information on the substance of what works and in what context. Nor is this evidence organized in a way that allows programme staff to identify what may be relevant for their own objectives and context. This is partly the consequence of a poorly developed corporate capacity in capturing lessons on the effectiveness of livelihood interventions in supporting resilience and overall knowledge management.
- 60. The function of KORE would be more effectively leveraged by being directly connected to a wider knowledge management function in FAO. Managing knowledge for resilience should be a central and core function of FAO, resonating ideally across SPs, and most certainly beyond the scope of a given project.

Recommendations

Recommendation 1. FAO should strengthen capacities for the production and dissemination of forecast, scenario-based early warning as a basis for early action.

- 61. It is recommended that the FAO Office of Evaluation (OED) conduct a review of the effectiveness of early warning systems (EWS), developing triggers for anticipatory action and lessons in supporting EWS capacity. Based on this review, FAO headquarters should develop a corporate strategy for partnering to strengthen early warning system capacities at various levels.
- 62. It is recommended that the GNAFCPP transition the publication of the GRFC and QEWEA reports to an online format with rolling updates, with an explicit link between the two products.

Recommendation 2. FAO should work in partnership to strengthen the delivery of early actions in selected priority high risk countries.

- 63. It is recommended that FAO update the corporate strategy to include operational processes and accountabilities for anticipatory action. FAO should advocate for a substantive increase in the SFERA EWEA window.
- 64. It is recommended that FAO Regional and Country Offices continue to work with national and regional authorities to pilot the development and monitoring of country EWEA plans in selected high priority countries and associated support for capacity development.

65. It is recommended that the gFSC support country clusters to embed responsibility (in concert with national authorities) for EWEA planning, surveillance and implementation.

Recommendation 3. FAO should support policy and programme decision makers through a diverse set of resilience-related analytical tools and improved data access.

- 66. It is recommended that FAO develop a broad strategy to support the analysis of resilience, based on the specific needs of decision makers, that uses a range of methodological approaches, including community based, participatory investigations of pathways to resilience.
- 67. It is recommended that FAO advocate for, and where appropriate support, the production of, and enhanced access to, food and nutrition statistics by the responsible agencies that contribute to resilience analysis.

Recommendation 4. Within this wider resilience analysis strategy FAO should focus any continued investment in the development, application and training of the RIMA tool in contexts where it is demonstrating the greatest potential.

- 68. It is recommended that FAO focus on continued investments in the development, application and capacity building for the use of the RCI as a tool for policy and programme monitoring. FAO should also skill test the accuracy of the RCI in predicting the capacity of households to maintain welfare levels in the event of a shock.
- 69. It is recommended that the GNAFCPP should continue to pilot use of RIMA II of the indirect analysis of resilience to research the determinants of the ability to bounce back from shocks. FAO should develop relevant guidance notes and further simplify the technical and data demands of RIMA analysis.

Recommendation 5. FAO should further and more sustainably invest in a function dedicated to capturing and disseminating lessons on the effectiveness of EWEA and resilience interventions.

- 70. It is recommended that FAO invest in establishing a knowledge management function within the Office of Emergencies and Resilience (OER) tightly networked with others in and outside of FAO. FAO should investigate developing a decision support tool to help programme staff determine which interventions would have most relevance in their specific context.
- 71. FAO should further reinforce, and invest in, corporate capacities for monitoring, evaluation and learning, and mainstream responsibility for capturing learnings around specific EWEA and resilience interventions and system accountability.

1. Introduction

1.1 Purpose of the evaluation and intended users

- 1. This report presents the results of the final evaluation of the project 'Information on Nutrition, Food Security and Resilience for Decision Making' (INFORMED), implemented over an initial period of three years (2015-2018), with a no cost extension to the end of 2019. The evaluation was commissioned by the Office of Evaluation (OED) of the Food and Agriculture Organization of the United Nations (FAO).
- 2. This evaluation responds to the FAO evaluation policy and pursues the dual objectives of accountability and learning. It provides accountability to the European Union, as the project financial supporter. The evaluation also has a strong focus on learning, with a forward-looking perspective in order to contribute to FAO's continuing work around nutrition, food security and resilience analysis.
- 3. The evaluation took into consideration that INFORMED has an immediate successor in the Global Network Against Food Crisis Partnership Programme (GNAFCPP), and aimed at identifying elements that may inform and further refine any subsequent strategies under this new collaboration between FAO and the European Union.
- 4. The principal users of the evaluation are the project donor and FAO. European Union Directorate-General for International Cooperation and Development (DG DEVCO) remains a strategic donor in supporting food security and nutrition and is therefore expected to have a high interest in the results of the evaluation. Such evaluation results are expected to contribute the European Union strategies in preventing, mitigating and responding to food crises. Partners in the Global network will also likely have an interest in the analysis presented in this report.
- 5. The results are expected to be of interest to project managers, who can use the independent assessment to improve their work. In addition, the strategic conclusions and recommendations are addressed to FAO managers at the highest level.

1.2 Scope and objective of the evaluation

- 6. The evaluation examined the relevance and appropriateness, use, utility and sustainability of the INFORMED project. The scope of the evaluation included the entire period of implementation, from 2015 to 2019, and covered activities at global, regional and country levels. The evaluation focussed on Output 1 (Data systems for long- and short-term trend analysis of food crisis situations are improved and integrated) and Output 3 (Resilience programming is improved through the application of a common methodology to measure resilience, and through knowledge sharing mechanisms).
- 7. The evaluation does not evaluate Output 2 (The Integrated Food Security Phase Classification (IPC) process is strengthened and applied at country level) in detail. A final evaluation of the Global Strategic Programme (GSP) of the IPC was commissioned for the period 2014-2018, which reported in March 2019 (FAO, 2019). It was agreed that this evaluation would not duplicate the work of this recent evaluation, but would examine the coherence and synergies between the IPC and other INFORMED Outputs.

- 8. More specifically, the evaluation examined the following key issues and questions:
 - i. On relevance and design:
 - a. How appropriate was the INFORMED programme design to the objective of increasing resilience of livelihoods to threats and crises?
 - b. To what extent did the programme adapt using lessons learned during implementation?
 - c. To what extent was INFORMED coherent with internal and external FSN and Resilience analysis systems?
 - ii. On use and sustainability:
 - a. To what extent were INFORMED products used in policy and programmatic decision-making?
 - b. What factors influenced the utility of INFORMED information?
 - c. How appropriate and effective was the strategy and approach to institutionalization?
- 9. The terms of reference developed prior to the evaluation (Annex 1) provide further details.

1.3 Methodology and limitations

- 10. Evidence was collected using a variety of methods and tools to measure the results achieved with the support of INFORMED and understanding the factors that might have supported or hampered achievements. First, the team reviewed a large set of secondary information, from published documentation to project information provided by the teams managing INFORMED. In particular, the evaluation reviewed analysis and information reports and guidance documents produced by each project component to substantiate the assessment of utility. A list of references and a full bibliography follows at the end of the report.
- 11. Secondly, the evaluation relied on data collected through semi-structured interviews with a large sample of project stakeholders, including FAO staff, representatives of national governments and regional organizations, donors, other United Nations agencies and non-governmental organizations (NGOs). The evaluation was able to consult over 150 individuals from global, regional or national interests, therefore providing a solid basis for triangulating information. Appendix 1 provides details regarding people consulted. Due to travel restrictions related to the COVID-19 pandemic, interviews were conducted almost entirely by virtual means. The evaluation regularly engaged with the INFORMED management team during the evaluation process.
- 12. A selection of seven country case studies, conducted virtually, provided an opportunity to illustrate the way in which INFORMED contributed to addressing information needs of decision makers in the field, the dynamics of these results and their sustainability. The evaluation purposely selected country cases with the highest number and variety of activities and deliverables, to maximize the learning potential. The country case studies covered: Colombia, Mongolia, Senegal, Somalia, South Sudan, and West Bank and Gaza Strip. Country case study reports assembled all relevant information gathered from virtual interviews and secondary data review, and provided a grounding for the evaluation's assessment of field level achievements. Stakeholders from additional countries and the Regional Economic Communities (RECs) the Intergovernmental Authority on

- Development (IGAD), Permanent Interstate Committee for drought control in the Sahel (CILSS), Sistema de la Integración Centroamericana, SICA and Southern African Development Community (SADC) were also consulted.
- 13. Two online surveys provided an additional channel to reach out to users of the INFORMED information products to gather a critical mass of perspectives. Only one of the two surveys received enough responses to allow using its results for the analysis. Appendix 3 presents the survey results in full.
- 14. The evaluation, managed by an evaluation officer from the Office of Evaluation (OED), benefitted from the expertise of three independent evaluation experts with solid experience in analysing food security and nutrition information systems, resilience-support programming and quantitative analysis. The evaluation officer and research analyst from OED took part in the design, data collection, analysis and drafting phases, and supported the team throughout the process with organizational aspects.
- 15. This evaluation started in January 2020, and with the data collection initially due to take place in March 2020. The COVID-19 pandemic situation starting in Italy early March and progressing throughout the globe in the following weeks and months forced the evaluation to adopt drastic changes to initial plans. The evaluation replaced planned in-country missions with virtual missions, and sought to diversify information sources and case studies, as countries faced with the pandemic were also becoming less responsive to virtual interview requests. The evaluation was successfully able to gather the necessary data using a virtual approach.
- 16. These changes and the reorganization to a full virtual consultation had a significant impact on the time required to gather the evidence desired to address all evaluation questions appropriately. Consequently the evaluation was delayed by approximately one month.

1.4 Structure of the report

17. Following this introduction, Chapter 2 presents the background and context of the project. Chapter 3 presents the main findings, substantiated by evidence, to address the evaluation questions; the findings are organized by the main output areas. Lastly, Chapter 4 presents the conclusions drawn from these findings, and recommendations proposed to relevant FAO staff.

2. Background and context of the programme

2.1 Context of the programme

- 18. The Information for Nutrition, Food Security and Resilience Decision Making (INFORMED) programme commenced in May 2015 (project code: GCP/INT/245/EC). The programme was designed to contribute to "increasing the resilience of livelihoods to threats and crises and contributing to the reduction of food insecurity and malnutrition". It was intended to achieve this through the specific outcome of "improved availability of regular, timely and early warning information as well as evidence-based analysis regarding the food security, nutrition and resilience situation for decision-making".
- 19. Supporting food security and nutrition information systems for improved decision-making is a longstanding area of collaboration between the European Union and FAO. Since 2015, strengthening resilience was defined as one of the top priorities of the European Union's External Action. In particular, INFORMED integrates within the European Union's policy commitment to contribute to building resilience of vulnerable communities by addressing the root causes of food insecurity and more specifically with the methodology adopted by the European Union in 2013, to guide the selection of countries to support, named PRO-Resilience Action ("PRO-ACT"). The PROACT methodology relies on evidenced-based needs assessments to identify the needs of a country and the severity of the crisis in terms of number of people affected by food insecurity, and was built on the joint efforts of the European Union and partners such as FAO an WFP. The analysis of food, nutrition and resilience added value to the nearly EUR 8 000 million of European Commission funds dedicated to improving food and nutrition security and sustainable agriculture (FNSSA) at country level during the 2014-2020 period. INFORMED also contributed to the food and nutrition security monitoring and resilience analysis-related results envisioned under FAO's Strategic Objectives 1 and 5.
- 20. The programme aimed to provide technical and analytical, as well as capacity development support to relevant regional institutions and national government institutions involved in food and nutrition security, and resilience analysis for policy and programming design purposes. The programme included three output areas, which in turn each included three workstreams, summarized in Figure 1 below.
- 21. INFORMED was managed and coordinated through a light Management and Coordination Unit based at FAO Headquarters and relies on the FAO SO5 delivery mechanisms. For its work at country and regional level, it worked through the established FAO delivery mechanisms of Country Programming Frameworks (CPFs) and, where relevant, regional initiatives, including the FAO subregional emergency and resilience Teams. The implementation of INFORMED relies on multi-sector and multi-partner inputs and support, which varies according to the area of work addressed.³

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³ The IPC Global Strategic Programme works with a joint partnership, which includes NGOs (ACF International, CARE, Oxfam, and Save the Children), United Nations agencies, (FAO, WFP and UNICEF), donor-related bodies (the European Commission JRC and FEWSNET), regional intergovernmental (CILSS, SICA, IGAD and SADC) and the global Food Security Cluster. United Nations agencies such as WFP, UNICEF and UNDP, and regional organizations such as IGAD and CILSS, are key partners with regard to the resilience measurement work. The harmonization of household survey data collection work has been supported by the existing partnership between FAO and the World Bank.

22. The immediate beneficiaries of the project were defined as decision makers involved in resilience-building programmes – including international, regional and national organizations, governments and institutions, and FAO country offices – as the main users of the information and analysis produced with the support of INFORMED. The selection of countries supported was based on demand by country governments, relevant regional bodies, the European Union delegation and FAO country offices, among those where FNSSA has been selected as a focal sector for the European Union development cooperation in the period 2014-2020.⁴

Figure 1: INFORMED intervention logic

IMPACT: Contribute to increase the resilience of livelihoods to threats and crises and contribute to the reduction of food insecurity and malnutrition.

OUTCOME: Improved availability of regular, timely and early warning information as well as evidence-based analysis regarding the food security, nutrition and resilience situation for decision-making.

Output 1: Data systems for long- and short-term trend analysis of food crisis situations are improved and integrated.	Output 2: The Integrated Food Security Phase Classification (IPC) process is strengthened and applied at country level.	Output 3: Resilience programming is improved through the application of a common methodology to measure resilience, and through knowledge sharing mechanisms.
Area of work 1.1: Developing and supporting action plans to enhance countries and regions capacities in data collection and analysis through country level Community of Practices' (CoP) networking. Rephrased during implementation to drop "through country level Community of Practices' (CoP) networking."	Area of work 2.1: Improving global quality of the IPC tool through technical development, quality and compliance.	Area of work 3.1: Knowledge sharing and lessons learning support the mainstreaming of resilience into programmes and policies.
Area of work 1.2: Improving longer term datasets (e.g. household surveys) by better integrating the food security and nutrition dimensions.	Area of work 2.2: Enhancing country level capacities to implement the IPC through IPC capacity building and professionalization.	Area of work 3.2: Technical and analytical support to Regional Analysis Unit and Platforms on resilience is consolidated.

⁴ A total of 36 expressions of interest to participate in INFORMED were received.

Area of work 1.3: Integrating food crisis related analytical tools into a single global and country-based food and nutrition security decision making product to promote, inter alia, Early Warning Early Action linkages.

Rephrased during implementation as "Enhancing Early Warning Early Action linkages by integrating food crisis related analytical tools into a single global and country-based food and nutrition security decision-making product"

Area of work 2.3: Supporting the application of the IPC methodology in a number of countries so that a clear long-term food and nutrition security analysis is available by country and region.

Area of work 3.3: Specific technical and analytical support to countries is provided.

Rephrased during implementation as "Technical development of Resilience Analysis Tool is conducted"

Source: Adapted from the Project Document by the FAO Office of Evaluation (OED)

- 23. The programme budget of approximately EUR 33.5 million was supported by a voluntary contribution from the European Union DEVCO of approximately EUR 21 million. The remaining contributions were made of other resources partners' funding (including the Department for International Development (DFID) and United States Agency for International Development (USAID) for IPC)⁵ and FAO regular programme resources. A limited part of the budget was allocated to partners (e.g. CILSS, IGAD) for the implementation of specific activities, for which detailed work plans were agreed.
- 24. Table 1 presents a breakdown in the use of European Union funds. The project ran for an initial period of nearly four years (May 2015-2018), with a no cost extension until the end of 2019.

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⁵ Through INFORMED, DEVCO provided approximately half of the IPC Global Strategic Programme (GSP) budget, complementing contributions from DfID and USAID.

Table 1: Use of European Union funds by INFORMED project component

	USD	Percentage (%)
Output 1		
EWEA	1 058 901	5.0
FSIN	357 867	1.7
Global Food Crisis Report	160 406	0.8
Household Surveys	738 244	3.5
Output 2		
IPC	11 245 002	53.3
Output 3		
Knowledge Management (KORE)	520 652	2.5
M&E	80 649	0.4
Horn of Africa/IGAD	1 359 378	6.4
West Africa/CILSS	1 294 170	6.1
RIMA	4 293 801	20.3
Total	21 109 069	100.0

- 25. FAO provided regular reports to the European Union on INFORMED through interim progress reports (2015, 2016, 2017 and 2018) with a final report including progress in 2019, still to be submitted. A mid-term review of INFORMED was published in 2017,6 which examined both INFORMED and FIRST,7 initially designed to complement one another. A results-oriented monitoring (ROM) report was produced by the European Union in 2018.
- 26. INFORMED has been succeeded by a new partnership programme supported by the European Union: the Global Network Against Food Crises Partnership Programme, which built on the foundations put in place through INFORMED. Partners in the Global Network are committed to working together and achieving results in three key areas: i) understanding food crises by generating evidence-based food insecurity, resilience and risk analyses to increase the understanding of food crises, including knowledge management and communication monitoring, evaluation and learning; ii) strategic investments by leveraging evidence-based, coherent and integrated strategic programming with country level impact; and iii) going beyond food by seeking synergies and coordination.
- 27. In 2019 the two programmes ran in parallel, with a transition of activities from INFORMED to GNAFCPP. While GNAFCCPP is not specifically part of the scope of this evaluation, the evaluation necessarily took this new programme into account in its analysis, and in making forward looking recommendations.

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⁶ In addition to INFORMED, the scope of this review included the Food and Nutrition Security Impact, Resilience, Sustainability and Transformation (FIRST) Programme which was a joint initiative between the European Union and FAO, to provide on-demand policy support to selected FAO and European Union priority country governments and regional bodies.

⁷ A final evaluation of the FIRST was produced in 2020 by OED.

3. Findings

3.1 Analysis of food crisis situations

3.1.1 Strategy and activities

- 28. Under programme Output 1 (Data systems for long- and short-term trend analysis of food crisis situations are improved and integrated) three areas of work were initially identified, namely: i) analysis-based advocacy for more investment by countries and other stakeholders in primary data collection and related analyses; ii) the integration of analytical tools into a single decision-making oriented product to promote in particular early warning for early action covering all levels (country, regional and global), specifically strengthening linkages between the Global Information and Early Warning System on Food and Agriculture (GIEWS)/IPC/ Emergency Prevention System (EMPRES) outputs and corporate programme; iii) harmonization of data collection through household surveys and make them more food security and resilience oriented so as to feed, *inter alia*, IPC and resilience analysis.
- 29. The majority of activities for this Output fell under the banner of Early Warning Early Action (EWEA). Figure 2 below outlines the strategic approach originally foreseen in implementing this initiative; including the production of a consolidated risk overview, identification of triggers for action, identification of early action activities and an internal FAO funding mechanism.

Step 5 Step 1 Consolidate existing **Development of an informal** EW products, eg: EA funding mechanism Step 3 Step 4 Step 2 Development Identification Overlay of appropriate EA activities of indicative information on Retriggers for vulnerability, allocation **EW** monitoring resilience and of existing ongoing CRR **SFERA** Ex. EA initiatives funds EA funding Window sources **Product 1** Monitoring of indicators Ad-hoc Early Consolidated risk overviews **Early** and triggers **Warning Alerts** product with risk actions with EA monitoring recommendations Sent to Validated by RO and CO **Activates** Sent to If relevant forwarded to **SO5 SO5** Senior Core Core management team team (forum tbd) SO5 team SO5 team reviews product 3 reviews EW alert and recommended **EA** activities

Figure 2: Initial conceptualization of FAO EWEA system

Source: FAO. 2015. Project Charter FAO Early Warning – Early Action System Establishment. Rome.

If relevant forward to

- 30. From 2016 INFORMED developed a global quarterly Early Warning Early Action report (QEWEAR) on food security and agriculture. This report focussed on creating coherence amongst the different early warning systems (EWS) operated by FAO, through a common risk prioritization method. The FAO report then contributed to the Inter-Agency Standing Committee (IASC) reference group on risk, early warning and preparedness monthly (calls) and biannual report to the emergency directors group.
- 31. Work at country level was triggered by the 2015/16 El Niño event. Working with the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), FAO developed the IASC Inter-Agency Standard Operating Procedures (SOPs) for Early Action to El Niño/La Niña Episodes. FAO's Special Fund for Emergency and Rehabilitation Activities (SFERA) fund was then established in mid-2016 as a result of a lessons learned exercise following the El Niño work with the countries where the need for rapid flexible financing for early/anticipatory action was identified. Subsequently the EWEA team also supported a number of countries on an ad hoc basis to respond to demands for developing proposals to access SFERA Early Action window.8
- 32. The increasing demand from FAO country offices prompted the development of a more systematic approach to EWEA. A concept note resulted in FAO's EWEA pilot programme, where support was given to FAO country offices in setting up risk analysis and early action trigger mechanisms; triggers are monitored and once the threshold is met, early action is activated (FAO, 2015). The main focus of the pilots for EWEA were on drought with pilots in Kenya, Madagascar, the Philippines and Sudan.

Through this piloting phase a FAO EWEA Country Toolkit was developed and is now available on the Handbook on Emergency Preparedness and Response Webpage (see Box 1). This Toolkit has been further tested, including the methodologies and tools, prior to scaling up.

from SFERA.

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⁸ For example, in Mongolia EWEA staff from FAO headquarters were deployed to support the analysis and submission to the SFERA early action window for an extreme cold temperature event (dzud). In Mongolia, the hydro-meteorological agency provided impact-based forecasts that identify the geographical area of impact of the dzud. This coupled with further vulnerability analysis enabled planning and submission for early action funds

Box 1: Early Warning Early Action (EWEA) Country Toolkit



- i. Step one involves elements such as identifying the geographical scope, identifying hazards, likelihood and impact assessments as well as undertaking disaster risk ranking. This step also involves a vulnerability analysis to identify the most vulnerable and their needs.
- ii. Step two involves the identification of triggers (e.g. livestock body condition or hydrological data) and agreed upon thresholds (e.g. < 60 percent of cumulative seasonal rainfall) that would trigger early actions.
- iii. Step three involves the identification of early actions, including targeting, timing of interventions due to the relatively small window of appropriateness of different early actions. This also provides guidance on a repository of early actions available on FAO's intranet.
- iv. Step four involves the development of an EWEA plan that captures steps one-three in a document that enables monitoring to take place based on the triggers and thresholds set and the recommended adjustments to the plan on an annual basis.
- v. Step five of the process is supported through guidance on how the SFERA early action window can be applied for.
- vi. Step six involves the implementation of the early actions.
- 33. Efforts to determine the impact of EWEA at country level were made through impact studies that included return on investment (ROI) analyses. Five impact studies were produced from Colombia, the Horn of Africa, Madagascar, Mongolia, the Philippines and Sudan. The impact studies enabled a better understanding of the effectiveness of early actions, collected beneficiary perceptions and calculated a cost benefit ratio. These studies supported both lesson learning and provided evidence for the effectiveness of the EWEA approach. Guidance for the impact studies methodology was also produced.
- 34. From 2018 there was greater emphasis on external partnerships, including with International Federation of Red Cross and Red Crescent Societies (IFRC), World Food Programme (WFP), OCHA, the START Network and the World Bank, and participation in the Inter-Agency Early Action Task Force (EATF). This included space for discussion of joint programming and joint analyses.
- 35. There was limited implementation under the first of these areas of work in support of the Food Security Information Network (FSIN). Under the third area of work INFORMED has supported the development of an improved survey module for collecting data on food consumption away from home that is being incorporated into country surveys supported by the World Bank.
- 36. Output 1 was also adapted over time to include support to the development and production of a Global Report on Food Crises (GRFC). Starting in 2017, four annual editions of the report have been produced under the auspices of FSIN. The GRFC brings together food insecurity and nutrition information and analyses by different regional and global technical agencies, including FAO, WFP, IPC, Famine Early Warning Systems Network (FEWSNET), United Nations Children's Fund (UNICEF), CILSS, IGAD and SICA). The report

consolidates estimates of food insecure populations in emergencies, in selected highly food insecure countries. The objective of the GRFC is to provide evidence for decision makers, principally to support resource allocation decisions.

3.1.2 Relevance

Finding 1. The increasing focus on EWEA within INFORMED was highly relevant given persistent gaps between early warning and timely action, and the mandate of FAO.

- 37. The literature and stakeholder interviews confirmed the continuing struggle of early warning systems to link analyses to decision-making and action to protect livelihoods. There is strong evidence that early warning systems all too often fail to result in action prior to a crisis. As noted by Maxwell and Hailey (2020) "Despite early warning and humanitarian diagnostics information being more available than ever in history, confusion persists as to what it means and what to do with it".
- 38. This challenge is not new and has featured in the literature for many years, indicating that the solutions are not straightforward. As one stakeholder commented, It is not so different from early discussion of drought cycle management in 1980s and 1990s. However, the EWEA strategic approach (see **Figure 2**) was understood to appropriately draw on key learnings from previous EWEA initiatives. Critically it goes beyond improved risk analysis for decision makers, with attention to improving access to appropriate financing instruments and the definition of pre-agreed plans and pre-identified anticipatory actions.
- 39. While the design is holistic, the FAO approach remained limited by the realities of its resource constraints and an appreciation of its own comparative advantages. Consequently, the EWEA initiative includes an appropriate mix of direct programme activities and strong inter-agency partnerships to address complementary areas of action better addressed by other specialized agencies.¹⁰

Finding 2. The EWEA initiative is consistent with a range of global commitments, but the design did not elaborate the specific contribution of INFORMED to these frameworks.

- 40. There have been a large number of international commitments over recent years with the broadly related objective of improving risk management. The INFORMED programme documents clearly demonstrated an awareness of these processes and situated EWEA as a contribution to these goals and processes. The EWEA strategy contributes to a number of international agreements and frameworks, including the Sendai Framework for Disaster Risk Reduction commitments to strengthen early warning systems, Paris Agreement commitments to reduce the risks of extreme events, and pledges to address disaster risk reduction as a cross-cutting necessity to achieve the Sustainable Development Goals (SDGs). More explicitly, FAO efforts on EWEA are aligned to commitments it made at the World Humanitarian Summit (WHS) 2016 to enhance delivery of early warnings related to agriculture, food security and nutrition to inform the design of shock-responsive social protection systems.
- 41. More substantive linkages to these diverse frameworks have only started to emerge during implementation. The argument was raised that these linkages are best developed when the

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⁹ See for example World Disasters Report, Focus on Early Warning Early Action, 2009, IFRC, Geneva.

¹⁰ Specific examples are developed in the following text.

activities and scope of the initiative has had time to mature. For example, strengthening and use of food security early warning to inform the design of shock-responsive social protection systems is still very much underdevelopment by FAO in line with its' WHS commitments. Engagement with FAO's climate and climate change resilience team has led to the inclusion of EWEA efforts in the report to the United Nation Conference of Parties (COP) in 2019 – but there is little evidence of linkages to field applications. FAO commitments on mitigating instability and conflict are not yet well developed under EWEA; nor is it clear how EWEA builds on the risk analyses pioneered under disaster risk reduction commitments. However, this finding needs to be contextualized against the resources available to the EWEA work and the limited practical application of some of the frameworks at country level.

Finding 3. FAO has a comparative advantage in addressing slow onset crises and food chain crises.

- 42. FAO EWEA efforts have been aligned with addressing the needs of people affected by natural hazards, particularly slow onset, climate related disasters such as droughts. The El Niño episode of 2015/16 provided an initial entry point for EWEA and resulted in development of the IASC SOP for the El Niño-Southern Oscillation (ENSO). FAO is also acknowledged as a leader in early warning of pests and diseases and this is reflected in the inclusion of support to the development and improvement of the Food Chain Crisis Management Framework (FCC) Early Warning Bulletin as part of INFORMED. Although more could be done to combine the analysis of FCC with other factors, these foci are already judged as highly relevant when compared to the importance of losses caused by these shocks and the expertise of FAO in early warning of these shocks and the corresponding livelihood responses.
- 43. Analysis undertaken by FAO suggested that floods have the greatest impact on the crop subsector while drought causes the greatest damage and loss in the livestock subsector. However, other agencies provide a strong complementary focus on EWEA in relation to rapid onset hazards. The International Federation of Red Cross and Red Crescent Societies, one of the main stakeholders in EWEA, is currently working in 31 countries. There is a potential good complementarity between the IFRC and FAO, the former with a focus on sudden onset, cold waves, heat waves, floods and cyclones. In Mongolia, for instance, the two agencies coordinated their efforts to avoid duplication in undertaking Early Actions in response to Dzud, through the livelihoods cluster in Mongolia, and learning webinars, in which both participated.
- 44. Informants were clear on the current limitations of FAO in responding to rapid onset crises, due to the inherent limitations of corporate systems. This would require significant organizational changes, including more rapid decision-making protocols, new standard operating procedures and faster procurement processes.

Finding 4. The role of conflict as a driver of food insecurity was appropriately considered, while conflict early warning *per se* was left to other agencies with the appropriate mandate and skills.

45. Conflict is acknowledged as a key driver of food insecurity and consequently there is an active debate on how it should be factored into the EWEA strategic approach. Conflict prediction is inherently complex and difficult, with high political sensitivities. Furthermore, conflict early warning is a specialist area where FAO lacks both mandate and skills. Most stakeholders consulted made no suggestion that FAO itself should attempt to provide

- conflict early warning, or develop its role beyond the work already performed by the team in SP5 working on conflict analysis.
- 46. However, an important challenge is to predict future food insecurity resulting from already observed conflict. There were suggestions that FAO could more systematically consider and incorporate the consequences of conflict into food security scenario analysis (Maxwell and Hailey, 2020). However, overall there was little evidence that FAO's context and conflict analysis had been used to inform the design of early actions. One example of the integration of conflict in EWEA occurred in the Philippines. During an early warning intervention in support of rice farmers suffering from drought, in an area prone to outbreaks of conflict, farmers were displaced from increased skirmishes. Activities were adapted to supported farmers with alternative livelihoods such as duck rearing, cash and household gardens as an alternative to a planned rice seed intervention.
- 47. More consideration could be given to less politically sensitive, small-scale conflicts, driven by resource constraints generated as a result of climate-related variations. For example, inter-communal conflict associated with scarcity of water and pasture which invariably are relatively easier to predict given knowledge of migration patterns and have less political fallout. FAO's experience in undertaking early action in Somalia may form a good example of how this could be done in other contexts. FAO also has various experiences of supporting technical work, related for instance to pest control, watershed management or use of natural resources, in recognition of their potential for preventing conflict. Such work has a significant forward-looking dimension which could have some use in framing Early Action.

Finding 5. Improving the quality and availability of food and nutrition statistics remains a high priority for many stakeholders, but this was not a primary goal of INFORMED.

- 48. Stakeholders expressed a strong and consistent demand for more regular, timely, reliable and accessible basic food and nutrition statistics. In many countries a lack of up-to-date and quality data was reported as a major constraint. This issue was clearly addressed in the INFORMED design in the first work area of "analysis-based advocacy for more investment by countries and other stakeholders in primary data collection and related analyses". The relevance of this activity was reiterated by the INFORMED 2017 mid-term review, which noted that of the 65 countries included in the 2017 Global Report on Food Crises, there was no data or other evidence available to estimate food insecure populations in fourteen countries (FAO, 2017).
- 49. Data is clearly a fundamental enabler for the analyses carried out by both EWEA and resilience index measurement and analysis (RIMA). Many stakeholders also highlighted the value of direct access to the basic datasets not just the analytical products produced by FAO to support their own analyses to inform a range of policy and programming decisions. However, this activity was not prioritized during implementation and the reasons for this decision were not entirely clear to the evaluators. Possibly a decision was made to concentrate on the more attainable programme outputs. Several stakeholders noted that (under Output 1) the concentration had been on the more efficient analysis of existing data, rather than supporting the generation of quality data or promoting open access.

¹¹ The GRFC pays attention to identifying data gaps and making related policy recommendations.

3.1.3 Use of EWEA products

50. A summary of the main EWEA reports produced over the programme period is presented in Table 2 below. The feedback received on the use of these various products is summarized in this section.

Table 2: EWEA Outputs

Year	Number of quarterly EWEA reports	Number of improved FCC reports	Country level EWEA plans	Number of SFERA EA window activations
2015	4	2	5	
2016	3	4	3	1
2017	4	4	4	4
2018	4	4	2	5
2019	4	4	10	9
Total	19	18	24	19

Source: INFORMED Monitoring Reports 2015-2019 and EWEA team data

Finding 6. The awareness and use of the Global Report on Food Crises and quarterly EWEA report were particularly high.

51. Overall, awareness amongst survey respondents of FAO EWEA products varied with the quarterly EWEA report and the EWEA country plans most commonly known. This awareness was particularly strong at global level, amongst respondents who worked outside of FAO. The patterns of awareness were mirrored by the use of information for decision-making (see Figure 3).

Figure 3: Awareness and use of EWEA Products (weighted average out of 10)



Source: From OED survey results (see Appendix 3)

52. An EWEA Communications Strategy was developed in 2017 to increase visibility and advocacy whilst bolstering evaluation frameworks. Furthermore communication plans were developed and implemented in Mongolia and Sudan, including the development of videos

and human interest. The plans were well developed and highlighted specific target audiences for outputs, including the general public, donors and other stakeholders (FAO, 2017 and 2018).

Finding 7. The quarterly EWEA report is valued primarily as a coordination and advocacy tool.

- 53. The original programme design brought together disparate FAO early warning systems into a common, consolidated analytical product, namely the quarterly EWEA report. As a global product the report consolidated and prioritized threats across countries and different shocks. The report added value through greater analysis of the impact on people and livelihoods, with recommendations on actions to mitigate against forecast hazards. ¹² There was specific appreciation for the leadership provided in specialist areas of addressing pest and diseases, such as the current locust infestation and the previous armyworm attacks. The major value added of the EWEA report lies in its combining information sources (e.g. EMPRES and others) that allowed determining the impact of e.g. the locusts on peoples livelihoods, or assessing risks, and forming an early response on that basis.
- 54. The evaluation survey found that the majority of respondents thought the quarterly report was of good quality and added significant value when compared to alternative products. Stakeholders indicated a high confidence in the data generated (83 percent) and the usability of the information products for decision-making (83 percent). The reports were judged by stakeholders to be concise and well presented.
- 55. Interviews and the online survey found that overall the quarterly report was an important advocacy tool. Examples of advocacy for EWEA include presentations of the report at the periodic Working Party on Humanitarian Aid and Food Aid (COHAFA) meetings of the European Union Member States, where participants credited the report with influencing overall donor support to EWEA initiatives. Inclusion of crises in the quarterly EWEA report supported local advocacy and fundraising. Smaller donors stated that the report encouraged investments in EWEA at an unearmarked level through FAO and other channels.
- 56. The quarterly EWEA report also served as an important coordination tool. The quarterly EWEA report provided a consolidated statement by FAO on emerging risks, which in turn fed into broader coordination platforms. For example, at a global level the quarterly report is used to feed into the biannual EWEA report of the IASC Reference Group on Early Warning and Preparedness to the IASC Emergency Directors Group meeting. In West Africa the quarterly EWEA report was regularly presented and discussed at the Regional Emergency Preparedness and Response Working Group (set-up to mirror the IASC group). Alongside other information sources, this was used to identify priority countries for monitoring or action.

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¹² See for example 2018 EWEA User Survey.

Finding 8. The process of compiling the EWEA report, rather than the report itself, was most helpful in prompting action.

- 57. There was mixed feedback on the use of the quarterly report for programming decisions. Internally it is used by FAO as an input to allocations from the SFERA window. Several respondents noted that the schedule of publication did not allow a sufficient lead time to mobilize a response. However, the process of compiling the report, with an ongoing dialogue between headquarters and field, was important in triggering action rather than necessarily the final report.
- 58. Externally there was less evidence that the report was used to inform specific programming decisions. Several stakeholders remarked that detailed decision-making was primarily driven by national or local information and analyses. Some recipients (such as smaller donors) lacked the technical expertise or absorptive capacity to make specific use of the reports. Other actors including the World Bank remained unsure of how to respond within the limitations of their developmental tools.
- 59. Consideration is already being given to moving from a printed quarterly report to an online version. This would address concerns raised on the timeliness of the report, especially for users at field level. Ultimately the desire would be to move towards a dynamic version of the report.

Finding 9. The EWEA Country Toolkit has helped to guide the development of country EWEA plans, but the effectiveness of these plans in triggering early action is so far largely untested.

- 60. The EWEA Country Toolkit has been applied in multiple locations. Examples included: Ethiopia (who are currently developing a FAO EWEA plan), Timor-Leste (to support the development of the drought disaster risk management plan for the government), Fiji (to set-up a drought EWEA system with the government), Democratic People's Republic of Korea (as the base of training to the national government to support the development of EWEA plans for both floods and drought). The Toolkit has been used more recently in Viet Nam where the European Civil Protection and Humanitarian Aid Operations (ECHO) has funded the first phase of development of an EWEA plan for two drought prone regions in the country. In Central America, in 2020 FAO Subregional Office for Mesoamerica (SLM) adapted the global guide into a practical guide with a specific focus on the Dry Corridor (El Niño phenomenon affecting Guatemala, Honduras, Nicaragua and El Salvador) to support the development of early warning plans.
- 61. Lessons from the Sudan pilot suggested that factors facilitating the use of the Toolkit included a functional early warning system (ideally with FAO participation), and good relationships with Government and other agencies such as WFP.
- 62. It was still early to assess the effectiveness of the country plans themselves as many are yet to be activated. A desk review of several of the EWEA plans found that the indicators and triggers were well developed in the text, but there was little detail on the early actions, timelines for action and the implementation partners. ¹³ In the case of Sudan it was reported that the plan had helped to raise money early, but it was questioned whether it led to a different, anticipatory response.

¹³ Kenya and the Philippines.

Finding 10. Learnings from EWEA pilots have supported advocacy efforts. There is strong demand for greater knowledge to support the design and delivery of programmes.

63. The focus of learning activities has been largely on producing evidence for advocacy, to generate agreement and buy-in from donors, set global targets and ultimately to encourage further investment in EWEA. The EWEA impact studies that incorporated return on investment (see box 2) have been highly valued internally and externally. FAO was credited with presenting clear evidence at a time when few others – notably IFRC and the START network - were providing this analysis and evidence on the cost efficiency of the EWEA approach.¹⁴

Box 2: EWEA impact studies

An impact study methodology is described in draft guidelines as part of the EWEA Country Toolkit. These describe four analyses required to assess the impact of EWEA, namely: i) return on investment: a comparison of project costs and project direct benefits; ii) avoided cost of emergency response: an estimation of the impact of early actions on reducing or avoiding the cost of standard emergency response iii) food security and nutrition benefits: an assessment of the impact of early actions on the food security and nutrition situation of beneficiaries; iv) beneficiaries' perceptions: an analysis of the qualitative data collected in interviews and discussions with beneficiaries and key informants.

EWEA Country Toolkit – Analysing the Impact of Early Actions

- 64. While this has been extremely helpful in making the general case for EWEA, as noted in a recent study "greater attention now needs to be paid to producing evidence in a way that can lead to improvement in the design and delivery of EWEA programmes" (WFP, 2020). A number of unmet needs emerged in evaluation interviews, including:
 - i. Stronger crisis timelines understanding the trajectory of events and defining windows for different types of response including cash transfers and shock responsive social protection.
 - ii. A better understanding of avoided losses through protected lives and livelihoods, and faster recovery, and avoided or mitigated physical and psychological suffering.
 - iii. Role of early action in preventing and mitigating conflict and social tensions.
 - iv. Impact of early action on longer term resilience building.
 - v. System accountability, including the accuracy of forecasts and the effectiveness in triggering action.
- 65. The FAO Evaluation of Transitions noted that "Country programmes reviewed are rich in relevant interventions that can potentially produce benefits to affected populations. However, impact on livelihoods of individual FAO activities is seldom verified, due to inadequacy of monitoring mechanisms, always focused on timely delivery of outputs,

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¹⁴ Five Impact studies were produced from the Horn of Africa, Madagascar, Sudan, Mongolia and Columbia. The return on impact studies enabled a better understanding of what actions worked, collected beneficiary perceptions and calculated a cost benefit ratio. These studies supported both lesson learning and provided evidence for the effectiveness of the EWEA approach. Guidance for the impact studies methodology was also produced (FAO, EWEA Country Toolkit – Analysing the Impact of Early Actions – undated).

neglecting outcomes or broader impact on livelihoods" (FAO, 2014). Similar findings come from country evaluations referencing the need to rebalance the compliance focus of FAO monitoring and evaluation (M&E) with equal attention given to outcomes and impact and to ensure that the M&E system feeds into learning as well as fulfilling accountability requirements (FAO, 2013).

Finding 11. The Global Report on Food Crisis is widely viewed as an important and valuable additional source of information and used for advocacy and prioritization.

- 66. INFORMED has supported the development and publication of a new global food security report the Global Report on Food Crises. Four editions have been produced starting in 2017. The 2017 report provided estimates of acutely food insecure populations in a total of 48 countries with the number of countries covered increasing to 59 countries in 2019. More recently the regional chapters have been spun-off into separate regional reports for example, a GRFC for the Horn of Africa was published in 2019. Stakeholders identified two main additionalities of the GRFC report over pre-existing products. First, it focuses on the specific issue of emergency-driven, acute food insecurity.¹⁵ Second, it draws information from multiple countries into a single reference document.
- 67. A major use of the publication was keeping acute food insecurity high on the global agenda. The publication of the report was accompanied by several high-profile launch events which brought senior and high-level stakeholders together, and generated considerable attention amongst donors, governments and media. Second, the report assisted in the prioritization and allocation of resources both by donors (where it amalgamated the analysis of acute food insecurity in one place) and for regional economic organizations such as IGAD (who welcomed the regional GRFC for this purpose). Third, the report is seen by some to have the potential albeit not yet realized to monitor progress in addressing acute food insecurity by examining trends over time. However, inter-annual comparability was viewed as problematic due to changes in coverage each year.

Finding 12. There are divided opinions on the added value of deepening the GRFC analysis.

- 68. Several technical actors reported concerns about the uneven quality of the country level analyses. Stakeholders felt that the quality of analysis by country was highly variable and the GRFC risked according an undeserved level of credibility across all countries. As one stakeholder commented "In practice quality control has to happen at the country level and cannot be "second-guessed" later". However, even where the actual figures in the GRFC were disputed, the report was still perceived as useful in sparking a debate on the correct figures.
- 69. Some stakeholders advocated for the report to become more analytical. For example, including an analysis of the emergency responses that had followed the publication of the (IPC) situational analysis. However, opinion was heavily divided on this point and others felt that this was repetitive of existing reports, such as the country appeal documents and cluster reporting. Other stakeholders called for real time updates on the situation in a rolling "real time" report. There are inevitable delays with an annual report and decision makers asked for more timely information, even at the risk of it being less robust.

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¹⁵ The FAO State of Food Insecurity (SOFI) report already provides a well-established annual estimate of chronic food insecurity.

3.1.4 Factors influencing effectiveness

Finding 13. The utility of EWEA is constrained by the capacity of early warning systems to provide predictive forecasts.

- 70. The EWEA process depends heavily on existing FAO early warning systems and products including IPC, GIEWS, FCC-EMPRES to provide an overall forecast analysis coupled with recommended early actions. Constraints were evident in the predictive capacity of these systems.
- 71. The evaluation found a strong consensus on the limitations of IPC as an early warning tool. The IPC Acute Food Insecurity (AFI) scale was primarily designed to analyse the current food security situation and provides a gold standard for emergency response decisions.
- 72. The most relevant IPC product in the context of EWEA are the IPC projections. However, the quality and reliability of the IPC projections are widely questioned. Guidance to develop the projections was reported as lacking standardization with the analyses themselves reportedly produced as an after-thought to the AFI. In many contexts, IPC data is collected infrequently, i.e. sometimes once a year making it less useful for making forecasts. More fundamentally there are questions over the extent to which forecasts are straight-line projections of the current situation rather than scenario-based analyses drawing on early warning signals. There has been no systematic attempt to retrospectively assess the accuracy of these forecasts.
- 73. This issue was repeatedly raised by the IPC evaluation, which noted that "What is apparent is that the AFI is not currently fulfilling an early warning function well compared with its ability to capture the current status of food insecurity. Very few stakeholders (from donors, NGOs, UN agencies or governments) mentioned the early warning role of the IPC as a particular strength or value added". The report went on the recommend that "The GSP should commission research to assess ... whether the analytical method used for the AFI is appropriate for EW, whether it requires adaptation, and ultimately whether the AFI can fulfil both roles of classifying the current status and providing early warning through projections. (FAO, 2019) There is a general agreement that, at best, IPC projections should be situated as one part of a wider set of early warning tools alongside risk monitoring and probabilistic scenarios (Maxwell and Hailey, 2020). While the IPC GSP is addressing the previous evaluation findings, stakeholders were yet to observe tangible improvements.
- 74. The EWEA quarterly report also draws on GIEWS work including the i) Agricultural Stress Index System (ASIS); ii) Price Analysis module to highlight price anomalies; iii) Crop and Food Supply Assessment Missions (CFSAMs); and iv) GIEWS global analysis of food balance sheets that provides an overall analysis of countries' food self-sufficiency.
- 75. When available, the CFSAMs are used as part of EWEA analysis as they were for example in the Mongolia analysis (FAO, 2018). However, they are only conducted in a handful of countries per year and only provide a snapshot of the situation rather than forecasting. The ASIS, which monitors drought using remote sensing, was found to be most useful in countries where it has been tailored and calibrated according to the context but so far this is limited, for example, Kenya (FAO, 2016) and Sudan (FAO, 2017).
- 76. Some stakeholders identified the frequency and timeliness of GIEWS reporting as challenges to its utility for EWEA. As a regular programme there has been no requirement

to evaluate the use and utility of GIEWS products nor were there any recent user surveys the evaluation could draw on.

- 77. The EWEA report drew on the FCC-EMPRES results to integrate the potential impact of animal disease on the food chain and the projected number of food insecure respectively. There was considerable appreciation for FAO's unique contribution in this specific area. INFORMED supported the early warning bulletin of the FCC, which is potentially predictive of future food insecurity, as mediated through pest and disease outbreaks but currently lacks a methodology to quantify food security impacts of such threats.
- 78. At the country level, FAO early warning information is combined with other national sources, e.g. hydro-meteorological data. However, hydro-meteorological agencies do not generally have the mandate or expertise to do impact-based forecasting and countries such as those in the Sahel have very low capacity. Several stakeholders also noted that national early warning capacities had degraded for example SADC noted that the operational capacities of national early warning systems in southern Africa had diminished over the last decade. Historically FAO has been a key supporter of national EWS, but a drop off in support was noted in recent years.

Finding 14. Defining thresholds and triggers for early action is critical, but complex and agency-specific.

- 79. There is a long running debate on the use of trigger mechanisms to translate early warning signals into clear decision points for early action. Determining thresholds justifying a preventative response based on the probability of a crisis has been a key constraint to timely action. Consequently, there have been attempts by several agencies to identify clear thresholds that automate the release of funds and predictive mechanisms.
- 80. At a strategic level FAO also used a mixed method approach, contextualized to the local situation. FAO's trigger mechanism combines 'hard' thresholds (e.g. climate forecasts, food security forecasts, remote sensing data) with qualitative information and expert judgement. All the evidence suggests that this is a pragmatic and sensible strategic approach and aligned to best practice. There is a need for more experience of using the FAO EWEA country defined triggers in practice and they largely remain to be tested.

Stakeholders pointed to the complexity and challenges of operating an effective trigger mechanism and this remains an important area of learning. It is apparent that a multitude of triggers may be needed, tailored to the needs and mandate of specific organizations and to the specific actions. The need for sequential triggers, with different agencies focusing on different types of responses, was also identified by the evaluation (see Box 3).

Box 3: Anticipatory action in Somalia

The case of Somalia illustrates the complexity and layering of agencies and mechanism that may contribute to early or anticipatory action.

Examples included:

- i. community-based responses including the use of community savings groups;
- ii. agency level emergency response funds controlled by NGOs, NGO consortia and United Nations agencies;
- iii. crisis modifiers which enable implementing agencies to redirect resources towards early action;
- iv. additional response funds of donors (e.g. DfID Internal Risk Facility, IRF) or inter-agency response funds (e.g. Central Emergency Response Fund (CERF), World Bank Famine Action Mechanism (FAM)).

Each of these sources have their own characteristics in terms of timeliness, the volume of funds available and the types of activities that can be supported. Consequently, a nuanced set of triggers is needed and no one single trigger will be appropriate. Several NGOs reported developing triggers contextualized to the local situation and argued that this level of specificity is required for a meaningful link to livelihood specific interventions.

81. Practical experience from longer established efforts also pointed to unresolved challenges. For example, the FAO managed Food Security and Nutrition Analysis Unit (FSNAU) IPC project in Somalia has developed a "dashboard" with DfID support. The dashboard complements the seasonal IPC assessments with near real time data on a wide range of indicators. While users appreciated the additionality of the tool, they reported continuing difficulties in how to apply it as it lacks clear thresholds for action. At best it is designed to trigger a discussion and further assessment (see Box 4).

Box 4: Food Security and Nutrition Analysis Unit (FSNAU) dashboard

FSNAU developed the "dashboard" as an attempt to corral forward-looking indicators into a single data "signal" that would indicate a worsening situation. Lessons learned from the 2011 famine suggest that a tool is needed to provide a more regular snapshot of the situation and that would be connected to triggers for decision-making and easier to understand by decision-making bodies such as the United Nations Humanitarian Country Team.

The dashboard presents real time updates of a range of food security and related indicators, including WASH and protection. These are consolidated with an interactive dashboard enabling users to explore and visualize the data.

It is designed to be discussed within existing inter-agency coordination mechanisms, with the objective of triggering further assessment where the situation is deteriorating. This process has yet to be institutionalized.

Feinstein International Center and Centre for Humanitarian Change. 2018. Constraints and Complexities of Information and Analysis in Humanitarian Emergencies Evidence from Somalia

Finding 15. EWEA products do not so far analyse the needs of – or suggest tailored actions for -vulnerable groups including women.

- 82. In general, vulnerable people and those in marginal groups may face an increased risk of death, injury, abuse and deprivation in crises due to pre-existing and crisis-related barriers, discrimination and stigmatization. Consequently, an inclusive approach to EWEA requires that the most vulnerable people in affected communities are included in the design, implementation, monitoring and funding decisions of programming in anticipation of a crisis. However, the FAO EWEA analysis and products were generally acknowledged to integrate gender. Underlying this is the fact that the early warning products also lack a disaggregated analysis of impacts by gender. For example, the IPC analyses occurred at household level and does not report on gendered food insecurity.
- 83. The EWEA team have acknowledged this gap and have engaged with the FAO gender team in drafting an "Inclusive Approach to Anticipatory Action", in order to make anticipatory action more inclusive and to address commitments such as "leaving no one behind". This is in the early stages of development, but shows promise.
- 84. Many of the early actions undertaken by FAO target women and other vulnerable groups as beneficiaries. However, this appeared to reflect standard FAO guidelines rather than being attributed specifically to the EWEA initiative. For example, targeting female-headed households and those with disabled, elderly or pregnant members in Madagascar; equal inclusion of men and women in a drinking water project in La Guajira; and improving access to milk from livestock for children and women in Somalia.

Finding 16. Internal financing sources have been essential in enabling FAO to pilot early actions.

- 85. In concert with the establishment of the EWEA initiative under INFORMED, FAO established a new USD 3 million funding early action window within SFERA. This includes both an "Organizational preparedness window" and financing of anticipatory actions that prevent or mitigate the impact of an anticipated event on the food security of vulnerable people. Allocations from the USD 3 million are capped at maximum USD 400 000.
- 86. The SFERA early action window was activated 18 times between 2017-2019 (see Annex E for the list of countries that accessed the SFERA window). Technical support from the EWEA was reported as very important and effective in assisting countries to realize funds from both tracks. Informants suggested that all proposals to the early action window of SFERA have been accepted and this was predominantly due to the fact that proposals are formed through the support of the EWEA team at headquarters level engaging, and in some cases undertaking field level support to country offices.

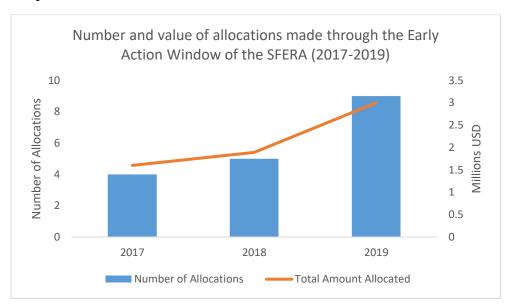


Figure 4: Special Fund for Emergency and Rehabilitation Activities (SFERA) allocations for early action

Source: Data provided by EWEA team

87. The ability to access such funds was seen as essential in allowing FAO to operationalize early actions. Examples of eligible actions include support to: livestock (de- and restocking, disease control, water supply, nutrition and shelter ahead of drought, for example); crop production (forecast-based climate advice, adapted agronomic practices, early water resource management, input supply, plant protection, crop storage); fisheries and forestry (supply of fishing gear, fire risk management); and rural income and employment (safety nets; alternative livelihoods).¹⁶

Finding 17. There is a lack of clarity between early action as "rapid response" and as "forecast-based anticipatory action".

- 88. Different characterizations were used by stakeholders in defining what constitutes an "early action". Most EWEA practitioners shared a common vision of the importance of "anticipation". At the heart of the concept is generally a core idea of utilizing weather and other forecasts to trigger funding for concrete, pre-determined actions prior to a shock or before a shock translates into acute impacts. However, for some stakeholders "The response mindset of the sector makes in inevitable that early action will sometimes be understood or framed more like preparedness or early response." (FAO, 2019).
- 89. There is a critical period between preparedness and response, when early actions can be taken. Different partners interpret it differently to range from preparedness actions, assessment, deployment of staff, to actions to mitigate the potential impact of a hazard on lives and livelihoods (WFP, 2020). With a number of global initiatives gaining momentum there is "a pressing need to formalize the structure to ensure coherence and collaboration in advancing anticipatory efforts" (Early Action Focus Task Force). Confused messages on this may result in a loss of credibility with donors who have the expectation that livelihoods

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¹⁶ FAO's Special Fund for Emergency and Rehabilitation Activities (SFERA) and the Early Action window.

- and food security are protected through early action, rather than the consequent needs addressed through early response.
- 90. To address this OCHA initiated the formation of the early action Task Force in September 2018 to provide a platform for information-sharing and FAO has been a key stakeholder in this platform. More recently, FAO hosted an inter-agency level workshop bringing together all the key stakeholders in January 2020, from which a joint note on Anticipating Food Crisis has been drafted and awaits final agreement.
- 91. There was evidence that FAO programme staff lack a clear distinction in their corporate early actions from rapid response. For example, in Colombia EWEA appeared to be more of a response to a displaced population, rather than an anticipatory action to prevent displacement. What also emerged in conversations with FAO programme staff was that the EWEA initiative was in some cases being deliberately "stretched" to compensate for limited organizational capacities and instruments to work comprehensively across the disaster risk management cycle in areas of preparedness and response.

3.1.5 Sustainability

Finding 18. FAO has contributed strongly to the promotion and sustainability of EWEA at global level.

- 92. EWEA work under INFORMED has placed FAO as one of the leading organizations in EWEA. Stakeholders noted that FAO is "ahead of other agencies on the conceptualisation of EWEA" and that "the fact that FAO has dedicated resources and teams on this issue has allowed FAO to lead conversations". The EWEA team was viewed as credible and as "a thought leader" by the main collaborating institutions.
- 93. FAO has played an important role in coordinating EWEA efforts both at global and country level. The EWEA team has effectively engaged externally through a number of coordination forums. These include:
 - i. IASC analysts group of the Reference Group on Risk, Early Warning and Preparedness;
 - Early Action Task Force coordination of partners including IFRC, START NETWORK, WFP and German Red Cross;
 - iii. participation in global and regional EWEA platforms, including an EWEA workshop hosted by FAO in January 2020.
- 94. These coordination efforts have had tangible results that collectively promoted increased and sustained attention to EWEA by the global community. The Inter-Agency ENSO SOPs, developed jointly with OCHA, gave the international community its first ever framework for a common monitoring, warning and early action planning for El Niño/La Niña events. Visibility for, and communication of EWEA priorities has been promoted through joint products including the IASC EWEAR report and joint advocacy efforts aimed at ECOSOC. Conceptual clarity is being promoted, for example a joint note has been drafted on "Addressing challenges to anticipating food crises".¹⁷

¹⁷ This remains in draft and has not been officially released.

95. FAO has also contributed to the establishment of the Risk-informed Early Action Partnership (REAP), which is a major step forward in promoting and sustaining EWEA. REAP was launched at the United Nations Secretary General's Climate Action Summit on 23 September 2019, with more than 30 partners committing to vastly increasing the coverage of early action. The target is to cover 1 billion more people by financing and delivery mechanisms connected to effective early action plans by 2025 (Climate Action Summit, 2019.

Finding 19. Through appropriate partnerships, FAO has supported efforts to develop and institutionalize system level financing for EWEA.

- 96. Stakeholders pointed to an unwillingness of governments and donors to fund early action as a system-wide issue, with United Nations agencies generally lacking resources for early action. As one report noted "Although there is increased recognition that early action following quality forecasts can reduce humanitarian needs after extreme weather events, financing is fragmented, agency-specific and small-scale" (*ibid*). To address this, the EWEA initiative has coordinated effectively with other key initiatives on EWEA financing through the World Bank Famine Action Mechanism (FAM) and OCHA.
- 97. The World Bank is developing the Famine Action Mechanism as a global mechanism dedicated to supporting interventions in famine prevention, preparedness and early action. The FAM seeks to formalize links between early warnings, financing and implementation arrangements (FAM). FAO has collaborated with the World Bank on this. Two key areas of collaboration were on triggers/thresholds and the use of artificial intelligence as well as thinking through crisis timelines to understand what actions could have been taken earlier to avert a crisis. FAO's contribution to this process was highly valued, although the mechanism is yet to become fully operational.
- 98. The United Nations Central Emergency Response Fund (CERF) is exploring a role in anticipatory action (ODI, 2019). While the exact role and mechanisms have yet to be defined, explicit efforts are underway to explore through pilots the role that CERF can have. FAO has supported the use of CERF for Anticipatory Action at both a global level and in Somalia where the first pilot is being set-up by ensuring the food security cluster had developed triggers, timelines and action plans for early action. In general, informants were supportive of CERF anticipatory use citing the scale of funding and the convening and coordination role it incentivises across sectors and organizations and promoting mainstreaming of the approach; while others questioned the effectiveness of what would be a complex (inter-agency) and potentially bureaucratic process.

Finding 20. EWEA has contributed to capacity building, but national ownership of EWEA processes is so far very limited.

99. The initial focus of the EWEA initiative was on embedding the approach within FAO corporate structures and processes, including FAO country offices. This was necessary given that the approach was new and needed to be accepted and understood within the organization. At the same time FAO staff indicated a keen appreciation of the need to entrench the approach within government systems, reflecting the primary responsibilities of States for the welfare of their citizens and ensuring a pathway towards longer term sustainability.

- 100. Some capacity building of national institutions has taken place under the INFORMED programme. The EWEA Country Toolkit developed in 2017 has provided a framework for collaboration with in-country stakeholders. The process of developing country EWEA plans engaged local actors including national hydro-meteorological offices, national emergency management agencies, United Nations organizations and civil society actors, and inevitably transferred some of the methodological and technical knowledge required for EWEA. There was also some emerging direct experience of institutionalizing the resulting approach with local authorities. For example, FAO is working to institutionalize EWEA into the Viet Nam disaster management authorities in partnership with the German Red Cross and other international NGOs.
- 101. An increasingly important strand in the EWEA approach is linking government-led shock responsive social protection mechanisms to EWEA. Experience of institutionalizing the approach at regional and country level is also emerging through ECHO funded scale up EWEA and shock responsive social protection in selected Association of Southeast Asian Nations(ASEAN) countries (see Box 5).¹⁸

Box 5: Linking EWEA to shock responsive social protection

Building on an European Civil Protection and Humanitarian Aid Operations (ECHO) funded FAO pilot on EWEA in Viet Nam, as well as IFRC efforts in the region, ECHO is supporting the scale-up EWEA and Shock Responsive Social Protection in select Association of Southeast Asian Nations (ASEAN) countries that are underpinned by innovative use of climate and disaster risk information to become new approaches in the implementation of the ASEAN Agreement on Disaster Management and Emergency Response. The proposal will be implemented by a Consortium of five United Nations agencies (United Nations Office for Disaster Risk Reduction (UNISDR), WFP, FAO, UN Women and UNICEF), the Red Cross and Red Crescent Society and NGOs. The intention is to consolidate the Forecast based Financing /EWEA pilots and support the implementation of the ASEAN Guidelines and country Roadmap to Establish SRSP Systems in ASEAN and select countries (Cambodia, Myanmar, Philippines and Viet Nam). These interventions will be supported by capacity building for use of climate information for enhanced risk analysis, forecast and early warning, identification of financial options. All will be facilitated by strengthened regional coordination and collaboration for knowledge sharing, developing coherent and standardized tools and training materials and joint advocacy.

FAO. 2019. Scaling up Forecast based Financing/Early Warning Early Action and Shock Responsive Social Protection with innovative use of climate risk information for disaster resilience in ASEAN. Rome.

102. FAO has an organizational structure and governance system that closely links FAO to governments. Still, to consider appropriate approaches to enhancing national ownership, FAO can draw from the experience of the IPC. Practice has shown that in some specific humanitarian situations, there can be a conflict between the objectives of delivering an impartial needs-based assessment and national ownership. Furthermore, national governments are currently the least significant users of the IPC for decision-making with implications on scheduling activities on-budget. This suggests that nuanced approaches to institutionalization may be required, as hinted in the IPC mid-term review "While the inappropriateness of a one-size-fits-all approach to institutionalization may be generally accepted within the GSP, there is a continued lack of clarity about what institutionalization means, and the strategy to achieve it in different contexts".

¹⁸ Although strictly speaking these efforts are not under the INFORMED programme, they are technically supported by the EWEA team.

Finding 21. A wide range of partnerships have been essential in developing pathways to effective institutionalization.

- 103. FAO has a well-established and generally effective strategy of working through the various Regional Economic Communities as an entry point for analytical support to food and nutrition security. This includes historical support to early warning systems (for example work in the SADC region) and to the IPC process (for example working in conjunction with CILLS to introduce the Cadre Harmonisé in West Africa). However, there is little evidence of this channel being used in support of EWEA at country level.
- 104. The main regional engagement has been with IGAD in supporting the establishment of the IGAD Food Security, Nutrition and resilience analysis Hub (IFRAH). Under this umbrella, FAO has provided technical support to the operation of the regional Food Security and Nutrition Working Group (FSNWG). This support has been highly appreciated and FSNWG has been revitalized. IFRAH and the FSNWG played a key role in the desert locust response in 2019. This included aspects of technical analysis, coordination, information sharing and communication, and fund mobilization. However, these results have not yet been replicated at the country level.
- 105. Collaboration with other agencies was reported as very positive. IFRC has been a key collaborator in various countries including Mongolia and the Philippines, to coordinate on triggers, thresholds for response, geographical coverage of early actions as well as advocacy with government.¹⁹ While there has been limited success in engaging with the global Food Security Cluster (gFSC), despite FAO's leadership role, collaboration with clusters at country level were noted. In Mongolia, plans for early action were discussed and agreed in the agriculture cluster and in the case of Somalia FAO drove the development of early action plans in the Food Security Cluster in readiness to programme CERF funds. In Sudan, FAO, WFP and OCHA established the EWEA Technical Working Group together with the Sudan Food Security Technical Secretariat and the Sudan Humanitarian Aid Commission. This was a significant partnership effort which also contributed to institutionalization of EWEA.

The new GNAFCPP aims to build capacity for carrying out EWEA work at regional and country levels. The inception note specifies that "EWEA will seek to increase the quality, coverage and reliability of risk analysis through capacity building at country level and institutionalization at regional level, as well as through improving global risk analysis and reinforcing links with IPC and resilience analysis" (FAO, 2018). In addition, the recently sourced three-year funding from the German Government focusses on capacity development and scaling up EWEA (see Box 6).

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¹⁹ IFRC are currently working in 31 countries on forecast-based financing.

Box 6: Support from Germany for EWEA capacity development

A recent successful application for funding to the German government focuses on scaling up efforts in EWEA over three years and totals USD 5 million. It proposes the following goals: i) in selected priority high risk countries, FAO has an established and fully functioning EWEA capacity and is able to anticipate disaster impacts with rapid deployment of early action funds; ii) FAO has a robust and dynamic risk analysis system linking country, regional and global levels, and producing effective and actionable agriculture and food security early warnings for FAO and partners; iii) FAO is a reference institution for agriculture and food security EWEA, helping build capacity of humanitarian partners as well as national institutions, informing policies and legislation (where appropriate); iv) FAO continues to be a key actor in advancing the global agenda on anticipatory action, including by generating key evidence and learning, and promoting partnerships and joint advocacy (FAO, 2019). The proposal includes increasing FAO's capacity at country and regional levels to achieve these goals.

Finding 22. Progress towards institutionalizing EWEA within FAO is partial and incomplete.

- 106. The EWEA pilot phase has created a solid basis to move towards embedding the initiative within corporate structures and processes. However, there is no documented strategy for institutionalizing EWEA work corporately within FAO. The accountability of field offices to management for implementing EWEA was low and depended on individual judgement and initiative. Core challenges in internal standard operating mechanisms for logistics and procurement to allow adequately scaled and timely early action, have not been addressed.
- 107. The EWEA initiative has been developed with relatively low levels of budget and human resources. These resource levels have been commensurate with piloting the approach, rather than the full-scale roll-out. This would need to be addressed in taking the approach forward as a corporate tool, with close consideration of the necessary levels of technical assistance and financial support required at headquarters, regional and country levels. The requirements are not just for developing an EWEA plan, but also the ongoing responsibility for updating and implementation.
- 108. Ownership of the EWEA initiative within FAO's regular programmes has only been partially achieved. In some areas it is embedded for example in the work of EMPRES but in other areas the integration of the approach within existing workstreams requires attention. For example, the GIEWS team perceived their role to stop at the point of delivering early warning and have not integrated key lessons from EWEA to make their analysis more actionable. The global Food Security Cluster through the national clusters has a highly relevant role in bringing stakeholders together to develop and implement plans as well as institutionalization of EWEA plans and approaches into the humanitarian system more widely. However, collaboration with the gFSC remains nascent and weakly developed at implementation level.²⁰
- 109. SFERA funds have only been sufficient to pilot small-scale projects in selected countries and are not currently sufficient to meet demand from a larger number of countries, or to bring the approach to scale. The availability of funds if further stretched as the organizational preparedness window has been used to finance the roll out of the EWEA system in Pakistan and technical support provided to the early action implementation in

²⁰ Despite this, some national clusters have supported the development of implementation partnerships at country level.

Colombia, Kenya and the Niger funded the analytical capacity underpinning the quarterly global EWEA report on food security and agriculture.

3.2 Resilience analysis

3.2.1 Strategy and activities

- 110. Programme Output 3 states that "Resilience programming is improved through the application of a common methodology to measure resilience, and through knowledge sharing mechanisms". Under this there were three main areas of work. This chapter presents the findings in relation to two work areas falling under this output of i) supporting regional and national technical capacities to conduct resilience measurement and analyses at country level by applying the RIMA methodology; and ii) improving the RIMA methodology to respond to different challenges related to decision-making processes. Findings on the other area of work under this output on knowledge management are presented in Chapter 3.3.
- 111. In 2008 FAO proposed an econometric approach, RIMA, for measuring resilience (Alinovi, Mane and Romano, 2008).²¹ RIMA I analyses were conducted in a number of countries. Based on the experience of using RIMA I, the methodology was subsequently simplified and improved over the period 2012–2016, in conjunction with the FSIN Resilience Measurement Technical Working Group. RIMA II was launched in 2016. RIMA II includes "direct" and "indirect" measures of resilience to support resilience programming, monitoring and impact evaluation:
 - i. A direct (or descriptive) measure of resilience designed to identify households more or less likely to resist a shock by estimating their "resilience capacity". The direct approach calculates a Resilience Capacity Index (RCI) based on the pillars of access to basic services; household assets; household social safety nets; and household adaptive capacity.
 - ii. An indirect (or inferential) measure of resilience, which employs regression analysis for assessing the effects of shocks on, and determinants of changes in resilience and food security. The indirect approach is designed to analyse the determinants of food security loss and recovery.
- 112. Further adaptations to the tool included the introduction of RIMA "Excel", that simplified the calculation of the RCI to dispense with the necessity of specialized statistical expertise and STATA software. The RIMA "Short" questionnaire simplified the data requirements. Optional "modules" have also been added to gather data on: subjective perceptions of resilience; conflict; social protection; local economy; and other context-specific features.
- 113. INFORMED collaborated with regional institutions (including IGAD, African Union, CILSS and SICA) and national governments to establish and enhance resilience analysis capacities. This included the creation of two main regional hubs in Africa (Dakar and Nairobi) and Resilience Measurement Units (RMU) at country level (including Uganda and South Sudan). As part of the capacity building effort more than 50 trainings were conducted during the

²¹ Resilience is defined by FAO and others as "The capacity that ensures adverse stressors and shocks do not have long-lasting adverse development consequences". It is connected to, but different from, vulnerability. (RMTWG 1).

- project period. Field support was given to the production of at least 33 RIMA reports and policy briefs in 14 countries (see Annex E).²²
- 114. Following the conclusion of INFORMED, support to RIMA has continued under component II of the Global Network Against Food Crises Partnership Programme. RIMA is embedded within the M&E framework and provides the basis, both as data collection and analytical instrument, for creating evidence on European Union resilience investments in a number of PROACT projects.

3.2.2 Relevance

Finding 23. Support to resilience analysis is highly relevant given the significant investments in resilience programming and the continuing methodological gaps.

- 115. In recent years resilience has gained prominence in both development and humanitarian policies. Numerous United Nations agencies, development, governmental and non-governmental organizations, and donors look to the concept of resilience to understand how households cope with shocks and stresses, and are operationalizing its use in programming. Large-scale investments in resilience programmes have been made by both governments and development partners to reduce food insecurity and malnutrition.
- 116. FAO was one of the first organizations to adopt the concept of resilience in a food security context, with the goal of addressing the root causes of food insecurity and reducing the need for regular humanitarian interventions (Pingali P., Alinovi L. and Sutton J., 2005). The European Union has also been a major supporter of resilience building initiatives, as demonstrated by policy commitments to invest more in tackling the root causes of recurrent crises and large investments such as Global Alliance for Resilience Initiative (AGIR) and SHARE (European Commission, 2012). While investments continue to be made in resilience capacity building across sectors, verifiable evidence of the impact of these investments remains scarce.
- 117. While multiple approaches have been proposed over recent years, using both quantitative and qualitative data, measurement has proved complex and challenging. There is still a need for a robust system for effective measurement to help generate evidence for informed decision-making and further investment. Consequently, continued investment in methodological improvements also remained highly relevant for all stakeholders, including FAO and the European Union. Given this context, the development of the RIMA methodology is highly relevant to support the design and monitoring of relevant resilience policies and programmes.

Finding 24. The understanding of decision makers needs was weak in the initial design of RIMA, but efforts made during implementation have partially addressed users concerns.

118. Multiple stakeholders acknowledged that there had been inadequate attention on the relationship between RIMA analysts and decision makers. The origins of RIMA – as evidenced by the FSIN process and technical papers - were highly technical and driven by an academic approach to conceptualizing and measuring resilience. There was little consideration given to how the results would be integrated into the decision-making process. The first round of RIMA studies were characterized as desk driven studies with limited reference to the needs of decision makers. The 2017 INFORMED mid-term review

²² Additional RIMA reports were produced in Central America using a sperate channel of European Union funding.

noted that "resilience analysis needs to be made less academic and more programme and policy relevant" (FAO, 2017).

- 119. Originally the INFORMED programme was intended to be paired with the European Union-funded the Food and Nutrition Security, Impact, Resilience, Sustainability and Transformation (FIRST) policy support programme. INFORMED was expected to develop evidence which would have directly fed into the policy work of FIRST. In practice this synergy was never realized. The country prioritization for each project was very different and INFORMED focused on SP5, while FIRST on SP1. Without this anchor INFORMED lacked the connection to decision-making processes of policymakers or an appreciation of the political economy surrounding the choices being made. This left both programmes lacking a comprehensive approach linking evidence to policy and programming.
- 120. FAO has acknowledged this gap and there were evident efforts to orient RIMA studies to respond to the specific research questions that countries were interested in. An example was orienting the northern Uganda RIMA study to the design of the refugee response. Prior to data collection exercises for RIMA, workshops are held with stakeholders to design the data collection exercises as well as meetings after data is processed to present and validate the RIMA findings. The development of the Resilience Marker in the Occupied Palestinian Territory provides an example of adapting tools to support decision makers

Box 7: The resilience marker

An innovation introduced by the resilience working group in the Occupied Palestinian Territory (FAO, 2017) (United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), WFP, FAO and partners, Aquatic Animal Health (AAH), OXFAM, WWI, PU-AMI, Weffect, Employment and Social Development Canada (ESDC)) was the development of a "resilience marking tool" in the Occupied Palestinian Territory. This was piloted in 2016 and 2017 to review projects submitted for inclusion in the HRP and assess the extent to which they contribute to improving resilience to food security. The marking enhances quality of humanitarian actions by ensuring a systematic reflection and inclusion of resilience considerations in all stages of the project cycle; promote discussions on how resilience can be better included in programming; and what it practically means in different Occupied Palestinian Territory contexts.

Two pilots of the resilience marker were conducted in 2016-2017 by the Resilience working group, with feedback loops from participants. Main feedback received allowed to tailor the tool to the Occupied Palestinian Territory different contexts, i.e. Gaza Strip, West Bank no camp and West Bank camp. The marking was used in support of HRP processes 2017 to 2019. It was not applied for the HRP 2020 due to some delays in identifying the contextual variables that should apply to each context in the Occupied Palestinian Territory. The marking is considered a useful but demanding consultative process requiring facilitation and resources. Discussions are ongoing to simplify the resilience marking approach.

- 121. However, to some extent this criticism has continued. Interviewees noted "a lack of clarity on who the users were" and what information was needed for decision-making purposes, including "what information was good enough in practical terms" and that "INFORMED produced information and tried to sell it". Other needs are unmet. For example, donors were keen to understand the extent to which resilience interventions had averted humanitarian costs and have a clearer understanding of the costs and benefits of building resilience. Programme staff expressed interest in modelling the impact of specific interventions on levels of resilience.
- 122. The inception report from the new GNAFCPP highlighted the need to improve the linkages of RIMA to decision makers. A second phase of the Resilience Measurement Technical

Working Group (RM-TWG) has been initiated with the goal of moving beyond basic conceptual work on resilience measurement. This next phase of work, referred to as the Resilience Evidence for Decisions in Development Initiative (REDDI), is designed to place the evidence-related needs of countries and regions at the centre of the process (FSIN). However, the implementation of REDDI appears to have been slow and there is little publicly available information on the initiative.

Finding 25. The RIMA approach is primarily embedded within an emergency response perspective and stronger links with development programming are required to increase its overall relevance.

- 123. For many stakeholders the objective of building resilience to food insecurity emerged from a humanitarian perspective. As one stakeholder stated "given the protracted nature of the situation in South Sudan and the recurrent shocks experienced by the population, the use of a resilience analysis tool to better understand which interventions contribute to resilience is relevant in order to reduce the need for regular humanitarian interventions."
- 124. The rationale for resilience under INFORMED has been aligned to managing risk, through building resilient livelihoods. The focus on keeping people from being worse off differs from the development objective of moving people to better states of welfare (Davis, 2018). Interpreting resilience purely from a risk reduction perspective could lead to "resilient but poor".
- 125. As one paper stated, "Because the central project of development is to improve human well-being among the under-resourced, merely stabilizing living standards around ex ante low levels, or accelerating recovery to an unacceptably low level does not advance these common goals" (Upton, Constenla-Villoslada, Barrett, 2020). Another report argued "It is probably not practical to see resilience as a primary programme objective in itself, but rather the concept should shape how a programme is implemented to achieve other objectives i.e. success of an intervention is not measured by resilience per se but by achieving other specific positive livelihood outcomes such as food security" (Sturgess, 2016).
- 126. It was noted that the location of the RIMA team within SP5 may have contributed to a predominantly humanitarian perspective and called for stronger links to development analysis and actors in house. Arguably RIMA could have interacted more with SP1 and SP3 and brought together the three Strategic Programmes (SPs) under a resilience-food security-poverty nexus to identify policy and programmatic options to address poverty and resilience that integrate risk management into development plans (Davis, 2018).

Finding 26. The addition of a conflict module to RIMA reflected the importance of conflict as a driver of food insecurity. Other FAO tools provided the primary analysis to support conflict sensitive programming.

127. The importance of the interrelationship between conflict and food security is clear – with global acute food insecurity mainly due to complex emergencies and in situations of protracted crises (Keen, Mitchell and Harris, 2013). However, historically FAO has been careful to clarify that its mandate does not extend to conflict resolution, peacebuilding and governance, but to keep attentive to ensuring that its interventions do not exacerbate

- conflict²³. But previous evaluations pointed out that capacities in conflict analysis and management cannot be completely outside the responsibilities of any agency active in fragile states, if the goal is to help vulnerable people (FAO, 2014). Conflict management is integral to natural resource management and the resolution of local disputes, tensions and conflicts is a pillar of effective sustainable natural resource management.
- 128. Consequently, FAO's position has evolved to acknowledge that in fragile and conflict-affected contexts FAO, broadly speaking, intervenes across two programmatic areas: i) developing and implementing interventions to offset the impacts of conflicts on food security, nutrition, agriculture and natural resources; and ii) identifying ways to minimize, avoid, positively transform and resolve conflict(s) where food, agriculture or natural resources are (or hold the potential to serve as) conflict drivers (FAO, 2018). FAO has developed specific guidance for project interventions in fragile and conflict-affected contexts. These include the FAO Guide to Context Analysis and the Programme Clinic: Designing Conflict-Sensitive Interventions that have been developed for decentralized office programme staff.²⁴
- 129. It is difficult, if not impossible, to build resilience without considering the impact of conflict and political shocks. The differential impacts of the 2011 drought in the Horn of Africa made it clear how conflict and political instability can exacerbate the impacts of natural hazards: central southern Somalia experienced famine, while similarly drought-affected populations in northern Kenya did not. However, the original RIMA approach focused on a limited set of risks or stressors, excluding conflict.
- 130. Collaboration between RIMA and FAO conflict teams has resulted in the development of an (optional) conflict module. The module gathers data on household exposure to violence with a view to better understanding the impact of violence on household resilience. The coping mechanisms of household are also explored, as well as developing the understanding of the interrelation between conflict and food insecurity. This conflict data does not influence the calculation of the RCI, but is used as a descriptive and explanatory variable. This area remains a work in progress. No reports are available and the benefits to users of integrating conflict into the resilience analysis are yet to be determined.

Finding 27. Gender is routinely included in all RIMA analyses in line with FAO policy commitments.

131. The FAO Policy on Gender Equality provides the rationale for how reducing gender inequalities in the agriculture sector is relevant to FAO's mandate of reducing hunger, poverty and injustice in the world (FAO, 2013). This policy includes specific commitments to: i) generating and communicating the evidence base through the use of sex-disaggregated data to substantiate the importance of closing the gender gap for achieving FAO's overall mandate; and ii) ensuring that gender analysis is incorporated in the formulation, implementation and evaluation of all field programmes and projects.

²³ FAO, 2015, CFS Framework for Action for Food Security and Nutrition in Protracted Crises http://www.fao.org/3/a-bc852e.pdf

²⁴ Good examples of these analyses include: "In support of the PBF project: Water for Peace in Yemen: Strengthening the role of women in water conflict resolution and climate change mitigation", and "Programme Clinic Report for the Improvement of food and nutrition security of vulnerable population in Rakhine State - Practical recommendations based on a mixed methods analysis of conflict dynamics".

- 132. Consistent with this policy, RIMA has incorporated gendered analysis from the outset. While the unit of analysis for RIMA is the household rather than individuals, the data is analysed by the gender of household heads. The analysis has included the dynamics of gender and resilience (how resilience shifts in periods of stress), differences in asset endowments by gender, differences in adaptive capacity (for example involvement in social associations) and access to social safety net receipts. For example, in Honduras RIMA analysis shows that the most vulnerable were older adults and women, following large migratory displacement towards the United States of America: the elderly remained to look after kids.
- 133. All the RIMA reports reviewed systematically included gender-disaggregated recommendations. For example, the Sudan report concluded and recommended that "Gender policies that should aim at increasing asset endowment and access to credit for female household heads. Also, female household heads seems to suffer of a low average education level, which is likely to be the side effect of gender discrimination in local cultures. Given this, interventions for improving education should be prioritized, especially in rural areas." (FAO, 2016). Gender experts were included in the formulation of recommendations for example RIMA reports in Somalia.

3.2.3 Use of RIMA

- 134. This section discusses the evidence of the extent to which the RIMA analysis has supported decision makers. The discussion of the uses of RIMA are presented against the main potential uses of the RIMA analysis identified by FAO, including (FAO, 2016):
 - i. Planning: providing evidence for developing projects, programmes, strategies and policies.
 - ii. Targeting: identifying populations for interventions; disaggregates populations for more effective targeting (by livelihoods, gender, region, etc.).
 - iii. Evaluating impact over time and identifying the main determinants of food security recovery.
 - iv. Monitoring trends in levels of resilience over time.

Planning

Finding 28. The RCI in RIMA baselines helped to explain factors contributing to resilience capacities, but there was little evidence of its use in planning policies and programmes.

135. The RIMA analyses generally included both a calculation of the overall resilience index (the RCI) and an analysis of how the different pillars contribute to the overall index (the Resilience Structure Matrix, RSM). 12 of the 14 reviewed RIMA reports included a quantitative analysis of the factors contributing to household resilience to food insecurity, which was designed to support policy and programme formulation.²⁵ For example, in Senegal all RIMA reports published between 2011 and 2019 included a section on main determinants of resilience. In the Occupied Palestinian Territory, RIMA was used in 2014

²⁵ The two RIMA reports not including this analysis were based on secondary data.

- and 2018 to identify the main factors contributing to low resilience levels and high food insecurity.²⁶
- 136. The baseline analyses provided a background understanding of factors contributing to resilience. Stakeholders reported that this helped to explain the concept of resilience as a holistic approach spanning multiple sectors and brought attention to the contribution of social protection and basic services. This was arguably most relevant in the early days prior to INFORMED, when the concept of resilience was still emerging.
- 137. However, the majority of users reported challenges in applying the results of the RCI- and RSM-based analyses to decision-making. Some examples were cited of where RIMA analysis had informed specific planning decisions. FAO sources suggested that the RIMA analysis in Mali had influenced the decision of the European Union to support an NGO project in building access to basic services. RIMA analyses were credited with influencing the design of joint FAO/WFP/UNICEF resilience strategies in Somalia and Uganda.²⁷ In Central America, SICA reported RIMA had been a factor in guiding public investments and programmes, although details were lacking.
- 138. Despite several high-level resilience programmes or strategies at country or regional level, there is only anecdotal evidence of the use of RIMA or Analysis and Measurement of Resilience (AMR) results for decision-making in Senegal. Here, decision makers reported struggling with the resilience concept, its measurement and its use for decision-making. Despite long-term strategies and programmes in Senegal aiming at improving resilience,²⁸ no evidence was found of use of the measure to inform policymaking. In Colombia, RIMA was not perceived as useful to allocate funding at national level.
- 139. For most stakeholders the RIMA baseline analysis lacked sufficient detail to have a practical impact on planning decisions. As one stakeholder said, "At the end the RIMA analysis tended to tell us at a macro-level what we already knew and is largely unilluminating". This point was reinforced by a review of the reports. Most RIMA reports reached broadly similar conclusions on the importance of household assets, access to basic services (including education, water, health and electricity), agricultural productivity, livelihood diversification, transport and access to markets, and safety nets. This is perhaps unsurprising given that many of these assumptions are inbuilt in the construction of the RIMA index (FAO, 2016).
- 140. Aggregate analyses at national level were also found to be challenging to apply to decision-making. For example, one stakeholder in Kenya referenced the problems of using a common resilience analysis that spanned pastoralists, farmers and urban populations and argued for a disaggregated analysis of each specific group. This issue is not specific to the RIMA methodology *per se*, but did reflect choices made during the definition of the scope of the analysis.
- 141. Stakeholders also reported that the use of a composite index made it hard for some decision makers to use it. One interviewee gave the analogy of applying the human development index (HDI) to decisions on development policy and programmes. While the composite index has a purpose, most practical decisions depend on more specific indicators such as

²⁶ 2014, 2018 Socio Economic and Food Security Surveys (SEFSec).

²⁷ However, no reference was made to the use of RIMA in FAO Country Programming Frameworks.

²⁸ National Strategy for Food Security and Resilience Strategy (SNSAR), PNASAR.

water scarcity or lack of education. The household level analysis also needs to be complemented by a much deeper analysis to understand the feasibility of possible response options.

Finding 29. The context specific food security and nutrition data collected through the RIMA process was valued by planners.

- 142. Over the programme period there has been an increasing level of local adaptation of the RIMA model to the country or area of analysis. This included the collection and analysis of locally relevant data, in addition to the indicators required to calculate the core RIMA results of the RCI and RSM. This contextual analysis, tailored to the demands of local planners, was generally well received.
- 143. For example, in August 2017 FAO was asked by the Commissioner for Refugees in the Office of the Prime Minister of Uganda to support the implementation of a socio-economic analysis within the refugees' settlements and host communities, with the aim of providing a comprehensive assessment of the current state of the refugees' food security, well-being and resilience. This study was highly relevant to the Government's decision to pilot the Comprehensive Refugee Response Framework and support the self-reliance of refugees and move away from long-term humanitarian assistance (see Box 8).

Box 8: The New York Declaration and Comprehensive Refugee Response Framework

The New York Declaration incorporates a Comprehensive Refugee Response Framework (CRRF) to be applied to large-scale movements of refugees and protracted refugee situations. The CRRF focuses on the importance of supporting countries and communities that host large number of refugees, promoting the inclusion of refugees in host communities, ensuring the involvement of development actors from an early stage, and developing a 'whole-of-society' approach to refugee responses.

New York Declaration for Refugees and Migrants. Resolution adopted by the General Assembly on 19 September 2016.

- 144. The refugees study in Uganda provided an important reference document for planning for the Government and FAO. However, a closer analysis suggests that the main benefit of the study has been understanding refugee livelihoods and pathways to self-reliance, rather than the analysis of resilience to shocks *per se*. It was also notable that the RIMA study of pastoralists in the Karamoja region of Uganda where resilience to shocks is the primary concern was viewed by stakeholders in-country as much less useful.
- 145. In data-poor environments, users credited RIMA with playing an important role in expanding the availability of information on areas such as consumption patterns and gender issues. Consequently food security analysts have used RIMA data beyond the immediate planned purpose. To give one example, the United Nations Development Programme (UNDP) relied on data collected during the RIMA exercise for an analysis of refugee land dynamics (UNDP, 2018).

Targeting

Finding 30. RIMA results have not been used to target resilience interventions and did not demonstrate a comparative advantage for this purpose.

- 146. RIMA has been proposed as a tool for targeting resilience interventions. This has included mapping RCI values as a basis for geographically targeting interventions to areas of low resilience and socially targeting interventions to groups of low resilience (rural populations, female headed households).
- 147. In practice, there was no evidence that the RIMA results had been used for geographical targeting purposes. A number of factors contribute to this outcome. First, lack of timeliness was a factor as many RIMA baselines were noted to have only been analysed and reported (and in some cases started) after the commencement of the associated resilience programmes. RIMA analyses lacked agility, given their complexity and resource demands of the RIMA process.
- 148. Second, it was not clear that the RCI had a compelling added value for targeting over more readily available food security and nutrition indicators, used in conjunction with indicators of risk exposure. The resilience index broadly corresponded with measures such as poverty and malnutrition (see Figure 5). Even where these do diverge, the justification for directing resources to less resilient areas (lower RCI), but with less poverty and malnutrition is uncertain.

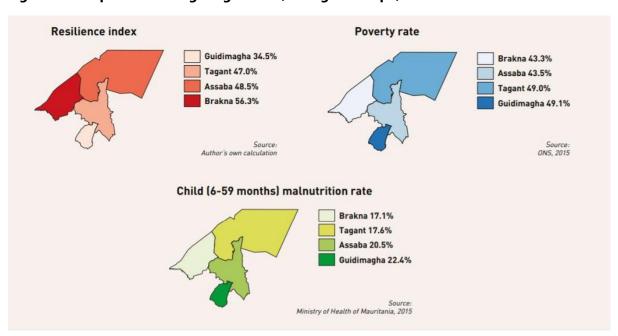


Figure 5: Comparison of targeting criteria, triangle of hope, Mauritania

Source: FAO. 2015. Resilience analysis in the triangle of hope, Mauritania.

149. RIMA could potentially also be used to target vulnerable groups, but no clear examples were found of where this had happened. RIMA has consistently disaggregated the analysis of resilience by gender. While, welcome and in line with FAO policy, no specific examples were encountered of how this analysis was used to target resilience interventions. Multiple RIMA reports highlighted a general disparity between the resilience of rural and urban

- populations. Again the use of high-level conclusions was hard to track into concrete decision-making.
- 150. The resource demands of RIMA also make it an impractical tool for household level targeting. For example, in Colombia RIMA is used to support an inter-agency project in identifying the least resilient households. However, the baseline was only set after the project was designed and the instrument (RIMA Short) was considered heavy and "complex".

Impact evaluation

Finding 31. The revised RIMA II analysis may contribute to a better understanding of the drivers of resilience. However, the contribution of programme interventions to changes in resilience has not been assessed too far.

- 151. RIMA may be used in two ways in evaluating changes in resilience. Both approaches require multiple rounds of data collection for the analysis of impact, with sufficient amount of time in between to allow resilience levels to change making the tool more suited to evaluate multi-year programmes.
 - i. First, through an analysis of the changes in resilience capacities. The analytical approach is to determine: i) What factors affect resilience? ii) What sorts of programmes can change these factors? and iii) Do these factors change as a result of the programmes implemented? This corresponds to what is termed by FAO as the "direct" measurement of resilience. This has the advantage that the measurement is not dependent on a shock occurring.
 - ii. Second, there is the analysis of the determinants (including interventions supported by the project) of how households are able to maintain their welfare in this case levels of food security or nutrition in the event of a real shock. This corresponds to what is termed by FAO as the "indirect" measurement of resilience. This analysis option has been added into the design of RIMA II. It corresponds to stakeholder interest in understanding if and why project beneficiaries were able to bounce back after a shock.
- 152. There have been relatively few examples where repeated rounds of RIMA surveys have been completed and changes in the "direct measure" could be compared.²⁹ In Somalia, RIMA I baselines and endlines of projects were available, but the analysis did not attribute the role of specific project interventions to changes in resilience. "It is not possible with RIMA to disentangle the effect of each single intervention on a specific indicator, it is only possible to see whether those household who have been reached by the JRS (treated) have had a significant and positive impact on a list of indicators" (FAO, 2016). Efforts are currently ongoing between MEAL, RIMA and FAO M&E Strategic Objective teams to develop guidance to address this challenge.
- 153. In Somalia the change in the RCI overtime was used to support a basic accountability function, with the analysis concluding that "a positive and significant impact has been reported on treated households, which turns to increase resilience capacity by 23.2 percent

²⁹ Differences in methodology between RIMA I and RIMA II have limited the comparability of data between survey rounds.

(on average)" (FAO, 2016). However, it was noted that the results are difficult to interpret in the absence of thresholds. Users were unable to conclude whether an adequate level of resilience had been achieved or not.

- 154. RIMA II is currently used as part of the evaluation framework (with control groups) in Pro Act programmes funded under the GNAFCPP. Examples of the planned application of RIMA for this purpose include Colombia, South Sudan (for the SAFER and Cross border programming initiatives) and Uganda (to evaluate the Karamoja Integrated Development Plan and the Northern Uganda Social Action Fund, NUSAF). In South Sudan USAID has placed RIMA as a requirement for proposals submitted for resilience programming. It was also reported that FAO is supporting UN Women to use RIMA as a measure of impact of their programmes on women in the Middle East.
- 155. The baselines are currently being conducted and it will be sometime before the performance of RIMA II as an evaluation tool can be properly assessed. However, while the analysis should help to understand what factors are associated with "realized" resilience, the extent to which this can be linked to specific programme interventions is less clear in the absence of appropriate and adapted guidance on RIMA use for impact evaluation. In addition, there is a strong continuing demand for mixed method approaches as a basis for impact evaluation (Box 9).

Box 9: Measuring impact of resilience programmes in Somalia

The Building Resilient Communities in Somalia (BRCiS, 2013-2017) is a DfID-funded NGO humanitarian consortium comprising Concern, Norwegian Refugee Council, Save the Children, International Rescue Committee and CESVI.

In the first phase of the programme, the international and local NGOs involved in BRCiS spent time with the communities to understand hazards, sources of internal conflicts, threats to their security, root causes of vulnerabilities and capacities, resources and assets. This participatory process led to the development of locally-adapted understanding of resilience, based on the attributes of each village. To evaluate the impact of the programme, they are using a combination of internationally recognized indicators: the Coping Strategies Index, the Dietary Diversity Score, Food Consumption Score and the Household Asset Score. They added a number of indicators relevant to Somali society in general and for the communities in particular. These ranged from literacy levels, access to safe water and sanitation, income diversification to community capacity to solve internal disputes. Qualitative information is collected by their staff on a weekly basis.

Sturgess, P. 2016. Measuring Resilience. DflD.

Monitoring

Finding 32. RIMA – and specifically the RCI – are potentially useful for policy and strategy monitoring.

156. The RIMA tool – specifically the RCI within RIMA – is being increasingly applied for policy monitoring. A prominent example includes the decision of the African Union to adopt the RCI to monitor commitment 6 of the African Union Malabo Declaration. The focus is on monitoring – the African Union reported approaching the REDDI initiative (see paragraph 122) to provide a complementary analysis of policy implications. The rollout of RIMA within the African Union has only recently commenced and consequently it is still too early to provide feedback from users on its effectiveness.

- 157. In the Occupied Palestinian Territory, discussions and reviews led to the implementation of the new food security measurement framework, where RIMA is a central pillar, alongside food consumption and poverty. The report is intended to be produced every two years.³⁰ RIMA was reported by interviewers to be an interesting and relevant approach to measure resilience, but donors were not interviewed and it is not possible to confirm how they are using it.
- 158. In Niger, the national development plan has integrated resilience as a measure of policy impact. In Mauritania RIMA was reportedly used to monitor government policy, although Government staff were not interviewed to confirm this. In Uganda it was applied to monitor the Joint Resilience Strategy (FAO, WFP and UNICEF) and resilience programming in Karamoja by other stakeholders. RIMA was mooted for similar applications in monitoring overall resilience trends, for example as part of the monitoring framework for the NDP 9 in Somalia (alongside other food security indicators including the food consumption score (FCS) and GAM/SAM) and as part of the 2020 HRP in South Sudan (OCHA, 2020).
- 159. As a policy monitoring tool the RCI has several potential advantages. It is attractive to users as it provides a single figure that simplifies reporting on a complex concept. It does not require an analysis of causality and is much less demanding on the skills of analysts as it can be conducted using RIMA Excel. Existing datasets can be used to conduct RIMA analysis at this level, reducing cost and data demand such as in Niger or Senegal.

3.2.4 Factors affecting use and utility

Finding 33. RIMA has benefitted from strong technical collaboration in developing the methodology, and from inter-agency coordination in implementation.

- 160. The RIMA team has been an active member of the Food Security Information Network technical working group on resilience measurement.³¹ As resilience was a relatively new concept, establishing a common framework has been extremely helpful in creating consensus around the definition and approach to measurement. The RIMA headquarters team also developed strong partnerships with institutions and universities to work on specific resilience issues (conflict module with the Uppsala University; resilience subjective measure with the Overseas Development Institute (ODI), modelling with a German university). RIMA has been developed alongside other quantitative methodologies developed to measure resilience, principally the TANGO International and the Cissé and Barrett method. A "healthy competition" contributed to promoting resilience measurement and fostered an academic rigor.
- 161. National and regional coordination of resilience measurement was effective in promoting the roll-out and use of resilience measurement tools. National groups in several countries have conducted reviews of alternative methodological approaches. This provided a forum to discuss and solve technical issue and adapt the approach to the context, reduce individual data collection costs and facilitate a shared understanding of resilience issues.

³⁰ It was not done in 2016, and the 2018 survey is not published yet as of May 2020.

³¹ The first official meeting took place in Rome on 9 and 10 October 2013 and it has been convening on a regular basis since up to and including the IFPRI 2020 Conference on Building Resilience for Food and Nutrition Security in Addis Ababa, May 2014.

162. In South Sudan, informants reported that the Partnership for Recovery and Resilience Framework, with the backing of USAID as the key donor, has created a coordinated approach among the United Nations and NGOs to using RIMA for resilience measurement, which had proved difficult in the past. In Sahel, the technical Platform for the analysis and measurement of resilience (PT-AMR) among populations in the Sahel and West Africa gathered in Niamey in 2016 to review existing resilience measurement tools and decided on the parameters of the future analysis and measurement of resilience.

Finding 34. Knowledge of RIMA is centred amongst a small group of technical specialists and the awareness and understanding amongst decision makers is low.

- 163. Many key decision makers were found to be largely unaware of the RIMA process and products. The 2018 ROM review visits to Kenya and Niger indicated that European Union Delegations (EUDs) have limited, if any, knowledge of the INFORMED initiative, even though there is close collaboration of the EUDs with the respective FAO Country Offices. The current evaluation also found low levels of awareness of RIMA amongst EUDs even though the European Union through the linkage with PROACT is targeted as a major user.
- 164. In Uganda, donors including USAID, DfID and ECHO were not aware of the RIMA tool, despite efforts at raising awareness of RIMA through the livelihoods working group and the Resilience Measurement Unit. Awareness centred amongst the technical agencies including WFP, United Nations High Commissioner for Refugees (UNHCR) and Renewed Efforts Against Child Hunger and Undernutrition (REACH) who had used the tool in assessment or monitoring frameworks. RIMA is known by a number of stakeholders in South Sudan, but the Government is not aware of the tool. FAO's Agriculture, Livestock and Food Security Information conducted a recent user survey across stakeholder groups which reported that only 3 percent of respondents accessed resilience reports, compared to 84 percent accessing the IPC reports.³² It is perhaps indicative of general levels of awareness of RIMA that efforts to gather stakeholder opinions on RIMA through an online survey by this evaluation failed with only 7 responses out of over 1 000 targeted requests for feedback.³³
- 165. There was an acknowledged problem in communicating RIMA results to decision makers. Overly technical reports were judged as inaccessible by many decision makers. Consequently, under INFORMED there have been significant efforts to improve communication. Report templates have been developed, the report language has become less technical and the graphics simplified for example replacing the poorly understood spider graphs with bar charts. Furthermore, the diversity of products has also increased to include: policy briefs aimed at providing key findings and messages to decision makers; workshops organized at national and regional level to present resilience measurement tools and compare approaches; webinars; the RIMA webpage; and a RIMA newsletter.
- 166. Despite these efforts users still reported difficulties in digesting the information produced by RIMA. Reporting was still critiqued for remaining overly research-focussed. It was noted that the RIMA team all had very technical backgrounds, and expertise in the team in knowledge management is lacking. INFORMED did not develop a full communication

³² Survey results were reported in April 2020.

³³ The target list of respondents was provided by the RIMA team. This compares to 159 completed responses received to the online questionnaire on EWEA.

- strategy. Stakeholders also indicated that insufficient involvement of users in the original design and framing of the research questions perpetuated the disconnect from decision makers.
- 167. Consequently, users lacked a solid understanding of the tool and felt unable to challenge or critique the results. Several users who integrated the RCI index in reporting admitted that they did not really understand how it was constructed. Part of the problem was a continuing challenge in explaining the concept of resilience this is inherently complex and hard to simplify. The academic debates around the resilience concept, the best way to measure it as well as the proliferation of tools and approaches contributed to confusion amongst potential users (Sturgess, P., 2016).
- 168. Part of the problem is also specific to the measurement of resilience using a composite measure as well as the absence of commonly agreed normative thresholds defining an acceptable level of resilience. As one stakeholder queried "What does it mean when RIMA decreased by 0,5?" To many stakeholders the RIMA analysis is perceived as a "blackbox" which depended on implicit trust in expert opinion and advice, rather than methodological transparency. While RIMA Excel has made it easier to calculate the index, it has not increased the capacity to understand and explain how it is constructed and the implications for policies and programmes. Users reported more comfort in using the underlying indicators rather than a blended index.

Finding 35. There has been little testing of the skill of the RIMA index in predicting the ability of households to weather shocks and stresses.

- 169. There was surprisingly little testing of the relationship between RIMA's calculated "resilience capacity" and the actual ability of households to weather shocks and stresses. A recent study conducted a comparative performance analysis of three methods (RIMA, TANGO International and Cissé and Barrett) using nationally representative panel data from Ethiopia and Niger (Upton, J., Constenla-Villoslada, S. and Barrett, C. 2020). One of the key findings was a poor correlation between households defined as having a high resilience capacity (by all methods) and those who were able to maintain their food security in the event of a shock.
- 170. The study went on to argue that "we need a measure (or measures) that allows us to accurately and reasonably inexpensively identify those most likely to suffer from shocks or stressors, to be able to rigorously estimate impacts of interventions on the resilience measure(s), and ensure that any such change reflects improvement in the shock-and-stress-proofing of wellbeing over time. While existing resilience measures have made some progress in those directions, the development community is clearly not there yet. ... it does not consistently add much value as compared to the far simpler method of just using the most recent wellbeing measure available to predict future resilience."
- 171. Conclusions on the skill of the method cannot be based on one study and FAO have rebutted the findings. There is also some counter evidence one earlier FAO study in Nicaragua had concluded that the RCI, estimated through RIMA I, is a good predictor of household food security (Romano D. and Ciani F., 2014). However, those more involved in the technical detail, are concerned about insufficient critical examination and validation of the index. This suggested a continued need for thoughtful reflexion around definition and measurement.

Finding 36. Resilience is best understood by drawing on a diverse range of methodologies – including qualitative and participatory approaches.

- 172. Previous research had concluded that the understanding of resilience must incorporate information that is not readily captured by quantitative models. "Resilience measurement, like most efforts to measure complex phenomena, requires a multi-dimensional, multi-method approach. Measuring resilience means understanding the perspective of affected populations and individuals, so analysis must include context-specific, qualitative and subjective information and some kind of measures of that information" (FSIN, 2015).
- 173. Many stakeholders, especially amongst the NGO community, also argued that participatory methods provide a deeper contextual understanding of resilience conditions and challenges at the community level. For example, a participatory Tufts study of recovery in Uganda identified key challenges of the impacts of climate change, poor governance and corruption, limited opportunities for decent work, livelihood changes and conflict over land. This provided a very different set of findings that could stimulate a richer debate of causality and responses (FAO and Tufts University, 2019). UNICEF work in Somalia on "Pathways to resilience" also provides a useful example of a more open-ended study.
- 174. The quantitative and participative approaches should be complementary, but at times they were competitive with a push for standardization. For example, FAO and UNDP (who developed the Community Based Resilience Analysis (COBRA) tool) were perceived to compete for their respective tools to be adopted by the IGAD Resilience Analysis Unit. A degree of confusion and competition was also reported in other settings where both actors are active including South Sudan and the Sahel. As one stakeholder commented "All agencies FAO, USAID, NGOs risk getting lost in pushing their measurement model. We need to step back and ask what is really wanted, for what purpose?".
- 175. IGAD was conducting a review of the alternative resilience measurement tools to determine whether one tool might be adopted for comparability across the region. The resulting country consultation indicated that countries were not in favour of adopting a standard regional tool and perceived it important to maintain a toolbox of different and complementary resilience analysis tools methods. The inter-agency United Nations guidance on resilience measurement does not promote any one tool and suggests that alternatives methodologies of FAO, UNDP and WFP may all play a role according to the context (UNSDG, 2020). Some FAO programme staff also asked for FAO be more open to promoting the use of a toolkit of approach, so that the most relevant mix of methods could be matched to a specific context and purpose.

3.2.5 Sustainability

Finding 37. INFORMED prioritized the production of RIMA analyses over the institutionalization of the RIMA tool.

176. Under INFORMED, work area 3.1 is defined as "Technical and analytical support to Regional Analysis Unit, Platforms, and countries on resilience is consolidated". The main objective of this area of work is stated as building capacities of countries and regional authorities in resilience measurement and analysis, and in the use of information to ensure the overall sustainability of the systems created. The specified targets were for the creation of one resilience technical platform, capacity development activities in ten countries and 18 RIMA analyses being conducted and supported.

- 177. No specific institutionalization strategy for RIMA was found to guide the activities conducted under this work area at global, regional or country level. FAO resilience hubs in Dakar and Nairobi were established and strengthened as the basis for country level engagement. Activities included technical and/or financial support to regional bodies (IGAD, CILLS, African Union), RIMA analyses country support (e.g. Kenya, Mauritania, Niger, Senegal, etc.), training of national statistical offices (Niger, Senegal, Somalia, etc.), promotion of resilience initiatives and case studies. Support to regional and national institutions appears to have been principally demand-driven, rather than proactive or strategic. The evaluation team found no evidence of ambition to develop a strategy to institutionalize further RIMA internally or externally, or document summarizing the services provided by FAO to external actors regarding RIMA. It was also not clear how the shift in emphases in conducting national-level baselines to project-level monitoring under the GNAFCPP related to any institutionalization strategy.
- 178. With limited headquarters staff resources available to support capacity building reportedly just two staff several interviewees concluded that the primary focus was on supporting and producing RIMA analyses and FAO did not place a high priority on institutionalization.

Finding 38. Regional and national authorities remained dependent on FAO's technical and financial support to conduct RIMA analyses.

- 179. FAO has worked with a wide range of partners –governmental, United Nations agencies and NGOs to jointly implement RIMA analyses. In some cases this collaboration has continued for over a decade. Technical and financial assistance has come from both the FAO RIMA team based in Rome and a number of regional resilience hubs created in Dakar and Nairobi. Even though there has been some progress in building ownership of RIMA outside of FAO, it has been slow and patchy.
- 180. A primary entry point for capacity development has been through the regional institutions. CILSS and IGAD and SICA have all received financial assistance to promote resilience analysis in their respective regions.³⁴ Working with Regional Economic Communities provides a connection with national policymakers and a range of technical ministries and statistical offices. Different levels of progress are evident in the various regions.
 - FAO and CILSS established a technical platform on resilience measurement. This provided a technical forum to progress the discussion of resilience measurement in the region. A workshop was held in Niamey in 2016 to identify relevant contextual variables adapted to the region. The collaboration with CILSS led to the creation of the "Analyse et Mesure de la Resilience", an ad hoc tool that adopts the econometrics of RIMA and the analytical framework of CILSS to measure resilience in the Sahel region.³⁵ This is currently being piloted in several Sahelian countries (Niger, Senegal). While this is a good sign of appropriation and contextualization of the tool at regional level, there is no clear strategy or recommendation for AMR use decided or

³⁴ In the case of SICA, this did not come through INFORFMED but another European Union project.

³⁵ A CILSS working group simplified and contextualized the RIMA, both at conceptual level (use of three pillars instead of four) and at technical level (choice of contextually adapted variables, often available in existing surveys such as LSMS across the region).

- communicated by CILSS to Sahelian countries. Resilience analysis in the region still remains reliant on FAO technical and financial support.
- ii. Cooperation with SICA in Central America supported RIMA studies being implemented in five countries (Costa Rica, the Dominican Republic, Nicaragua, El Salvador). Surveys are collected by national statistical offices. In each country RIMA has a technical group on resilience analysis and SICA has been working with these groups to prepare the reports. The SICA focal point is an active promoter and well aware of the developments in this field of work having been involved with FAO in the development of RIMA I. Through SICA, the RIMA team supported National Institute of Statistics and academia (universities). They also collaborate with the Central American Institute of Public Administration. RIMA is still at an early stage of development in Central America.
- iii. In the Horn of Africa FAO supported IGAD to establish the IFRAH unit, to bring together a range of food security, nutrition and resilience analysis capacities.³⁶ This process is still in its early stages and a resilience analyst has yet to be recruited by IGAD. A good practice in terms of sustainability and cost efficiency is that FAO supported IGAD to recruit their own staff to the unit, rather than seconding FAO technical assistance.
- iv. As noted above, the African Union has adopted the RIMA RCI as an indicator for monitoring Result 6 of the Malabo Declaration (see paragraph 156). FAO is providing technical assistance to support the biannual analysis of this indicator for inclusion in future reports. It is still early to assess progress towards building and sustaining the necessary capacities within the African Union and Member States.
- 181. At the national level support has mostly been demand-driven and provided on request. Support in some countries predated INFORMED and has been provided over many years. Some of the most prominent examples of collaboration at national level included the Occupied Palestinian Territory, Senegal, Somalia, South Sudan and Uganda. Interviews with a range of stakeholders in these countries confirmed a high level of interest in resilience analysis alongside challenges in establishing national ownership.
 - i. In South Sudan, RIMA is placed at the centre of discussions on resilience analysis. However, it is situated in a donor/United Nations-led partnership programme without the engagement of the Government. It was suggested that FAO could have involved partners more on the contextualization of the tool to South Sudan to create a higher sense of ownership among partners, as only a few partners (specifically the International Food Policy Research Institute, IFPRI) truly understood the tool.³⁷ FAO retains the technical responsibility for utilization of the tool in South Sudan supported by the Regional Office in Nairobi. Expectations on the use of RIMA have been raised and there is concern about whether FAO can continue to meet the demand generated due to capacity constraints.

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³⁶ The connection between IFRAH and IDRSSI (the IGAD platform tasked with supporting resilience in the region) is unclear.

³⁷ FAO was making efforts in this regard with an awareness raising and technical training on RIMA planned for March 2020 with partners, however this is delayed due to the COVID-19 outbreak.

- ii. In the Occupied Palestinian Territory, the RIMA RCI has been integrated as a key indicator since 2014, alongside other food and nutrition indicators. The methodology is adapted to the Palestinian context and is taken as one of the references for food security measurement in the area. It is reported as fully integrated within the official food security measurement mechanisms and used by all partners. This is further complemented with the resilience marker embedded in the 2017-2019 HRP processes.
- iii. However, the analysis and use of the RCI has been intermittent. It is designed to be reported on at two yearly intervals. It was reported in 2014, not collected in 2016 and the 2018 survey is not published yet as if May 2020 although intermediary findings are available. This limited the application of findings for programming or advocacy. This was attributed to resource constraints as the responsible agency is dependent on external funding. While technical capacities have been built locally by the RIMA team, the Palestinian Central Bureau of Statistics still seek final validation of the RIMA team in Rome before publication.
- iv. In Senegal, technical support from FAO and CILSS have led to a good level of awareness among technicians, with RIMA I, RIMA II and AMR analyses being conducted. The national statistical offices reportedly had the capacity to implement the RIMA methodology. However, recent staff turnover in SSNSA requires further capacity building to ensure the technical capacity to use RIMA autonomously in the future. It is unclear when the AMR will become the official resilience measure at the regional level and how this will be absorbed at country level.
- v. In Somalia, Government officers perceived the introduction of RIMA as "top-down" from FAO rather than based on the needs of Somalis. Training of national counterparts was well received, but it was short-term, limited in scope and has not been sufficient in itself to embed capacities in the country. Overall the approach is not seen as suited to institutionalization in fragile contexts and the relevance or viability of attempting to embed RIMA in the national system in Somalia is questioned. A more pragmatic approach was suggested of focussing on strengthening the collection of the underlying data and indicators, rather than RIMA. Alternative qualitative tools were also perceived to offer a more appropriate solution for the specific context.
- vi. FAO has worked with the Uganda Resilience Measurement Unit under the Office of the Prime Minister. The positioning within the Office of the Prime Minister is seen as strategically important as the relevance analysis goes beyond any one Ministry. However, FAO are still heavily involved in the analysis, as the national authorities can do the technical data processing but not interpretation.

Finding 39. There has been collaboration with other agencies in piloting RIMA, but no United Nations agencies or international NGOs have adopted the tool.

182. There has been a limited uptake of RIMA amongst United Nations agencies. WFP has collaborated with FAO in piloting RIMA in several countries. WFP is currently taking stock of alternative resilience measurement methodologies, including RIMA, but has not yet agreed on a corporate standard. WFP expressed reservations on the complexity and cost of the method and currently lack the capacity for RIMA analysis. Some WFP interviewees suggested that for their purposes it may not be necessary to attempt to measure resilience

- capacities directly and existing food security and nutrition indicators may be sufficient, and has reportedly "almost given up on resilience measurement in corporate results framework".
- 183. The UNICEF perspective on resilience is very different from the one in the food security sector. Consequently UNICEF reported struggling with the use of quantitative measures of resilience such as RIMA. UNICEF respondents at various levels expressed more interest in qualitative and participative analyses of resilience to understand changes in nutrition.
- 184. International and national NGOs reported that they lacked the technical capacity or resources to use RIMA. When they are required to use RIMA (e.g. donors requested NGOs to use RIMA in South Sudan to monitor progress), they are challenged by the tool technicalities. It is considered costly and required consultants to support the process and calculation, which leaves no sustainable capacity in house. Most NGOs, including Action Against Hunger (ACF) and CARE, are analysing resilience based on either existing food security indicators or participatory analysis. For example, BRICS (a consortium of NGOs in Somalia) uses the coping strategy index (CSI), the Food Consumption Score (FCS) and six or seven main indicators to measure resilience over time, using annual surveys.

Finding 40. RIMA trainings were well received but only a small number of professionals are capable of independently conducting a RIMA analysis.

185. FAO has organized a large number of trainings at various levels to support the implementation of RIMA studies. A number of curricula have been developed for different audiences (see Box 10). Training has been principally conducted by RIMA experts based at the FAO headquarters, supported by regional and country staff.

Box 10: RIMA trainings

Four different RIMA training courses have been developed:

- i. Two-three days RIMA AWARENESS (non-technical training explaining what is RIMA, how it is created (with no math and statistics involved), and awareness raising to involve policymakers or other stakeholders after RIMA analysis is finalized).
- ii. Five- days RIMA Basic training (STATA introduction and DATA manipulation/crunching/programming; it is generally addressed to those people with no or limited knowledge of STATA, who will be future users of RIMA methodology.).
- iii. Five days RIMA Advanced training is addressed to those people who attended the Basic training or those having a knowledge of STATA or familiarity with STATA language.
- iv. RIMA in Excel which is specifically designed and developed for Monitoring & Evaluation officers, Evaluators and other operators without a proper background of econometrics and use of statistical tools (such as STATA).
- 186. Trainings have been offered to individual countries and through regional institutions. In addition to the trainings, several workshops and conference were organized and videos on using RIMA Excel produced. Feedback on the quality and conduct of the training and associated sessions was universally positive and the videos were complemented as user-friendly.

- 187. However, there has been limited progress in establishing a sufficient corps of professionals able to autonomously conduct RIMA analyses, and technical knowledge of RIMA implementation remains concentrated amongst a few experts. The stand-alone capacity among national entities or regional bodies for analysing resilience remains lacking. Apart from the headquarters RIMA team, it is estimated that only six trained and expert resources in different offices in Africa can implement RIMA autonomously or under minimum guidance (FAO, 2020).
- 188. FAO staff has generally a good knowledge of the tool and its use, however in some instances there is a limited ability to use the method due to the level of skills required to run the analysis and internal staff turnover. To date, the transfer of competence to the FAO regional offices is considered insufficient and capacity building efforts with partners mostly require the participation of headquarters staff.
- 189. Multiple factors appear to underlie this outcome. It did not help that the resources available to support RIMA capacity building are limited and inadequate to the scale of the task. There is a common agreement that there are not enough trainers and budget to deliver at scale. High staff turnover amongst trained staff was frequently encountered undermining capacity. Staff who qualified for RIMA training were highly skilled individuals with strong employment prospects in more lucrative careers outside Government. For example, in Somalia nearly all the staff trained in RIMA were reported to have left Government service within two years.
- 190. The complexity of the RIMA tool required high levels of skill to conduct. Trainings are therefore limited to organizations with statistical capacities (statistical offices, universities) and left out a significant part of the humanitarian sector (notably international NGOs, local NGOs). FAO acknowledged this limitation and introduced RIMA Excel to circumvent the use of statistical packages and this has significantly simplified the calculation of the RIMA RCI index. However, to do any further analysis of causality still requires statistical expertise. Therefore, for most RIMA applications this constraint remains.
- 191. This situation was exacerbated by a deficit of suitable RIMA guidance. INFORMED developed global level guidance (RIMA II, RIMA Short, FSIN publications), and contributed to resilience methodological developments and advance research (FSIN publications, articles and academic papers) on resilience measurement. However, much of this guidance is highly technical and not easily accessible to the majority of food security analysts. More guidance materials were requested regarding the choice of the most appropriate "tool for the job".

Finding 41. The heavy data demands of RIMA, and associated costs, continue to constrain adoption of the tool, despite improvements made over time.

- 192. Stakeholders routinely referred to the heavy data demands of the RIMA tool as a major barrier to the sustainability of the approach. RIMA requires multi-dimensional, high-frequency, longitudinal data. There are two main options for accessing the data either through the use of existing data sets (for example Living Standards Measurement Study (LSMS) data) or through the collection of survey data.
- 193. Some select countries have recent and detailed data needed for the RIMA analysis. The LSMS surveys currently provide this data for six countries in sub-Saharan Africa. Consequently, RIMA studies have been run using pre-existing data, for example several

RIMA surveys in the Sahel region (Niger, Mauritania and Senegal) were based on existing datasets. Food Security and Nutrition Monitoring System data is used for RIMA in South Sudan but it is collected to be representative at county level. There is interest in analysis at Payam and household level, where data is not available and bespoke panel survey data³⁸ is required to support project evaluations.

- 194. However, even where the data has already been collected, data processing demands need to be considered. For example, the African Union Malabo Declaration monitoring of the RCI is based on data from multiple Ministries (including Agriculture and Health) in addition to the World Bank LSMS data. These data have to be extracted and cleaned, which requires time and expertise. National data sets are often old and infrequent. In Honduras, the RIMA analysis has relied on data from the ENCOVI National Survey, conducted by the National Institute of Statistics for the last time in 2014. Until another ENCOVI is conducted, it would not be possible to conduct a follow-up RIMA analysis.
- 195. The repurposing of existing or pipeline surveys to support resilience analysis has been mooted and is a possibility for more flexible surveys, such as multiple indicator cluster surveys (MICS) and LSMS, rather than fully standardized Demographic and Health Surveys (FSIN, 2015). To some extent this has been achieved in Senegal and Uganda, albeit with challenges on synchronizing data collection with the reporting time frame and financial sustainability.
- 196. In the majority of cases, RIMA analysis required the collection of survey data. The cost and data demands of RIMA analyses is still questioned, despite the introduction of RIMA Short to lessen this burden. While RIMA Short has been helpful in making RIMA significantly less data-intensive, data demands are still significant. The collection of panel data to support RIMA is particularly demanding.³⁹
- 197. In practical terms the heavy data demands translated into high costs. WFP reported a reluctance to mainstream the use of RIMA, specifically due to concerns on the cost. It was noted that if this was an issue for a well-endowed United Nations agency, it was likely to be an even bigger issue for budget constrained national authorities. In Colombia, where RIMA is used for monitoring and evaluation, staff from the project reported that data collection was long and tiring, and "The whole exercise in general is very complex", that's why they are not envisioning the use of RIMA at mid-term to redirect programmes but just two measures (baseline and endline). IGAD States reported that that they are already overstretched and overburdened with monitoring the SDGs.
- 198. RIMA-related data collection exercises have been heavily dependent on FAO financial support and in kind support from other United Nations agencies including WFP and UNICEF (for example, the first round of RIMA data collection in Karamoja). Partners reported concerns about FAO's capacity to continue to deliver on the monitoring requirements due to a lack of internal FAO capacity.
- 199. Unfortunately it was not possible to determine the cost of data collection associated with RIMA. Even though FAO is tracking all INFORMED expenses and is allocating these expenses to the corresponding outputs, no attention has been given on the cost for the

³⁹ It was noted that alternative impact assessment tools – notably the Barrett method – only require a single round of data collection for impact assessment.

³⁸ A further option would be to create synthetic panels using existing and experimental techniques.

delivery of each output produced; nor had the RIMA team estimated the cost of survey data collection. Stakeholders in Uganda estimated the cost of data collection for one survey round for one project at USD 100 000 to 200 000.

3.3 Knowledge management

3.3.1 Strategy and activities

200. In 2016, FAO established a Knowledge Sharing Platform on Resilience, KORE ("Knowledge Resilience"), initiated as an additional component of INFORMED, under work performed towards programme Output 3. The intention was to support resilience building by developing guidance and facilitating the production and dissemination of knowledge products to help field practitioners share their practices and promote replication. KORE developed a structured approach to support learning processes. Figure 6 below presents a simple logic model illustrating the intention at design.

Figure 6: Simple logic model for Knowledge Sharing Platform on Resilience (KORE)

Identify, devise and disseminate tools, approaches, analyses and good practices on resilience building to inform resilience-strengthening interventions of FAO and partners



Provide a suite of mechanisms and products to facilitate knowledge generation on resilience-related initiatives across sectors and themes, such as food security and nutrition, disaster risk reduction, peace sustaining and climate change



Develop good practice studies and guidance material; produce newsletters; organize and facilitate webinar and knowledge sharing sessions

Source: Evaluation team

201. The KORE initiative included the following work streams:

- i. Documenting and broadcasting of good (or promising) practices by facilitating the capture and systematic analysis of resilience-related interventions and their dissemination within FAO networks. The aim was to enable replication and upscaling. Supporting tools include templates and process maps.
- ii. Facilitating knowledge sharing on resilience-related interventions, through webinars advertised both externally and internally and other internal knowledge sharing e-sessions.
- iii. Draw attention of potentially interested practitioners on relevant knowledge products or events, whether produced with support of KORE or not, through a quarterly newsletter sent to a wide external and internal list of stakeholders since November 2017.
- iv. Establishing and maintaining a web portal for resilience compiling all knowledge gathered; and a community of practice open to any practitioner of resilience building interventions to facilitate knowledge exchange between practitioners.

202. All the above initiatives were financed exclusively from INFORMED resources - and continue under the GNFCPP. Costs mainly supported the salaries of consultants composing the headquarters-based KORE team, which steadily grew from one to four between 2016 and 2019. With a total level of financial expenditures of about USD 522 018, KORE represented only 2.4 percent of the total project costs. The KORE team at headquarters identified colleagues in the field to support them in championing knowledge management and distributing tools and products through field networks. KORE thus progressively built a network of focal points based in East Africa and IGAD, in West Africa (Regional Resilience, Emergency and Rehabilitation Office for West Africa/Sahel, REOWA office) and more recently in Latin America (Regional Office for Latin America and the Caribbean (RLC) office).

3.3.2 Relevance and appropriateness of KORE

Finding 42. Establishing dedicated support under KORE to leverage existing knowledge responded to a need amongst practitioners to learn for replication or upscaling of interventions.

- 203. Establishing KORE within INFORMED responded to a rationale of systematically documenting and sharing lessons from experience to improve resilience building programmes. Various other institutions, such as IGAD or USAID, also considered resilience building as a programmatic area with high action-learning potential, which motivated these institutions to invest in resilience knowledge management.
- 204. The e-consultation launched in 2016⁴⁰ revealed that the community of practitioners identified three main areas of need:
 - i. broadcasting analytical lessons learned and good practices;
 - ii. structuring and synthesizing the proliferation of knowledge on resilience;
 - iii. having an interactive and action-oriented platform for practitioners (knowledge providers and consumers) to exchange their experiences, discuss and debate, share methods, data and analysis.
- 205. Generating learning warranted dedicated support, considering that resilience building programme managers tended to focus on implementation and on documenting practices merely to meet reporting obligations. Additionally, managing knowledge for learning is a function that requires specific skills sets, which programme managers often lack. The INFORMED mid-term review already highlighted the need to continue to expand the knowledge management component of the programme.

Finding 43. The creation of a new resilience knowledge management platform was not necessarily the most appropriate action to take to fulfil needs expressed by practitioners.

206. Within the 2016 e-consultation, some experienced practitioners (including FSIN, USAID, TANGO and IGAD) warned against the risk of duplicating efforts and pointing to the need to streamline, cross-reference and structure an already prolific number of resilience knowledge management platforms. The community advocated for adopting a collaborative 'and partnership-driven' approach. Suggestions included assembling the wide range of actors developing local, regional and global resilience knowledge management and learning platforms under a shared initiative that could start with mapping existing

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⁴⁰ The e-consultation was launched via the FSN forum.

references, developing a shared framework to organize resilience knowledge and clarifying the demand.

207. Although the team examined the opportunity of supporting an integrated platform that may build on pre-existing partner efforts such as IGAD's under the IGAD Drought Disaster Resilience Sustainability Initiative (IDDRSI) strategy,⁴¹ the establishment of an ad hoc platform prevailed as it had been agreed upon with the project donor. Also, there are practical challenges in coordinating knowledge initiatives due to competition over visibility and funding; and the team in charge of developing FAO's knowledge management offer encountered a level of reluctance amongst other initiatives in sharing the knowledge they had captured.

Finding 44. The initial strategy underpinning KORE was not founded on clearly defined knowledge needs and users. This constituted a fundamental constraint to manage the initiative effectively. However, regular user consultations helped improve the relevance of knowledge products to potential users.

- 208. Effective knowledge management starts with identifying the needs and characteristics of target audiences and requires matching product formats and outreach modalities to them. KORE was not designed based on a thorough needs assessment, as knowledge management was only given limited attention prior to INFORMED. Having a vaguely defined user base made it challenging for KORE, once created, to devise suitable strategies to generate knowledge and learning that suited defined needs. This was also a fundamental constraint to measure knowledge uptake.
- 209. With this initial constraint, the KORE team has assessed needs of potential users in various ways. The team kept attentive of FAO's internal knowledge needs largely through regular interactions with the FAO teams under the SP5 at headquarters and field offices. This led to the development of the webinars which, in turn, provided an opportunity to gather feedback from attendees, who were asked to provide suggestions for further learning sessions. The community of practice is another tool that facilitated communication with and feedback from practitioners, in particular on their knowledge needs.
- 210. Decisions on topics to choose for good practices sheets mainly stemmed from proposals offered to programme managers interested in documenting and giving visibility to successful approaches. This offer-driven approach risked leaving many good practices unseen. KORE's progressive network building with teams leading on thematic work streams (e.g. nutrition, peace sustaining) and field-based colleagues involved in resilience work, has helped collect good practices more systematically. This allowed disseminating templates

⁴¹ Existing initiatives, network or platforms mentioned in the e-consultation included: The Open Data for Resilience Initiative (OpenDRI) supported by the World Bank (https://www.gfdrr.org/opendri); the Knowledge sharing platform through BRACED with support from DflD and ODI (http://www.braced.org/); the Global Resilience Partnership (http://www.globalresiliencepartnership.org/); USAID's Center for Resilience (https://www.usaid.gov/resilience/resources); the Food Security Network supported by TOPS / USAID (https://www.fsnnetwork.org/); Agrilinks supported by USAID (https://www.agrilinks.org/topics); Rockefeller Foundation's Resilience page (https://www.rockefellerfoundation.org/our-work/topics/resilience/); the Farmerfirst platform (http://www.farmingfirst.org/resilience); the Linkedin community of practice on Resilience by PopTech: (https://www.linkedin.com/groups/5074090); the Food Security Information Network's Resilience Measurement Technical Working Group; and the global Food Security Cluster.

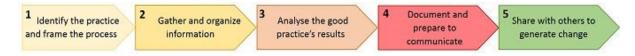
developed by KORE to support the documentation of good practices, and progressively sensitizing colleagues to knowledge management needs and approaches.

3.3.3 Effectiveness of KORE tools and products

Finding 45. KORE has delivered a significant number of well-designed products and services.

- 211. The evaluation of Strategic Programme 5 on resilience, conducted in 2016, deplored a lack of structured knowledge exchange within FAO's resilience Strategic Programme team (SP5) (FAO, 2016). Several of KORE's products, including the community of practice and internal knowledge exchange sessions, demonstrate attempts to promote knowledge exchange within FAO, addressing the need identified, despite limited resources.
- 212. KORE delivered a well thought and structured approach to knowledge management. The processes, tools and efforts of the KORE team led to the production of a number of outputs, listed below (KORE communication material):
 - Over 30 good (or promising) practice sheets were produced on topics such as SAFE, gender mainstreaming, cash-based transfers, social cohesion, livestock/pastoralism, institutionalization processes, etc. (see Annex for full list). In REOWA, the knowledge management consultant supported national facilitators who might help famers adopt good practices;
 - ii. 22 webinars were organized for externals users, which gathered on average around 80 participants, and a maximum of 135 participants, with numbers growing over time;
 - iii. 25 knowledge exchange sharing sessions were organized for FAO staff since 2017, to capture attention on a focused topic, with 49 participants on average reported (during the webinar), and recordings posted on internal share drive. (see Annex X for details).
- 213. A structured process was established to collect good practices. Figure 7 shows the stepped approach to developing good practices. A template was developed in 2016 and updated throughout the programme based on feedback and use, to encourage a capture of information that isolates features to help identify the conditions for replicating the practices in different contexts. The suite of tools provided solid guidance and support for practitioners who do not necessarily have expertise in relation to knowledge transfer, and an incentive to take the time to reflect and share experience.

Figure 7: KORE stepped approach to developing good practices



Source: From FAO/KORE website on capacity development

214. The KORE web portal structure improved over time, with dedicated pages for webinar series, good practices or publications, and investments in mobile-friendly interface, to allow for smoother navigation for mobile resilience practitioners and expand good practices dissemination. KORE reported the website to have attracted over 25 000 visitors since its launch in 2017.

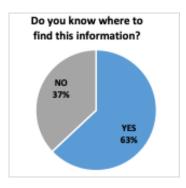
- 215. There are over 2 200 subscribers⁴² to the KORE community of practice and regularly sharing updates via a newsletter has kept the community engaged. Experience showed that the website use peaks immediately after sending the newsletter to approximately 2 250 subscribers.
- 216. KORE's engagement with partners such as IGAD and CILSS during regional knowledge share fairs supported the dissemination of good practices and knowledge. KORE facilitated good practice documentation of cross border resource and livestock sharing in the Horn of Africa and won a presentation spot at Expo 2020 Dubai Global Best Practice Programme.

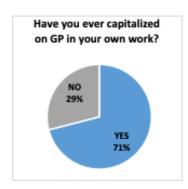
Finding 46. The use of knowledge products appears to be patchy with mixed levels of awareness and appreciation of KORE products.

217. The survey launched by the KORE team in 2018 showed that a large majority of respondents found webinars and good practices useful, and expressed an interest in KORE continuing to offer them.⁴³ The online survey conducted for the evaluation also confirmed that a majority of respondents know where to find good practices and have used them (see Figure 8).

Figure 8: Use of KORE good practices







Source: From OED survey results (see Appendix 3)

- 218. The KORE team also reports receiving anecdotal evidence from FAO colleagues that good practices are being replicated. KORE knowledge products were cited in the recent FAO handbook for emergency preparedness of FAO. IGAD also reports regularly using tools, guidance and good practices, and disseminating within their community. REOWA reported use of information and good practices collected by FAO in the region by Federation of Red Cross colleagues.
- 219. However, stakeholder interviews conducted by the evaluation, from within and outside FAO, showed a generally low level of familiarity with KORE products. At the field level, the evidence of use is quite uneven:
 - i. In REOWA, a consultant dedicated to managing knowledge reported a few good results: first, the regional office developed a strategy to capitalize on experience, with KORE and other support from the emergency operational support teams of the Emergency and Rehabilitation Division (PSE) at headquarters. This is a step forward

⁴² Figure reported as end 2019, as per KORE communication material.

⁴³ Most users were in Africa and Europe.

- as there was no previous structure to manage knowledge. The team also mentored national consultants in documenting good practice in such way that they will be easier to replicate. Lastly, the team also worked on a process to facilitate the replication of relevant good practices at community level, developing tailored activities.
- ii. In Uganda, where the knowledge management focal point is mainly dedicated to another task (RIMA), the overall contribution of the team to knowledge management is much less visible and results less evident. In countries where KORE had no champion, such as Colombia, Honduras or Mongolia, FAO staff are generally not familiar with KORE knowledge products and awareness was even lower with FAO partners.
- 220. The REOWA knowledge management team acknowledges that more needs be done to support replication, for which dedicated capacity is necessary. However, where staff have training around and can dedicate time to knowledge management, there are more visible results.

3.3.4 Factors influencing utility

Finding 47. Having strategic management decisions made by programme managers lacking comprehensive knowledge management expertise affected KORE effectiveness in generating knowledge and learning.

- 221. Some decisions related to the design of the KORE strategy suggest that the requirements of an effective knowledge management function were not fully appreciated by non-expert programme managers. With a reduced power on budget management, the KORE team, exclusively working from temporary consultancy contracts, was not in an advantageous position to influence strategic decisions. The progressive growth of human resources and efforts to institutionalize the knowledge management function within the subsequent GNAFC points to a recognition by Management of the importance of establishing an effective knowledge management function.
- 222. The following paragraphs describe how some of the strategic decisions made by non–expert managers influenced KORE effectiveness.

Finding 48. Despite a positive evolution of human resources dedicated to knowledge management over time, the resources available to KORE remained limited and insufficient.

- 223. KORE articulated its work around the stimulation of people's engagement, providing them with tools, to facilitate knowledge and learning generation. This approach supposes long-term and regular investments into understanding user needs and building channels of communications with them. This aligned to the purpose of supporting capturing, creating, distilling, sharing and using know-how (FAO, 2011). Still, insufficient resources in particular human resources were invested to permit the required interactions with users. The limited number of staff in the KORE team inevitably limited the capacity of KORE to nurture the level of interactions with colleagues required to manage knowledge sharing—oriented collaborations, as reported by the KORE team and other teams in FAO HQ.
- 224. The low level of resources available to KORE limited staffing of field offices. Consequently, KORE relied on focal points, whose primary focus was on programmatic areas and were sensitized to knowledge management. Although this was a pragmatic approach, relying on

staff who hold different responsibilities entails a risk. For example, one knowledge management focal point was unaware of basic information such as an upcoming regional knowledge share fair and the internal knowledge sharing mechanisms used by KORE. This is also true for work done at the headquarters level: for instance, maintaining a community of practice typically requires ongoing attention, and members of the KORE team, who attend many work areas, cannot afford to dedicate adequate time to the facilitation of such community.

Finding 49. Limited partnerships and coordination with external platforms (with the exception of few institutions) constrained outreach and the efficient use of knowledge.

- 225. Considering that managing knowledge entails minimizing duplication, searching for synergies and complementarities with other platforms and consolidating knowledge was a relevant strategy. The 2016 e-consultation offered several leads for reflection on existing initiatives FAO might build on, including:
 - i. IGAD's resilience knowledge management and research pillar under the IDDRSI strategy as the framework within which an integrated knowledge sharing platform can be established and coordinated;
 - ii. the Food Security Information Network's Resilience Measurement Technical Working Group, cited as a good example of how to build and share knowledge on resilience among different stakeholders;
 - iii. the global Food Security Cluster, serving as a neutral platform for coordinating action avoiding any duplication or overlaps and offering a potential platform for partners to also share ideas, products and good practices on resilience building in food security sector.
- 226. In practice, collaboration with other external platforms was limited due to competition over content. In contrast to this general finding, both the KORE and IGAD's knowledge management teams report positive and ongoing collaborations in preparing products, sharing tools and cross-referencing. The drivers of these open collaborations appears to stem from a shared vision and understanding of mutual interests. The KORE portal references good practice booklets of key partners (European Union, IGAD, CILSS) but does not cross reference other resilience knowledge management platforms.
- 227. Even the efforts made to coordinate with knowledge platforms internal to FAO did not yield convincing results. Although a few good practices sheets were prepared jointly with the TECA platform, documenting good practices for small agricultural producers (FAO, 2017), and despite sustained efforts to coordinate both portals, many other practices relevant to resilience still appear only on TECA's pages. As the KORE team itself acknowledges, much of the knowledge remains scattered across various hosting sites, and is not all cross-referenced in a way to facilitate use.

Finding 50. The uptake and use of the knowledge products was not monitored, limiting the opportunities for learning and adjustment.

228. Although the end goal of sharing good practices is to allow their replication, this is not tracked. The headquarters-based KORE team acknowledges that they do not have a full grasp on the use of their products, owing to lack of mechanism to track users. The fact that the KORE strategy did not stem from systematic user analysis may have instigated this

challenge to track knowledge use. The team is aware of the need to work further on this, as demonstrated by the hiring of new staff to track good practices application. In the field, knowledge management 'champions' recognize that "There is a huge gap in monitoring GP in the field" because they lack an approach to measure use.

229. The survey conducted in 2018 demonstrated an interest in gathering user feedback. KORE also seized the opportunity of each webinar to consult attendees systematically at the end of each session via a short questionnaire collecting metrics (institution, localization), asking standard questions on satisfaction in relation to the quality and contents of the webinar, but also probing for suggestions for future topics. The questionnaire was short and could be fill out immediately (initially it was a google form link which was less conducive).

Finding 51. The limited proactive collaboration between KORE and MEAL was a missed opportunity for cross-fertilization between two initiatives despite their complementary purposes.

- 230. An SP5 MEAL team has been formed in recent years. However, there has been little collaboration between the two teams until recently. There are obvious opportunities to establish synergies with knowledge management. However, a dialogue between the two teams only started recently. From early 2020 KORE and MEAL started to discuss possible synergies, although processes to facilitate these synergies were still not clear.
- 231. Prior to this, the emphasis was on building synergies between MEAL and the RIMA analysis. A difference in 'culture' might have caused the slowness in collaborating as KORE tends to use qualitative approaches to generate knowledge, while MEAL has so far emphasized quantitative approaches which aligned better with the RIMA methodology. However, this difference in approach offers a strong rationale for collaboration. KORE could provide the MEAL approach with complementary qualitative understandings and with a solid approach to 'learning'.

3.3.5 Sustainability

Finding 52. KORE was anchored in INFORMED, a time-bound project, and was not connected to knowledge management as a core function of FAO.

- 232. The knowledge management function ties in well with the focus of INFORMED, but also pertains to FAO's entire work on resilience and beyond. Both the INFORMED mid-term review and 2018 results-oriented monitoring identified a vision of KORE becoming a knowledge sharing and knowledge management platform, expanding beyond the subject of resilience and INFORMED, as well as becoming a reference point for other organizations, not just FAO. Still, KORE's influence lacked the support of a broader knowledge management culture in SP5 and beyond, reflecting a wider issue related to the limited development of knowledge management strategies in FAO.
- 233. KORE's role within the wider SP5 information management systems is not fully clear, from a general browsing of the webpages dedicated to FAO's work on resilience (FAO). The criteria distinguishing knowledge reported under the KORE portal from that reported under other SP5-related webpages are not clear. More generally, the SP5 web portal structure does not help bring clarity.

Finding 53. The creation of a dedicated knowledge management platform for resilience related knowledge management and limited engagement with others, and the lack of anchoring in a broader knowledge management function in FAO was not conducive to institutionalization.

- 234. KORE opted for leveraging FAO's programme human resources by building a network of champions in the field and building their capacities in managing knowledge and relaying KORE approaches and products. As mentioned above, in principle this was a valid solution to expand FAO staff knowledge and engagement in knowledge management, with limited resources,. In practice, relying on people whose primary responsibility is elsewhere also entails distilled attention onto their knowledge management-related tasks, hence risking a shallow anchoring of knowledge management within the institutional culture.
- 235. The use of a community of practice was another approach to keep the network engaged and unified, but again, it requires maintenance to remain active and appealing to members, and KORE's reliance on project-dependent financial and human resources did not provide sufficient investment.
- 236. Lastly, as noted above, the choice to set-up a stand-alone platform was less sustainable than joining forces with existing stakeholder institutions and build a joint platform.

4. Conclusions and recommendations

4.1 Conclusions

237. As noted in the scope of the evaluation, the evaluation report, including the conclusions, focus on the EWEA, RIMA and KORE work areas. A separate evaluation of the IPC was finalized in 2019 and this provides a detailed set of findings, conclusions and recommendations in relation to that component of INFORMED.

Conclusion 1. The main outcome areas of the INFORMED programme - promoting Early Warning Early Action, resilience analysis and knowledge management – are key needs for food security and nutrition decision makers and should remain priorities for FAO. However, the Organization should do more to advocate for and support improved data streams to assist these analyses.

- 238. The general relevance of all the main areas of INFORMED to the priorities of decision makers responsible for food security, nutrition and resilience is clear. Improved analysis to support early action, build resilience and related areas of knowledge management is highly relevant. In developing the GRFC, INFORMED also addressed an important gap in bringing together a global picture of the incidence of, and trends in, acute food in security. While IPC activities were mainly out of the evaluation scope, these were also undoubtedly highly relevant as confirmed by the IPC evaluation.
- 239. The design originally recognized the need to improve access to food, nutrition and resilience statistics, alongside improving the analysis, and this was very relevant as well. However, this was not carried forward as a priority under INFORMED and remains an important gap.
- 240. The demand for this information and analysis responded to a well-articulated demand amongst a range of key users. FAO was a principal beneficiary, both as a normative agency supporting the capacities of national authorities and in its role in implementing humanitarian and development interventions. The European Union, with its large food security, nutrition and resilience portfolios, was a second key stakeholder, alongside other development partners active in addressing food security and nutrition. Furthermore, there is evidence that the INFORMED design responded to the needs of national authorities themselves, and their supporting regional organizations.
- 241. These demands remain strong and have not diminished, and the need for programming in these areas should remain a priority for FAO.

Conclusion 2. An important lesson is that the initial design lacked a sufficient understanding of specific decision-making processes and needs. Consequently, it has taken time for the programme to develop a proper understanding of decision makers' needs. To enhance utility, the design of INFORMED products should find their inspiration in identified users' needs, rather than seek to communicate research findings retrospectively.

242. Overall the INFORMED design made many sound choices. However, the initial understanding of the detailed needs of potential users – or the operating context – was insufficiently developed. The consequence of this was that the design of tools and activities did not align well with user needs. The programme would have benefitted from a starting

- point of how it could facilitate decision-making processes rather than trying to retrospectively communicate research findings to decision makers.
- 243. This was evident in the case of resilience analysis, which had a very academic and research focussed entry point. Similarly, the EWEA initiative was initially at first driven by an internal demand for greater coherence and synergies between the different early warning streams within the organization. And the initial KORE design was also not strongly anchored in user information needs assessment. To their credit, INFORMED managers recognized this deficit and the programme has been strongly adaptive over the implementation period, striving to improve its specific relevance to decision makers. Both formal and informal accountability and learning mechanisms enabled and supported adaptation.
- 244. However, it has taken time for the programme to reorient itself to better address user demands and it is evident that there are still important gaps. There is still a lack of clarity in how the RIMA analysis addresses different purposes, rather than offering a common analysis for multiple purposes. A wide range of analytical gaps remains around resilience, and decision makers still require many other metrics that are not yet available. The relevance of resilience analysis across the nexus could improve with resilience analysis informing poverty reduction programming.
- 245. Similar challenges were also evident in the other output areas. The initial design of EWEA lacked a consideration of decision-making processes at the country level and the addition of a country-level pilot was essential in providing evidence on the effectiveness of the EWEA approach. By itself, the production of the quarterly EWEA report would not have moved EWEA beyond a theoretical approach. Knowledge management tools developed under KORE still do not respond to the practical needs of programme staff to identify context specific early actions or resilience interventions.

Conclusion 3. The Early Warning Early Action initiative has been highly effective at the global level. It has positioned FAO as a key player in the key coordination forums and FAO has used this platform to advocate for the promotion of EWEA with significant results.

- 246. Through INFORMED, FAO has developed into a highly influential member of the EWEA community at the global level. Through participation in the main coordination platforms at global levels, FAO has been a key contributor to the international debate on promoting and developing anticipatory action. While hard to attribute to FAO's efforts, there is clearly a refreshed interest amongst a range of stakeholders in anticipatory action. This has resulted in very significant collective outcomes, most notably the REAP partnership.
- 247. Core products, including the GRFC and the quarterly EWEA report, have been particularly helpful in raising the profile of EWEA. There is an opportunity to more explicitly link the GRFC and the quarterly EWEA report to further highlight opportunities while the GRFC provides a backward-looking view on the recent food security situation, this could be married with the forward-looking view on emerging crises. FAO's credibility as an advocate lies on its comparative advantage in generating key evidence and learning around anticipatory action rooted in its experience of implementation.

Conclusion 4. At an operational level, establishing effective anticipatory action systems will require sustained investments, both internally in FAO and amongst partners. Key areas include improving the forecasting ability of early warning, improving access to finance and building partnerships.

- 248. The implementation of pilot EWEA activities at country level have provided important learning opportunities on establishing EWEA systems. These pilots served to highlight a number of constraints, both internal to FAO and across the system as a whole, that need to be addressed as the EWEA initiative moves forward. Many of these factors are outside the manageable interest of the EWEA initiative itself and require attention from senior levels of management.
- 249. Foremost amongst these constraints is the limited predictive, or forecast capacity, of early warning systems. This emerged a critical constraint to the effectiveness of EWEA. The heavy reliance of IPC projections is problematic given the fact that IPC was not designed as an early warning tool and has yet to be adapted for this purpose. Improved risk analysis and scientific partnerships for early warning are needed.
- 250. Furthermore, the trigger mechanisms linking early warning to action are untested. Communication of the results could be improved FAO also needs to move towards digital solutions for the aggregation and dissemination of early warning information, including creating or adapting existing online platforms to host early warning alerts and trend analysis for the benefit of both FAO and partners.
- 251. Other constraints within FAO include its own protocols and procedures, which inhibit timely action. The EWEA initiative remained heavily dependent on project-based budget resources and has not yet been adequately embedded in sustained funding commitments. While internal financing through SFERA has been key to implementation, it lacks the resources to deliver at scale. Internal financing through SFERA has been key to rolling out pilots, but insufficient to meet rising levels of demand. Critically, there is still a lack of understanding and clarity in the distinction between early (anticipatory) action and early response.
- 252. It is still too early to determine the utility of the EWEA Country Toolkit and the associated plans but it is clear that early action is complex and is dependent on strong partnerships across a large number of government and non-governmental stakeholders. Forging strong and inclusive partnerships at national level is key, alongside access to appropriate sources of finance.

Conclusion 5. With INFORMED's support to RIMA, FAO has been an important forerunner in resilience measurement. However, the current tool is not widely used for planning, targeting or assessing the impact of resilience policies or programmes. It has had more utility to policy monitoring. The tool in its current form is also not likely to subsist in national systems independently. An evolution of resilience methodologies is therefore inevitable.

- 253. Investments in INFORMED have strategically positioned FAO as a key global contributor on debates on resilience measurement. FAO has been recognized as an important pioneer in resilience analysis and has been an influential member of the global technical coordination platforms. Through this, FAO has undoubtedly made important contributions to the development of resilience measurement methodologies.
- 254. However, detailed findings on the use and utility of RIMA analyses point to major challenges in both application and sustainability. The RIMA tools and products remain poorly understood. The use of the RIMA index for many of the intended purposes including planning, targeting or assessing the impact of resilience policies or programmes is limited. Furthermore, the appropriateness and added value over existing food security

- and nutrition indicators and approaches can be questioned for some applications. The utility of the new "indirect" measure to analyse the determinants of resilience has yet to be demonstrated.
- 255. There has been insufficient attention to monitoring the use and utility of the analytical products, which could have helped managers to adapt the programme. The indicators included in the LogFrame are insufficient to capture the achievement of the expected results and their contribution to the INFORMED objective of evidence-based analysis regarding the food security, nutrition and resilience situation for decision-making.
- 256. The cost and technical complexity of the method challenge prospects for institutionalization within Government or other partners. RIMA analyses remain largely dependent on FAO technical and financial support. Capacity building is limited to individual training rather than a strategic approach to institutionalization. Further methodological innovation and simplification is required if RIMA is to move beyond a niche research tool.
- 257. There are relatively few contexts where RIMA currently has strong prospects as an effective and sustainable tool to support decision makers. Using the RIMA index to monitor policy commitments is one example; where the main constraints are mitigated as data can often be extracted from existing surveys rather than conducting a bespoke survey, and technical demands are limited by the use of RIMA Excel.

Conclusion 6. Considering the sustained demand for information and analysis to support resilience policies and programming, there is a need for continued methodological innovation. This will require dedicated efforts towards measuring and analysing needs and undercurrents of resilience, based on a diversity of tools and approaches.

- 258. There is clearly a strong demand for continued support and innovation from multiple stakeholders in resilience analysis. This demand is to support decision-making across a wide range of purposes including advocacy, learning and accountability.
- 259. RIMA analyses have been substantially adapted to different contexts and purposes over the years. However, these diverse processes are still effectively presented as a single methodology. This has compounded confusion amongst users on the purpose of RIMA. Furthermore, as RIMA has attempted to respond to multiple purposes it risked becoming increasingly complex and cumbersome through the continued addition of optional modules.
- 260. There is a need to clarify how FAO analyses can contribute to the measurement and analysis of resilience in different contexts and for different purposes. It would therefore be desirable to unpack RIMA into a number of differentiated tools, to be used for different and specific purposes.
- 261. There is a strong need to build on good practices and provide practical and cost efficient approaches to resilience measurement at strategic and operational level. Existing large-scale national survey data are amongst those that may be used to derive the RCI and identify hotspots where to conduct more in-depth resilience surveys, complemented with qualitative data collection.
- 262. Furthermore, there is strong demand and justification for using a wider range of analytical approach. In particular, there is a clear demand for understanding dynamics influencing

resilience at community level, possibly based on more open and qualitative approaches, and using participatory tools to understand pathways to achieving resilience. FAO would benefit from access to a mix of resilience methodologies, rather than an exclusive focus on RIMA.

Conclusion 7. The various INFORMED outcome areas developed largely in isolation. Recent attempts to explore and develop synergies between the different analyses have had limited results. A more appropriate level to develop synergies would be in identifying and supporting common data set to support the different food and nutrition security analysis tools.

- 263. The various programme pillars operated autonomously and there were few examples of synergies between the different analytical pillars. This was partly explained by an initial emphasis on developing each of the tools. Only when they had reached a certain level of maturity did the different initiatives start to examine possible areas of complementarity. The location of different systems in different FAO units has also impeded interaction.
- 264. Much of the debate concerned attempting to create synergies between the main analyses and tools. For example, using RIMA as a tool to assess the contribution of early actions to resilience outcomes, or using the RIMA index as an input to the IPC phase classification. In reality, most of these linkages have been found to be impractical. The main exception was the use of IPC as an input to EWEA, albeit with identified limitations.
- 265. However, there are strong arguments that all data collection efforts emphasized by INFORMED should be integrated and linked, providing a fuller understanding of the multi-sectoral nature of food insecurity and malnutrition that can then inform both national and regional policies around food and nutrition security.

Conclusion 8. While tools, guidance and services developed, and capacities established under KORE constitute useful building blocks, promoting knowledge exchange for learning and programme improvement requires more investment and giving staff skilled on knowledge management the appropriate decision-making power to steer their mission.

- 266. Under INFORMED, FAO has made important contributions to learning on resilience building and early action interventions. Understanding which interventions work, in which contexts, is critical given the weakness of the existing evidence base. However, there are important opportunities to strengthen this evidence base.
- 267. The scope of evidence needs to be expanded. In the case of EWEA, information collected so far has concentrated on supporting advocacy, principally by assessing the economic benefits of acting early. However, programme staff responsible for both EWEA and resilience need much more information on the substance of what works and in what context; nor is this evidence organized in a way that allows programme staff to identify what may be relevant for their own objectives and context.
- 268. This is partly the consequence of a poorly developed corporate capacity in capturing lessons on the effectiveness of livelihood interventions in supporting resilience and overall knowledge management. The gradual growth in human resources dedicated to knowledge management and the new MEAL capacity established within SP5 partly addresses this and reflects an acknowledgment of the importance of such investment. Still, until recently, the KORE and MEAL initiatives remained insufficiently connected.

269. The function of KORE would be more effectively leveraged by being directly connected to a wider knowledge management function in FAO. Managing knowledge for resilience should be a central and core function of FAO, resonating ideally across Strategic Programmes, and most certainly beyond the scope of a given project. An effective function of knowledge management would likely entail some extent of exchanges and networking with FAO and external knowledge providers on resilience and food security.

4.2 Recommendations

Recommendation 1. FAO should strengthen capacities for the production and dissemination of forecast, scenario-based early warning as a basis for early action.

(This recommendation is based on Conclusions 1 and 4, and Findings 5, 13, 14 and 17)

- 270. It is recommended that the FAO Office of Evaluation (OED) conduct a review of i) the effectiveness of FAO-supported early warning systems (including GIEWS, IPC and EMPRES) and their relation to other external early warning systems; ii) lessons from supporting early warning system capacity development at national level and an assessment of the capacity building needs of regional and country partners.
- 271. Based on this review, it is recommended that FAO headquarters develop a corporate strategy for its role in both the production of forecast-based early warning, and partnerships to strengthen early warning system capacities at various levels.
- 272. It is recommended that FAO conduct a review of lessons in developing triggers at country level to link early warning to anticipatory action. Such review may include the conflict analysis dimension.
- 273. It is recommended that the GNAFCPP transition the publication of the GRFC and quarterly EWEA reports to an online format with rolling updates. Furthermore, an explicit link should be developed between the two products, combining the backward-looking perspective of the GRFC and the forward-looking perspective of the quarterly EWEA report.

Recommendation 2. FAO should work in partnership to strengthen the delivery of early actions in selected priority high risk countries.

(This recommendation is based on Conclusion 4, and Findings 3, 9, 16, 17, 20, 21 and 22)

- 274. It is recommended that FAO update the corporate strategy to include operational processes and accountabilities for anticipatory action. This should clarify the distinction between forecast-based anticipatory action and early response.
- 275. It is recommended that FAO regional and country offices continue to work with national and regional authorities to pilot the development and monitoring of country EWEA plans in selected high priority countries. FAO should continue to develop the capacity of national institutions and humanitarian partners in the spirit of active learning in piloting of tools, rather than institutionalization of finalized products.
- 276. It is recommended that the gFSC support country clusters to embed responsibility (in concert with national authorities) for EWEA planning, surveillance and implementation.

277. It is recommended that FAO advocate for a substantive increase in the SFERA EWEA window.

Recommendation 3. FAO should support policy and programme decision makers through a diverse set of resilience-related analytical tools and improved data access.

(This recommendation is based on Conclusions 1, 2 and 6, and Findings 23, 24, 29, 36)

- 278. It is recommended that the FAO develop a broad strategy to support the analysis of resilience. This should be based on a consideration of i) the specific needs of users for information to support decision-making; ii) the comparative advantages of FAO in responding to these needs; and iii) the skills required at headquarters (stakeholder analysis, quantitative and qualitative skills sets) to support the delivery of a range of methodological approaches.
- 279. It is recommended that FAO advocate for, and where appropriate support, the production of, and enhanced access to, food and nutrition statistics by the responsible agencies that contribute to resilience analysis.
- 280. It is specifically recommended that FAO investigate the potential for supporting community-based, participatory investigations of pathways to resilience.

Recommendation 4. Within this wider resilience analysis strategy, FAO should focus any continued investment on the development, application and training of the RIMA tool in contexts where it is demonstrating the greatest potential.

(This recommendation is based on Conclusion 5, and Findings 28, 30, 31, 32, 35 and 41)

- 281. It is recommended that FAO focus continued investments on the development, application and capacity building for the use of the RCI as a tool for policy and programme monitoring.
- 282. It is recommended that FAO collaborate with partners to skill test the accuracy of the RCI in predicting households' capacity to maintain welfare levels in the event of a shock.
- 283. It is recommended that the GNAFCPP continue to pilot use RIMA II of the indirect analysis of resilience to research the determinants of the ability to bounce back from shocks.
- 284. It is recommended that FAO develop guidance notes in support of these differentiated analytical purposes, presented in an accessible language. FAO should also continue efforts to further simplify the technical and data demands of RIMA analysis.

Recommendation 5. FAO should further and more sustainably invest in a function dedicated to capturing and disseminating lessons on the effectiveness of EWEA and resilience interventions

(This recommendation is based on Conclusions 2 and 8, and Findings 10, 36, 42, 50, 51 and 52)

285. It is recommended that FAO invest in establishing a knowledge management function within the Office of Emergencies and Resilience (OER) tightly networked with others in and outside of FAO.

- 286. It is recommended that FAO further reinforce, and invest in, corporate capacities for monitoring, evaluation and learning and mainstream responsibility for capturing learnings around specific EWEA and resilience interventions and system accountability.
- 287. It is recommended that FAO investigate developing a decision support tool to help programme staff determine which interventions would have most relevance in their specific context.

Bibliography

African Union (AU). 2014. Second Biennial Review Report of the African Union Commission on the Implementation of the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. The 2019 Progress Report to the Assembly Highlights on "Resilience and Livelihoods". Department of Rural Economy and Agriculture (DREA). Addis Ababa. (also available at: https://au.int/sites/default/files/documents/38119-doc-2019_biennial_review-en.pdf).

Alinovi, L., Mane, E., & Romano, D. n.d.. *Measuring Household Resilience to Food Insecurity: Application to Palestinian Households.* (also available at:

https://www.researchgate.net/publication/228609523_Towards_the_Measurement_of_Household_Resilience_to_Food_Insecurity_An_Application_to_Palestinian_Households).

Barrett, C. & Upton, J. 2018. Resilience as an Integrative, Measurable Concept for Humanitarian and Development Programming. Benjamin Trump, Marie-Valentine Florin, & Igor Linkov, eds., Resource Guide on Resilience, Volume 2: Domains of resilience for complex interconnected systems. New York. (also available at:

http://barrett.dyson.cornell.edu/files/papers/2018%20IRGC%20Resilience%20Guide%20Vol2%20(Barrett%20&%20Upton).pdf).

Cahier Agricultures. 2016. L'intégration des concepts de résilience dans le domaine de la sécurité alimentaire: regards croisés. (also available at:

https://www.cahiersagricultures.fr/articles/cagri/full_html/2016/06/cagri160043/cagri160043.html).

CERF. 2018. CERF for the future: Anticipatory humanitarian action. Update for the CERF advisory group. (also available at: https://cerf.un.org/sites/default/files/resources/cerf_ag_anticipatory-action_20181017_en_0.pdf)

Climate Action Summit. 2019. *Risk-informed Early Action Partnership (REAP)*. (also available at: http://www.globalresiliencepartnership.org/wp-content/uploads/2019/09/REAP-two-pager-230819.pdf).

Constas, M., Cisse, J., Knippenberg, E. & Downie, K. 2016. A Focused Review of Methodologies to Measure Resilience: An Analysis of Conceptual Presentations, Indicators, and Estimation Procedures. Report prepared by The Technical Consortium, a project of the CGIAR. Technical Report Series No 2: Strengthening the Evidence Base for Resilience in the Horn of Africa. Nairobi, Kenya: A joint International Livestock Research Institute (ILRI) and Charles H. Dyson School of Applied Economics and Management, College of Agriculture and Life Sciences, Cornell University publication (also available at:

https://www.fsinplatform.org/sites/default/files/resources/files/Constas%2520et%2520al%25202016%2520-%2520Review%2520of%2520methodologies.pdf).

D'Errico, M. & Smith, L. 2020. Comparison of FAO and TANGO measures of household resilience and resilience capacity. Research Gate. (also available at:

https://www.researchgate.net/publication/340233351_Comparison_of_FAO_and_TANGO_measures_of_household_resilience_and_resilience_capacity).

D'Errico, M., Garbero, A., Letta, M., Winters, **P.** 2020. Evaluating Program Impact on Resilience: Evidence from Lesotho's Child Grants Programme, The Journal of Development Studies. (also available at: https://doi.org/10.1080/00220388.2020.1746279).

D'Errico, M., Pietrelli, R. & Donato, R. 2018. Household resilience to food insecurity: evidence from *Tanzania and Uganda*. Rome.

Davis, B. 2018. *Strengthening resilience analysis for food security and poverty reduction*. FAO internal document. Rome.

ECHO. 2014. *Resilience Marker. General Guidance*. (also available at: https://ec.europa.eu/echo/files/policies/resilience/resilience_marker_guidance_en.pdf).

European Commission (EC). 2012. Communication from the Commission to the European Parliament and the Council. The EU Approach to Resilience: Learning from Food Security Crises. Brussels. (also available at: https://ec.europa.eu/echo/files/policies/resilience/com_2012_586_resilience_en.pdf).

European Union. 2017. Operationalising the EU Strategic Approach to Resilience. Bietlot. (also available at: https://op.europa.eu/en/publication-detail/-/publication/7c941258-d971-11e7-a506-01aa75ed71a1/language-en/format-PDF).

FAM. n.d.. Famine Action Mechanism (FAM). Also available at https://www.worldbank.org/en/programs/famine-early-action-mechanism

FAO and European Union. 2019. Strengthening Livelihood Resilience of Pastoral and Agro- Pastoral Communities in South Sudan's cross-border areas with Sudan, Ethiopia, Kenya and Uganda. Baseline report. Rome.

FAO and IFRC. 2019. Financing for anticipatory action. Key messages from the members of the Early Action Focus Task Force: IFRCI, WFP, FAO, START Network, OCHA. New York. Unpublished.

FAO and IGAD. 2019. Promoting effective resilience investments – Delivering peace, agriculture-led growth and socio-economic transformation in the Horn of Africa. Rome. (also available at: http://www.fao.org/3/ca3703en/ca3703en.pdf).

FAO and Interpeace. 2020. Pathways to sustain peace at the Food and Agriculture Organization of the United Nations (FAO). A thematic paper jointly authored by FAO and Interpeace as a contribution to the 2020 Report of the Secretary-General on Peacebuilding and Sustaining Peace. (also available at: https://www.un.org/peacebuilding/sites/www.un.org.peacebuilding/files/fao_-_peacebuilding_and_sustaining_peace_thematic_paper_1.pdf).

FAO and the World Bank. 2018. Food Data Collection in Household Consumption and Expenditure Surveys. Guidelines for Low- and Middle-Income Countries. Rome. (also available at: http://surveys.worldbank.org/sites/default/files/publications/6_Guidebook_final_Web2.pdf).

FAO and **Tufts University.** 2019. *Comparative analysis of livelihood recovery in the post-conflict periods in Karamoja and northern Uganda*. Mind the gap – briefing paper 2. Rome. (also available at: http://www.fao.org/3/ca7105en/CA7105EN.pdf).

FAO and UNESCO. 2019. Global Network against Food Crises Partnership Programme. Country Investment South Sudan. Resilience Pastoral Livelihoods and Education Project. Baseline survey report. Unpublished.

FAO and WFP. 2020. *Monitoring food security in countries with conflict situations*. Rome. (also available at: https://docs.wfp.org/api/documents/WFP-0000112228/download/? ga=2.165734654.1507455778.1592849307-1182248685.1592849307).

FAO, UNICE), WFP, UNDP and IFPRI. 2019. Report on Resilience and Vulnerability in South Sudan. (also available at: https://climis-southsudan.org/uploads/publications/Report-on-Resilience-and-Vulnerability-in-South-Sudan-FINAL-min.pdf).

FAO, WFP and UNICEF. 2012. A Joint Resilience Strategy for Somalia. Rome. (also available at: http://www.fao.org/fileadmin/templates/cfs_high_level_forum/documents/Resilience_HLEF_sideevent__13Sept12_.pdf).

FAO. 2005. *Resilience Analysis in Senegal.* FAO resilience analysis N.1. Rome. (also available at: http://www.fao.org/3/a-i4456e.pdf).

FAO. 2011a. Knowledge Strategy, March 2011, definition of knowledge management, Annex 1

- **FAO.** 2011b. FAO Knowledge Strategy. Rome. (also available at: http://www.fao.org/fileadmin/user_upload/capacity_building/KM_Strategy.pdf).
- **FAO.** 2011c. Gender Considerations for the Impact Assessment of OSRO/GAZ/912/UK, 2010-2011. Focus group session. Rome.
- **FAO**. 2011d. *Resilience Analysis in Senegal*. FAO resilience analysis N.8. Rome. (also available at: http://www.fao.org/3/a-i6584e.pdf).
- **FAO.** 2013a. Evaluation of FAO's Cooperation in Somalia 2007 to 2012. Management Response. Rome. (also available at: http://www.fao.org/3/a-bg904e.pdf).
- **FAO.** 2013b. *Policy on Gender Equality. Attaining Food Security Goals in Agriculture and Rural Development*. Rome. (also available at: http://www.fao.org/3/a-i3205e.pdf).
- **FAO.** 2014. Evaluation of FAO's contribution to crises-related transition. Linking Relief, Rehabilitation and Development. Office of Evaluation. Rome. (also available at: http://www.fao.org/3/a-bd494e.pdf).
- **FAO.** 2015a. The impact of natural hazards and disasters on agriculture and food security and nutrition. A call for action to build resilient livelihoods. Rome.
- **FAO.** 2015b. Evaluation of FAO's resilience sub-programme in Somalia (2013-2014). Office of Evaluation. Resilience programme evaluation series. Rome. (also available at: http://www.fao.org/3/a-bd443e.pdf).
- FAO. 2015c. External Review of the Food Security Information Network. FAO Internal document. Rome.
- **FAO.** 2015d. RIMA-II: Moving forward the development of the resilience index measurement and analysis model. Rome. (also available at: http://www.fao.org/3/a-i5298e.pdf)
- FAO. 2015e. Project Charter FAO Early Warning Early Action System Establishment
- **FAO.** 2016a. *A dynamic analysis of resilience in Uganda. ESA Working Paper No. 16-01.* Rome. (also available at: http://www.fao.org/3/a-i5473e.pdf).
- **FAO.** 2016b. Early Warning Early Action report on food security and agriculture October-December 2016. Rome (also available at: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/883858).
- **FAO.** 2016c. Evidence from Mid-Term Review of the Impact Evaluation For the "Building Resilience in Somalia" Joint Strategy. Rome.
- FAO. 2016d. FAO early action plan Kenya country level. FAO internal document. Rome.
- **FAO.** 2016e. Final Evaluation of the Improved Global Governance for Hunger Reduction Programme. Office of Evaluation. Project evaluation series. Rome. (also available at: http://www.fao.org/3/a-bd492e.pdf).
- **FAO.** 2016f. FSS Palestine presentation. Resilience Marking: A modest proposal. Power Point presentation. FAO internal document. Rome
- **FAO.** 2016g. *Investing in education, healthcare and productivity: how to strengthen resilience in Matam.* Building resilience: a policy brief series N.7. Rome. (also available at: http://www.fao.org/3/a-i6213e.pdf).
- **FAO.** 2016h. *Karamoja region (Uganda), baseline report for impact evaluation of FAO-UNICEF-WFP resilience programming.* FAO baseline impact evaluation report N.2. Rome. (also available at: http://www.fao.org/3/a-i5473e.pdf).
- **FAO.** 2016i. Livestock refuge mounds to strengthen resilience against natural hazards in Bolivia. Protecting livestock and agricultural production during floods and droughts. Rome. (also available at: http://www.fao.org/3/a-i6613e.pdf).

- **FAO.** 2016j. *Peace, Conflict and Food Security. What do we know about the linkages?* Rome. (also available at: http://www.fao.org/3/a-i5521e.pdf).
- **FAO.** 2016k. *RIMA-II. Resilience Index Measurement and Analysis II.* Rome. (also available at: https://reliefweb.int/sites/reliefweb.int/files/resources/AnalysIng%20Resilience%20for%20better%20targeting%20and%20action.pdf).
- **FAO.** 2016l. *Strategic work of FAO to increase the resilience of livelihoods*. Rome. (also available at: http://www.fao.org/3/a-i6463e.pdf).
- **FAO.** 2016m. Evaluation of FAO Strategic Objective 5: Increase the resilience of livelihoods to threats and crises
- **FAO.** 2017a. *Early Warning Early Action report on food security and agriculture April-June 2017*. Rome. (also available at: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/883853).
- **FAO.** 2017b. Early Warning Early Action report on food security and agriculture January-March 2017. Rome. (also available at: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/883857).
- **FAO.** 2017c. Early Warning Early Action report on food security and agriculture July-September 2017. Rome. (also available at: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/902638).
- **FAO.** 2017d. Early Warning Early Action report on food security and agriculture October-December 2017. Rome. (also available at: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/1042125).
- **FAO.** 2017e. Evaluation of FAO's Programme in West Bank and Gaza Strip (2011-2015). Office of Evaluation. Rome. (also available at: http://www.fao.org/3/a-bd698e.pdf).
- FAO. 2017f. FAO Mongolia. SFERA Early Action Fund Proposal. FAO internal document.
- **FAO.** 2017g. FAO Philippines. SFERA Early Action Fund Proposal. FAO internal document.
- FAO. 2017h. FAO Sudan. Early Warning Early action plan. FAO internal document. Rome.
- FAO. 2017i. FAO Sudan. SFERA Early Action Fund Proposal. FAO internal document.
- **FAO.** 2017j. Kuxur rum agroforestry system against natural hazards in Guatemala. Integrating agricultural production with agroforestry to build resilience during heat wave season in Ch'ortí region. Rome. (also available at: http://www.fao.org/in-action/kore/good-practices/good-practices-details/en/c/854298/).
- FAO. 2017k. Mid-Term Review of FAO & EU Joint Programme FIRST & INFORMED. Unpublished. Rome.
- **FAO.** 2017I. *Resilience Analysis in Karamoja Uganda*. FAO resilience analysis report N. 10. Rome. (also available at: http://www.fao.org/3/i9708en/I9708EN.pdf).
- **FAO.** 2017m. *The Sustainable Agriculture for Economic Resiliency (Safer) Project*. Baseline Report South Sudan. FAO internal document. Rome.
- **FAO.** 2018a. 2018/2019. El Niño. High risk countries and potential impacts on food security and agriculture. FAO internal document. Rome.
- **FAO.** 2018b. ANALYSE DE LA RÉSILIENCE EN MAURITANIA. Rapport d'analyse de la résilience N.14. Rome. (also available at: http://www.fao.org/3/ca2258fr/CA2258FR.pdf).
- **FAO.** 2018c. *Building resilience of livelihoods in Karamoja, Uganda*. Rome. (also available at: http://www.fao.org/3/ca0345en/CA0345EN.pdf).

- **FAO.** 2018d. Communication Plan. Mongolia Early Warning Early Action Pilot. Return on Investment Study 2018. FAO internal document.
- **FAO.** 2018e. *Corporate Framework to support sustainable peace in the context of Agenda 2030*. Rome. (also available at: http://www.fao.org/3/I9311EN/i9311en.pdf).
- **FAO.** 2018f. Early Warning Early Action Plan. The Philippines. Drought & Cyclones. FAO internal document. Rome.
- **FAO.** 2018g. Early Warning Early Action report on food security and agriculture 2018. Rome.
- **FAO.** 2018h. Evaluation of the Emergency Prevention System (EMPRES) Programme in Food Chain Crises. Office of Evaluation. Project Evaluation series. Rome. (also available at: http://www.fao.org/3/I8924EN/i8924en.pdf).
- **FAO.** 2018i. Food security, resilience and well-being analysis of refugees and host communities in Northern Uganda. FAO resilience analysis report N.12. Rome (also available at: http://www.fao.org/3/i9708en/I9708EN.pdf).
- **FAO.** 2018j. Global Network Against Food Crises Partnership Programme. Evidence innovations and policy change. Rome.
- **FAO.** 2018k. Horn of Africa. Impact of Early Warning Early Action. Protecting pastoralist livelihoods ahead of drought. Rome. (also available at: http://www.fao.org/3/ca0227en/CA0227EN.pdf).
- **FAO.** 2018l. Human Interest Story Collection Sudan Early Warning Early Action Pilot Return on Investment Study 2018. FAO internal document.
- **FAO.** 2018m. Institutionalization of resilience measurement and analysis in Uganda through the establishment of a Resilience Measurement Unit (RMU). Building resilience livelihoods using the Resilience Index Measurement and Analysis (RIMA). FAO internal document. Rome.
- **FAO.** 2018n. *Mongolia. Impact of Early Warning Early Action. Protecting the livelihoods of heards from a dzud winter*. Rome. (also available at: http://www.fao.org/3/ca3933en/ca3933en.pdf).
- **FAO.** 2018o. *Resilience Analysis in Jordan*. FAO resilience analysis report N.11. Rome. (also available at: http://www.fao.org/3/I8394EN/i8394en.pdf).
- **FAO.** 2018p. *Resilience Index Measurement and Analysis Short questionnaire*. Rome. (also available at: http://www.fao.org/3/ca0878en/CA0878EN.pdf).
- FAO. 2018q. Resilience Index Measurement and Analysis II. RIMA-II. FAO internal document. Rome.
- **FAO.** 2018r. Special Fund for Emergency and Rehabilitation Activities (SFERA). Annual Report 2018. Rome. (also available at: http://www.fao.org/3/ca4120en/ca4120en.pdf).
- **FAO.** 2018s. Strengthening resilience analysis for food security and poverty reduction. FAO internal document. Rome.
- **FAO.** 2018t. *Vegetable and staple food production in refugee settlement in northern and mid-western Uganda*. Rome. (also available at: http://www.fao.org/in-action/kore/good-practices/good-practices-details/en/c/1046058/).
- **FAO.** 2019a. *Analyse de la résilience au Tchad*. Rapport d'analyse de la résilience N.15. Rome. (also available at: http://www.fao.org/3/ca2971fr/CA2971FR.pdf).
- **FAO.** 2019b. Changing the way disasters are managed. Linking social protection mechanisms with Early Warning Early Action systems. Rome. (also available at: http://www.fao.org/3/ca5006en/CA5006EN.pdf).

- **FAO.** 2019c. Colombia. Impact of Early Warning Early Action. Boosting food security and social cohesion on the frontline of the migration crisis. Rome. (also available at: http://www.fao.org/3/ca6818en/ca6818en.pdf).
- **FAO.** 2019d. Colombia. Impact of Early Warning Early Action. Boosting food security and social cohesion on the frontline of the migration crisis. Rome. (also available at: http://www.fao.org/3/ca6818en/ca6818en.pdf).
- **FAO.** 2019e. Cross-border coordination of livestock movements and sharing of natural resources among pastoralist communities in the Greater Karamoja Cluster.
- **FAO.** 2019f. *Early Action focus task force coordination meeting*. Meeting notes. FAO internal document. Rome.
- **FAO.** 2019g. Early Warning Early Action (EWEA) for agriculture and food security. Concept note for a scale-up 2020-2022. FAO internal document. Rome.
- **FAO.** 2019h. Early Warning Early Action report on food security and agriculture 2019. Rome.
- FAO. 2019i. Early Warning Early Action. Power Point presentation. FAO internal document. Rome.
- **FAO.** 2019j. Evaluation of the "Food and Nutrition Security Impact, Resilience, Sustainability, and Transformation" FIRST. Office of Evaluation. FAO internal document. Rome.
- **FAO.** 2019k. *FAO's work on climate change. United Nations Climate Change Conference 2019.* Rome. (also available at: http://www.fao.org/3/ca7126en/CA7126EN.pdf).
- **FAO.** 2019I. Final Evaluation of the Integrated Food Security Phase Classification (IPC) Global Strategic Programme (GSP). 2014-2018. Office of Evaluation. Project evaluation series. Rome. (also available at: http://www.fao.org/3/ca4203en/ca4203en.pdf).
- **FAO.** 2019m. *Guide to context analysis: informing FAO decision-making*. Rome. (also available at: http://www.fao.org/3/ca5968en/CA5968EN.pdf).
- **FAO.** 2019n. Horn of Africa. Impact of Early Warning Early Action. Protecting pastoralism livelihoods ahead of drought. Rome. (also available at: http://www.fao.org/3/ca0227en/CA0227EN.pdf).
- **FAO.** 2019o. *Madagascar. Impact of Early Warning Early Action. Protecting farming livelihoods from drought and food insecurity.* Rome. (also available at: http://www.fao.org/3/ca3933en/ca3933en.pdf).
- **FAO.** 2019p. Operationalising the humanitarian-development-peace nexus through the promotion of intercommunity coexistence. Rome. (also available at: http://www.fao.org/3/ca7178en/ca7178en.pdf).
- **FAO.** 2019q. Resilience Analysis of pastoral and agropastoral communities in South Sudan. Cross-border areas with Sudan, Ethiopia, Kenya and Uganda. FAO resilience analysis report N.17. Rome. (also available at: http://www.fao.org/3/ca4975en/CA4975EN.pdf)
- FAO. 2019r. RIMA Conflict Module. FAO internal document. Rome.
- **FAO.** 2019s. South Sudan. Resilience Strategy 2019-2021. Working across the humanitarian-peace-development nexus for resilience and food security. Rome. (also available at: http://www.fao.org/3/ca5727en/ca5727en.pdf).
- **FAO.** 2019t. Sudan. Impact of Early Warning Early Action. Protecting agropastoralist livelihoods ahead of drought. Rome. (also available at: http://www.fao.org/3/ca4653en/ca4653en.pdf).
- **FAO.** 2019u. *Sustainable Agriculture for Economic Resiliency Project*. Follow-up Survey Report. FAO internal document. Rome.
- **FAO.** 2019v. *The Programme Clinic: Designing conflict-sensitive interventions Facilitation Guide.* Rome. (also available at: http://www.fao.org/3/ca5784en/CA5784EN.pdf).

- **FAO.** 2019w. The UN Common Guidance on Resilience for Humanitarian-Development-Peace Actors. The Global Food Security Cluster. FAO internal document. Rome.
- **FAO.** 2019x. The United Nations (UN) Common Guidance on Resilience for Humanitarian-Development-Peace Actors. Webinar 22 October 2019. Summary points, questions and answers. FAO internal document. Rome.
- **FAO.** 2019y. UN Common Guidance on Helping Build Resilience Societies. Webinar 22 October 2019. Summary points, questions and answers. (also available at: http://www.fao.org/3/ca7487en/ca7487en.pdf).
- FAO. 2020a. INFORMED End of Project Reflection (unpublished)
- FAO. 2020b. About KORE Knowledge Resilience. Power Point Presentation. FAO internal document.
- **FAO.** 2020c. Dimitra Clubs in the Democratic Republic of the Congo: improving the prospects for local peace. A community-driven model reinforcing conflict prevention and resilience in the Tanganyika Province. Rome. (also available at: http://www.fao.org/3/ca7711en/ca7711en.pdf).
- **FAO.** 2020d. Early Warning Early Action report on food security and agriculture 2020 January-March.
- **FAO.** 2020e. FAO's Agriculture, Livestock and Food Security Information User Survey Report. FAO internal document. Rome.
- **FAO.** 2020f. *Provisional Outline of the New Strategic Framework. PC 128/2*. Rome. (also available at: http://www.fao.org/3/nc850en/nc850en.pdf).
- FAO. 2020g. Resilience Good Practice Template and Guide. FAO internal document. Rome.
- FAO. 2020h. Food value chains. PowerPoint presentation. FAO internal document. Rome.
- FAO. n.d.. An Inclusive Approach to Anticipatory Action. Internal FAO document.
- **FAO**. n.d.. Capitalisation des expériences et bonnes pratiques de résilience. Stratégie pour l'Afrique de l'Ouest et le Sahel (2018-2021) Amélioeer l'impact des programmes de résilience, en favorisant l'émergence, la partage, l'adoption et la mise à l'échelle des bonnes pratiques. Note interne. Internal FAO document.
- FAO. n.d.. Early Warning Early Action Toolkit. FAO internal document. Rome
- **FAO.** n.d.. FAO's Special Fund for Emergency and Rehabilitation Activities (SFERA) and the Early Action window. FAO internal document.
- FAO. n.d.. Key evidence from FAO's analyses on the impact of early actions. FAO internal document.
- **FAO.** n.d.. Optional Conflict Module Interpretation. Rome. FAO internal document.
- FAO. n.d.. Project Document GCP/INT/245/EC. Rome. FAO internal document.
- **FAO.** n.d.. Report of the Special Fund for Emergency and Rehabilitation Activities (SFERA). FAO internal document. Rome.
- **FAO.** n.d.. Resilience good and promising practices. Collection of factsheets 2016-19. FAO internal document. Rome.
- FAO. n.d.. Resilience Index Measurement and Analysis Short Questionnaire. FAO internal document.
- **FAO.** n.d.. SHORT RIMA Manual 1.0. Part A. How to use Excel for the creation of the Resilience Capacity Index. FAO internal document. Rome.
- **FAO.** n.d.. SHORT ROMA Manual 1.0. Part B. Data Cleaning and management. FAO internal document. Rome.

FAO. n.d.. The Regional Initiative on Building Resilience for Food Security and Nutrition (RI-FSN). Knowledge Management proposal and action plan. FAO internal document.

FSIN. 2013. Resilience Measurement. Proceedings of the Technical Working Group Consultative Meeting. Rome.

FSIN. 2014a. A common Analytical Model for Resilience Measurement. Causal framework and methodological options. Rome. (also available:

http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/FSIN_Paper2_WEB_1dic%20(WEB). pdf).

FSIN. 2014b. *Resilience Measurement Principles. Toward an agenda for measurement design*. Rome. (also available at:

http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/FSIN_29jan_WEB_medium%20res.pdf).

FSIN. 2015a. *Households Data Sources for Measuring and Understanding Resilience*. Rome. (also available at: https://www.fsnnetwork.org/sites/default/files/FSIN_TechnicalSeries_3.pdf).

FSIN. 2015b. *Measuring Shocks and Stressors as Part of Resilience Measurement*. Rome. (also available at: http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/1_FSIN_TechnicalSeries_5.pdf).

FSIN. 2015c. *Qualitative Data and Subjective Indicators for Resilience Measurement*. Rome. (also available at:

http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/1_FSIN_TechnicalSeries_4.pdf).

FSIN. 2015d. Systems Analysis in the Context of Resilience. Rome. (also available at: http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/1_FSIN_TechnicalSeries_4.pdf).

FSIN. 2016. Quantitative Analyses for Resilience Measurement. Guidance for constructing variables and exploring relationships among variables. Rome. (also available at:

https://www.fsinplatform.org/sites/default/files/paragraphs/documents/FSIN_TechnicalSeries_7_3.PDF)

FSIN. 2018. *Global Report on Food Crises*. Rome. (also available at: https://docs.wfp.org/api/documents/WFP-0000069227/download/?_ga=2.2786544.1507455778.1592849307-1182248685.1592849307).

FSIN. 2019a. *Global Report on Food Crises*. Joint analysis for better decisions. Rome. (also available at: https://www.fsinplatform.org/sites/default/files/resources/files/GRFC%202019_Full%20Report.pdf).

FSIN. 2019b. Regional Focus on the Intergovernmental Authority on Development (IGAD) Member States. Global Report on Food Crises. Joint Analysis for better decisions. (also available at: https://www.fsinplatform.org/sites/default/files/resources/files/IGAD_RRFC_2020.pdf).

FSIN. n.d.. *FSIN in Action 2013-2014*. (also available at: http://www.fsincop.net/fileadmin/user_upload/fsin/docs/FSIN-in-Action-2013-2014.pdf).

FSIN. n.d.. Resilience Evidence for Decisions in Development. An Initiative for Country and Regionally Focused Work on Resilience Measurement. Rome. (also available at: https://www.fsinplatform.org/sites/default/files/resources/files/6July_REDDI%20concept%20note.pdf).

FSIN. n.d.. South Sudan. Operational Strategy for Food and Nutrition Security Information Systems Capacity Development. (also available at:

https://www.fsinplatform.org/sites/default/files/resources/files/FSIN%2520South%2520Sudan%2520Operational%2520Startegy.pdf).

German Red Cross. 2017. *Forecast-based financing: A policy overview.* Berlin. (also available at: https://www.drk.de/fileadmin/user_upload/FBF/Policy_overview_sep_2017.pdf).

Gershon Kodwo Ansah, I., Gardebroek, C. and Ihle, R. 2019. *Resilience and household food security: a review of concepts, methodological approaches and empirical evidence*. (also available at: https://link.springer.com/article/10.1007/s12571-019-00968-1).

Hailey, P., Kim, J., McCloskey, E., et al. 2018. Constraint and Complexities of Information and Analysis in Humanitarian Emergencies. Evidence from Somalia. A Feinstein International Center Brief. (also available at: https://fic.tufts.edu/wp-content/uploads/Somalia-Case-Study-Report_11-16.pdf).

IASC. 2018. Standard Operating Procedures. Early Action to El Niño episodes. Inter-Agency Standard Operating Procedures. (also available at:

https://interagencystandingcommittee.org/system/files/inter_agency_sops_for_early_action_to_el_nino_la_nina_episodes.pdf).

IFPRI. 2019. *Resilience and Food Security in South Sudan: Evidence from Communities*. PowerPoint presentation. Unpublished document. Juba.

IGAD. 2019. *Market access, trade and financial services. Resilience of Focus Issue 6/2019*. Djibuti. (also available at: https://resilience.igad.int/wp-content/uploads/2020/02/RFM_Issue6-19_Final.pdf).

Joint Research Centre (JRC). 2017. Building a Scientific Narrative Towards a More Resilient EU Society. Part 1: a Conceptual Framework. Luxemburg. (also available at: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC106265/jrc106265_100417_resilience_scienceforpolicyreport.pdf).

Jones, L., Samman, E. ND. *Measuring Subjective Households Resilience. Insights from Tanzania.* (also available at: https://www.odi.org/sites/odi.org.uk/files/resource-documents/10651.pdf).

Maxwell, D. & Hailey, P. 2020. Towards Anticipatory Information Systems and Action: Notes on Early Warning and Early Action in East Africa. Boston. Feinstein International Center, Tufts University; Nairobi: Centre for Humanitarian Change. (also available at: https://fic.tufts.edu/wp-content/uploads/Towards-Anticipatory-Information-Systems-and-Action.pdf).

Maxwell, D. 2019. Conflict Research Programme. Famine Early Warning and Information Systems in Conflict Setting: Challenges for Humanitarian Metrics and Response. LSE, CRP, Tufts University & World Peace Foundation. (also available at: https://fic.tufts.edu/wp-content/uploads/CRP-Famine-Early-Warning-and-Information-Systems-in-Conflict-Settings-D-Maxwell-final-20191119.pdf).

Maxwell, D., et al. 2020a. Food Policy. Determining famine: Multi-dimensional analysis for the twenty-first century. (also available at: https://doi.org/10.1016/j.foodpol.2020.101832).

Maxwell, D., et al. 2020b. The Politics of Information and Analysis in Humanitarian Emergencies. Evidence from Kenya. Tufts University. Boston. (also available at: https://reliefweb.int/sites/reliefweb.int/files/resources/PIA-Kenya-April-2020-FINAL.pdf).

National Institute of Statistics (Niger) (INS), CILSS. 2017. Rapport de l'etude sur la mesure et l'analyse de la resilience l'insecurite alimentaire au Niger. Niamey.

Nkunzimana T., Custodio E., Thomas A.C., Tefera N., Perez Hoyos A., Kayitakire F. 2016. *Global analysis of food and nutrition security situation in food crisis hotspots*. Belgium. (also available at: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/global-analysis-food-and-nutrition-security-situation-food-crisis-hotspots).

OCHA. 2020. *Humanitarian Needs Overview. South Sudan. Humanitarian Programme Cycle*. (also available at: https://reliefweb.int/sites/reliefweb.int/files/resources/South%20Sudan%20-%20Humanitarian%20needs%20overview%202020.pdf).

ODI. 2014. Assessing resilience: why quantification misses the point. HPG Working Paper. London. (also available at https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9049.pdf).

ODI. 2015a. A comparative overview of resilience measurement frameworks. Analysing indicators and approaches. London. (also available at: https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9754.pdf).

ODI. 2015b. *Measuring 'subjective resilience' perceptions to quantify household resilience. Working paper 423.* London. (also available at: https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9753.pdf).

ODI. 2016. Analysis of Resilience Measurement frameworks and approaches. The Resilience Measurement, Evidence and Learning Community of Practice (CoP). London. (also available at: https://www.fsnnetwork.org/sites/default/files/analysis_of_resilience_measurement_frameworks_and_a pproaches.pdf)

ODI. 2019. Anticipatory humanitarian action: what role for the CERF? Moving from rapid response to early action. Working paper 551. London. (also available at: https://www.odi.org/sites/odi.org.uk/files/resource-documents/12643.pdf)

OXFAM. 2013. A multidimensional Approach for Measuring Resilience. Oxfam GB Working Paper. (also available at: https://policy-practice.oxfam.org.uk/publications/a-multidimensional-approach-to-measuring-resilience-302641).

Pingali P., Alinovi L. and Sutton J. 2005. Food Security in Complex Emergencies: Enhancing Food System Resilience. Disasters Volume 29, Issue s1

REACH. 2018. South Sudan. "Now the Forest is Blocked": Shocks and Access to Food. (also available at: https://reliefweb.int/sites/reliefweb.int/files/resources/ssd_report_shocks_and_access_to_food_march_2 018_final.pdf).

Romano, D. and Ciani, F. 2014. Testing for household resilience to food insecurity: evidence from Nicaragua. Paper presented at the EAAE 2014 Congress, Slovenia

Smart Resilience. 2016. Analysis of existing assessment resilience approaches, indicators and data sources: Usability and limitations of existing indicators for assessing, predicting and monitoring critical infrastructure resilience. Stuttgart. (also available at:

https://www.ivl.se/download/18.4a88670a1596305e782de/1484131257184/E002.pdf).

Start Network and Climate Centre. 2020. *Sector-wide review of the development and use of methodologies and guidance for the monitoring and evaluation of forecast-based action.* Unpublished.

State of Palestine Ministry of Agriculture. 2016. *National Agriculture Sector Strategy (2017-2022) "Resilience and Sustainable Development"*. (also available at: http://extwprlegs1.fao.org/docs/pdf/pal174456E.pdf).

State of Palestine Ministry of Agriculture. n.d.. *National Agriculture Sector Strategy "Resilience and Development" 2014-2016.* (also available at:

https://reliefweb.int/sites/reliefweb.int/files/resources/1417423273.pdf).

Sturgess, P. 2016. Measuring Resilience. DFfID

UN Women, ECHO, FAO and Save the Children. n.d. Development process of early warning early action for drought in Vietnam.

UNDP and INS Niger. 2016. Rapport sur le developpement humain (RNDH) Niger. Developpement Humain er Résilience des ménages à l'insecurité alimentaire au Niger. Niamey.

UNDP. 2014. Understanding Community Resilience: Findings from Community-Based Resilience Analysis (CoBRA) Assessments. Marsabit, Turkana and Kajiado countries, Kenya and Karamoja subregion, Uganda. New York. (also available at:

 $https://www.undp.org/content/undp/en/home/librarypage/environment-energy/sustainable_land_management/CoBRA/CoBRA_assessment.html).\\$

UNDP. 2018. Understanding Land Dynamics and Livelihood in Refugee Hosting Districts of Northern Uganda.

UNDSG. 2020. United Nations Sustainable Development Cooperation Framework (UNSDCF) Guidance – also see IPC,. 2019. Technical Manual Version 3.0

UNOCHA. 2020. *Humanitarian Response Plan South Sudan*. Humanitarian Programme Cycle. (also available at:

https://reliefweb.int/sites/reliefweb.int/files/resources/20191210_hrp_2020_south_sudan.pdf).

Upton, J., Constenla-Villoslada, S., Barrett, C. 2020. Caveat Utilitor: A comparative assessment of resilience measurement approaches. New York.

USAID. 2018. Resilience and Resilience Capacities Measurement Options. Full Approach. Methodological guide: A Guide for Calculating Resilience Capacity. Washington. (also available at: https://www.fsnnetwork.org/resilience-and-resilience-capacities-measurement-options).

USAID. 2019a. *Resilience Profile – Yambio*. (also available at: https://fscluster.org/sites/default/files/documents/resilience_profile_-_yambio_-_2019.pdf).

USAID. 2019b. *South Sudan. Resilience Profile – Aweil.* (also available at: https://fscluster.org/sites/default/files/documents/resilience_profile_-_aweil_-_2019.pdf).

USAID. 2019c. *South Sudan. Resilience Profile – Torit.* (also available at: https://fscluster.org/sites/default/files/documents/resilience_profile_-_torit_-_2019.pdf).

USAID. 2019d. *South Sudan. Resilience Profile – Wau.* (also available at: https://fscluster.org/sites/default/files/documents/resilience_profile_-_wau_-_2019.pdf).

Von Uexkull, N., d'Errico, M. and Jackson, J. 2020. *Drought, Resilience, and Support for Violence: Households Survey Evidence from DR Congo.* Journal of Conflict Resolution. (also available at: https://journals.sagepub.com/doi/pdf/10.1177/0022002720923400).

WFP and Applied Research Institute-Jerusalem. 2010. *Socio-Economic and Food Security Atlas in the occupied Palestinian territory.* (also available at: https://unispal.un.org/pdfs/SocEcoFoodSec_Atlas.pdf).

WFP, FAO, PCBS. 2010. *Socio-Economic and Food Security Survey. West Bank and Gaza Strip, occupied Palestinian territory.* A survey carried out by World Food Programme, Food and Agriculture Organization and Palestinian Central Bureau of Statistics. (also available at: https://documents.wfp.org/stellent/groups/public/documents/ena/wfp232398.pdf?iframe).

WFP, FAO, UNDP, UNICEF. 2018. Declaration concerning Joint Resilience Analysis, Measurement and Monitoring for Programming in South Sudan Among FAO, UNICEF, UNDP and WFP. South Sudan. Unpublished document.

WFP. 2020. *The evidence base for Anticipatory Action*. (also available at: https://docs.wfp.org/api/documents/WFP-0000110236/download/?_ga=2.93701915.728628740.1593440108-683757336.1593440108).

World Bank Group. n.d. *Global Risk Financing Facility. Supporting Early Action to Climate Shocks, Disasters, and Crises.* Information Sheet. (also available at: https://www.gfdrr.org/sites/default/files/GRiF%20Information%20Sheet.pdf).

Appendix 1. People interviewed

Last name	First name	Institution/Agency	Role
Abdulrahman	Abdullahi	Humanitarian Affairs and Disaster Management Agency Puntland (HADMA)	General Manager
Acosta Zamorano	Paola	Guajira Naciente	Wash and Nutrition Advisor
Afidra	Juma	USAID	Food Security Specialist
Ahmed Farhan	Abdullahi	Somaliland Ministry of Livestock	Director of Somaliland Ministry of Livestock
Amling	Matthias	Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ)	Policy, International Organisations, Multilateral Coordination
Antonaci	Lavinia	FAO	Technical Coordinator
Arango	Carlos Felipe	FAO	Project Coordinator
Arnal	Pablo	WFP	Monitoring and Evaluation advisor for Climate and DDR Programmes
Arrieta	Victor	Local Authority Albania, Colombia	Local Government Representative
Assabir	Hicham	FAO	EWEA Consultant
Atieno	Immaculate	FAO	Resilience Analyst/Econometrician
Atozou	Baoubadi	FAO	Economist
Austin Carmichael	Zacharey	World Bank	Team Leader for the Famine Action Mechanism (FAM) and Operations Officer
Awino	Imelda	Action Contre La Faim (ACF)	Regional Nutrition Advisor
Baffo	Abdi	Independent	National Resilience Focal Point in Somalia 2016-2017
Bakouan Traore	Aminata	Independent	Consultant
Bardi	Ariel Sophia	FAO	Knowledge Management Specialist
Barrett	Christopher	Cornell University	Professor
Benammour	Omar	FAO	Social Protection Officer
Bernal	Leidy	FAO	Veterinary
Biru	Nigist	Famine Early Warning Systems Network (FEWS NET)	Regional Technical Manager, East Africa
Bogale	Ayalneh	AU	Professor
Bori	Assad	FAO	Economist
Buchanan-Smith	Margie	Independent	Researcher
Bukania	Christine	IGAD	IDRISSI Head of Knowledge Management
Bustamante	Clara	Agrosavia	Agricultural Researcher
Cafiero	Carlo	FAO	Project Manager
Callens	Karel	FAO	Deputy Director SP1

Camara	Tidiane	Agence Nationale de la statisque et de la	Point focal systeme d'alerte précoce	
		Démographie		
Carbonne	Fabrice	OCHA	Head of Preparedness	
Castermans	Alain	DEVCO	Programme Manager	
Chana	Opaskornkul	WFP	Head of Monitoring and Evaluation	
Clark	Kathryn	FAO	Food Security and Livelihoods Coordinator	
Collman	Sarah	REACH	Country Coordinator Impact Initiatives	
Contreras Castellanos	Marta	University of La Guajira, Colombia	Professor at the University of La Guajira	
Cortez	Sandra	Fundaliza	Project Coordinator	
D'Errico	Marco	FAO	Economist	
Daidone	Silvio	FAO	Economist, Impact Evaluation	
Davis	Benjamin	FAO	Strategic Programme Leader	
Di Giuseppe	Stefania	FAO	Econometrician	
Diop	Moby	IFRC		
Drabe	Antazio	Famine Early Warning Systems Network (FEWS NET)	Country Representative	
Dujanovic	Dunja	FAO	Technical Officer	
Ejem	Alfred	Action Contre La Faim (ACF)	Regional Nutrition Advisor	
Emoyo Peter	Gerald	UNHCR	Assistant Livelihoods Officer	
Esthete	Gezahegn	Save the Children	Food Security and Livelihood Technical Adviser	
Farr	Emily	OXFAM	EFSVL Team Leader	
Ferloni	Marco	Food Security Cluster (FSC)	Food Security Coordinator	
Ferrand	Cyril	FAO	Head of the Resilience Team of East Africa (RTEA)	
Ferreira	Pedro	FAO	Programme Officer	
Fiorillo	Ciro	FAO	Head of Office	
Frankenberger	Tim	TANGO International	Director Tango International	
Gichane	Benjamin	FAO	Data Analyst	
Gillan	Tabitha	DfID	Livelihoods Advisor	
Giuffrida	Valerio	WFP	VAM Database Manager	
Glaeser	Laura	FEWSNET	FEWSNET NET CoP	
Glinni	Ariella	FAO	Senior Technical Officer	
Goddeeris	Martijn	BRICS NGOs Consortium Somalia	Heads of BRICS NGO Consortium	
Gonzalez Cely	Omar	FAO	Project M&E	
Groder	Joachim	WFP	Head of Analysis and Early Warning Unit	
Guerten	Nora	FAO	EWEA Consultant	
Hailey	Peter	What Works	Head of WhatWorks	
Hamdan	Nora	We Effect	Programme Coordinator	

Hannoun	Rana	FAO	Economist
Hee Ban	Hyun	UNICEF	Chief, Social Policy, Planning, M&E
Herzenstein	Leo	FAO	EWEA Consultant
Hillbruner	Chris	USAID	Head of Analysis
Hoskins	Alexis	WFP	FSIN Secretariat Coordinator 2014-2016
Husain	Arif	WFP	Chief economist and Director of Research, Assessment and Monitoring
Innocente	Sergio	FAO	Agriculture Officer
Jackson	Julius	FAO	Technical Officer
Jacqueson	Patrick	FAO	Senior Programme Officer
Jaime	Catalina	Red Cross Climate Centre	Senior Risk Advisor
Jama	Abdi	IGAD/ICPAC	Coordinator of IGAD Food Security Nutrition and Resilience Analysis Hub (IFRAH)
Jones	Catherine	FAO	EWEA Specialist
Jore	Joice	Food Security Technical Secretariat Bureau of Statistics South Sudan	Coordinator
Kamau	David	FAO	Data Analyst
Kamil	Halimatou	Institut National de la Statistique du Niger	Directrice de l'Institute National de la Statistique du Niger
Kerandi	Nicholas	FAO	Food Security Analyst
Khawaja	Mustafa	FAO	PCBS Acting Director General
Kimeu	Paul	National Drought Management Authority (NDMA), Kenya	Drought Resilience Manager
Klassen	Sarah	START Network	Risk Analysis Advisor
Lago	Panduleni	Southern African Development Community (SADC)	Food Security advisor
Lagos	Melissa	Independent	Independent consultant
Lahham	Salah	WFP	VAM Officer
Lanyon	Andrew	FAO	Resilience Coordinator
Laracca	Giacomo	FAO	Food Security Monitoring and Analyst Specialist
Larfaoui	Fairouz	FAO	Animal Health Officer
Latimer	Dennis	FAO	FAO Country Representative
Lazarus	Brenda	FAO	Emergency Needs Assessment and Early Warning Advisor
Lekiefs	Cyril	Action Contre La Faim (ACF)	Head of Food Security
Liku	Justus	CARE	Senior Technical Advisor
Lombardi	Niccoló	FAO	EWEA Specialist
Lopez	Jose	FAO	Senior Programme Coordinator
Lowanyang	Nathan	WFP	Programme Associate

Mackey	Kevin	World Vistion International (WVI)	SOMREP Coordinator
Malik	Amin	FAO	Monitoring and Evaluation Officer
Manni	Alemu	FAO	Chief Technical Advisor
Manning	Simon	World Vistion International (WVI)	Programme Quality Director
Marquez Ariza	Javier	FAO	Veterinary
Marsland	Neill	FAO	Senior Technical Officer
Mason	Jesse	WFP	Global Coordinator for Anticipatory Action
Matar	Lunba	World Vision	Economic Development Lead
Matras	Frederique	FAO	Knowledge management and Capacity Development Specialist
Maxwell	Dan	Tufts University	Professor
Mclean	Calum	Independent	Thematic expert on food security
Minelli	Marco	FAO	Disaster Risk Reduction Expert and Emergency Focal Point
Minjauw	Bruno	FAO	Global Coordinator
Molla	Daniel	FAO	Chief Technical Adviser
Moloney	Grainne	UNICEF	Regional Manager
Muci	Giampiero	DEVCO	Head of Resilience and Food Crises
Muhigirwa	Louis	FAO	Emergency Programme Officer
Mungai	Maureen	FAO	Programme Monitoring Officer
Mwangi	John	National Drought Management Authority (NDMA), Kenya	Head of Drought Information Department
Mwirigi	Louise	UNICEF	Nutrition Specialist
Negesse	Belihu	FAO	Senior Economist
Ngesa	Oscar	FAO	Econometrician
Nguyen	Thaianh	FAO	NPO on Climate changes and DDR
Obrien	Erin	FAO	Emergency Preparedness Specialist
Omolo	Danvers	FAO	Data Analyst
Omtzigt	Dirk-Jan	ОСНА	Head, Humanitarian Financing Strategy and Analysis Unit
Opio	Paul	FAO	Livestock Officer
Opio	Paul	FAO	Livelihoods Programme Officer
Ouédraogo	Abdoulaye	Government Burkina Faso	Government Representative
Pahari	Krishna	WFP	Senior Regional Programme Officer (VAM/M&E)
Palma	Patricia	Central American Integration System (SICA)	Director of the Central America Regional Program on Food and Nutrition Security PRESANCA
Palombi	Lucia	FAO	Knowledge Management Specialist
Pangech	John	Ministry of Agriculture	Chair of IPC Technical Working Group

Pangech	John	Ministry of Agriculture South Sudan	Director General
Parodi	Luca	FAO	Early Warning Early Action Focal Point
Peeters	Annick	Belgian Development Agency (ENABEL)	Desk Officer Humanitarian Affairs, Foreign Trade & Development Cooperation
Peters	Jake	DFID	Humanitarian Advisor
Pham	Hang	FAO	Senior Resilience Officer
Pietrelli	Rebecca	FAO	Economist
Pitaud	Thomas	UNDP	Resilience Expert
Quattrola	Veronica	FAO	FAO Deputy Representative
Quilla	Maria	FAO	National Project Development and Coordination Specialist and PU CDRENR Team Leader, FAOPH
RamadanElSayed	Giulia	FAO	Knowledge Management Consultant
Ricoy	Anna	FAO	Disaster Risk Management Coordinator
Rikard	Katie	REACH Initiative	Head of Programmes Africa and Europe
Rodriguez	Humberto	FAO	Project Coordinator
Rouillard	Arnaoud	FAO	MEL Consultant and Social Protection
Russo	Luca	FAO	Project Coordinator
Sabdow	Bashir	DFID	Humanitarian Advisor
Sadibou Pene	Cheikh	FAO	Consultant National Agronome
Saeed	Haleema	Presidency of the Palestinian Central Bureau of Statistics WBGS	International Relations
Saleh	Jawad	FAO	Assistant to the PCBS President for the technical affairs
Salih	Huyman	FAO	Agricultural Officer
Senahoun	Jean	FAO	Senior Economist
Sharavnyambuu	Munguntuya	Mongolian Red Cross Society	Disaster Management Programme Manager
Shibru	Mulugeta	FAO	Programme Officer
Siahaan	Kara	Red Cross Movement	Programme Coordinator - Forecast based financing
Sibrian	Ricardo	Central American Integration System (SICA)	Expert in statistical analysis
Smith	Ross	WFP	Senior Regional Programme Officer (VAM/M&E)
Solarte	Henry	FAO	Project Supervisor
Sonko	Mamadou	FAO	Consultant National Agronome
Sow	Coumba	FAO	Policy Officer
Spano	Federico	FAO	Social Protection Consultant
Sukhbaatar	Jigjidpurev	FAO	Programme Technical Advisor
Takavarasha	Tobias	FAO	FAO Country Representative Kenya

Tall	Nourou	FAO	Emergency and Rehabilitation Officer
Tamiru	Wakweya	FAO	Monitoring and Evaluation Specialist
Torero	Maximo	FAO	Assistant Director General
Torres-Miralles	Jordi	ECHO	Technical Assistant Uganda
Touze	Camille	FAO	Technical Consultant
Traoré	Modibo	Institut National de la Statistique du Mali	Chef du Département Agricole
Tumursukh	Altansuvd	UN Resident Coordinator Mongolia	Humanitarian Portfolio Coordinator
Ulimwengu	John	International Food Policy Research Institute (IFPRI)	Senior Research Fellow
Van Aaken	Rudi	FAO	Senior Programme Officer
Verduijn	Rene	FAO	Senior Resilience Officer
Vergara	Maria Consuelo	FAO	Senior Specialist in Risk Management
Vhurumuku	Elliot	WFP	Head of VAM and M&E
Vos	Rob	International Food Policy Research Institute (IFPRI)	Director of Markets, Trade and Institutions division
Wabbes Candotti	Sylvie	FAO	Emergency and Rehabilitation Officer
Walther	Ryan	USAID	Programme Officer
Wiegers	Esther Silvana	FAO	Senior FSN Policy & Monitoring Expert
Winder Rossi	Natalia	FAO	Senior Social Protection Officer
Wuestenberg	Andreas	UNICEF	Emergency Specialist
Zappacosta	Mario	FAO	Senior Economist
Zuñiga	Misael	Farmers Association - Albania, Colombia	Farmers Association Representative

Appendix 2. Evaluation matrix

Evaluation Question	Judgement criteria / evidence sought
1. How relevant and appropriate was the INFORMED programme design to the objective of increasing resilience of livelihoods to threats and crises?	What are the specific needs of 'decision makers' that the programnme responds to?
	Alignment with incidence and causes of food insecurity
	Other drivers of the programme design
2. To what extent did the programme adapt using lessons learned during implementation?	Changes in the programme strategy and approach overtime
	Use of formal and informal accountability and learning mechanisms
	Responsiveness to changing stakeholder information needs
3. To what extent was INFORMED internally coherent?	Synergies between the three programme outcomes
	Coherence/overlap with other FAO information systems, programmes and processes
4. To what extent was INFORMED coherent with external FSN and resilience analysis systems?	Gaps and overlaps with external information systems and networks
	Implementation partnerships and factors promoting and hampering partnerships
	Coordination and communication with programme partners
5. To what extent were INFORMED products used in policy and programmatic decision-making?	Examples of how decision makers are using the products, and for which programming decisions (e.g. preparedness, emergency, response, exit strategy, evaluation, etc.)?
	Examples of contributions to improved understanding of the different needs of men and women and gender-sensitive programming References to INFORMED products in policies and programme
	documents
	Perceptions of 'value-added' of INFORMED products over other information and analyses
6. What factors influenced the utility of INFORMED information?	Awareness amongst decision makers of INFORMED products
	Actions undertaken by INFORMED to promote dissemination and utilization
	Perceived quality and credibility of results
	Ability of decision makers to understand and interpret results

Evaluation Question	Judgement criteria / evidence sought
	Timeliness of release of INFORMED analysis relative to key decision- making points
	Remaining gaps in information and analysis
	Other factors influencing utility - positively and negatively, e.g. dissemination approach, data sharing, ad hoc analysis, etc.
7. How appropriate and effective was the strategy and approach to institutionalization?	Clarity of institutionalization strategy
	Transfer of capacities to regional and national institutions
	Local ownership of INFORMED products and processes and local adaptation of tools
	Other factors facilitating or constraining progress towards institutionalization

Appendix 3. Survey results

Introduction

1. As part of the evaluation of the European Union-FAO Partnership Programme "Information for Nutrition, Food Security and Resilience for Decision Making" (INFORMED) an online survey was circulated to stakeholders involved in FAO's work on Early Warning for Early Action, both at country and global level. The survey was conducted during the period April—May 2020. This document presents an analysis of the main survey results.

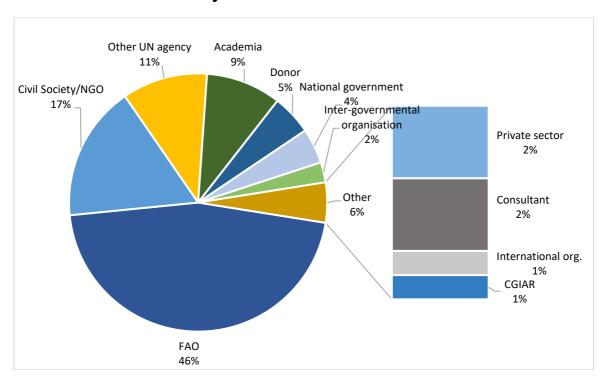
Survey population, response rate and limitations

- 2. The INFORMED management team provided email addresses of potential respondents' users of the Resilience Index Measurement Analysis (**RIMA**), the Early Warning for Early Action (**EWEA**) and the Knowledge Sharing Platform for Resilience (**KORE**). With three distinct mailing lists, the evaluation opted for launching two surveys: one specific for RIMA and another one specific for EWEA; both surveys included a set of questions related implicitly to KORE, as a crosscutting theme.
- 3. The survey bearing mainly on EWEA work was addressed to over 2000 individuals, including stakeholders internal and external to FAO. It received a total of 294 responses, with a completion rate of 45 percent. Out of the total responses received, 159 were used to feed the analysis. The survey bearing mainly on RIMA work was shared with the RIMA mailing list subscribers, excluding individuals already targeted with the EWEA survey, to avoid duplications. Out of 1182 addresses, this survey received 11 responses, of which only 6 where complete. Such response rate was too low to permit a meaningful analysis of the data received. Therefore, this document presents the results of the first survey only.
- 4. A limitation that might have affected response rates, was that the evaluation team was not in a position to isolate population groups according to each theme, owing to overlapping mailing lists. This led to the decision to separating survey addressees in such way, to avoid having one person receive several similar surveys. This also led to sending only the EWEA survey to some people who might have also been appropriate respondents to the survey on RIMA.

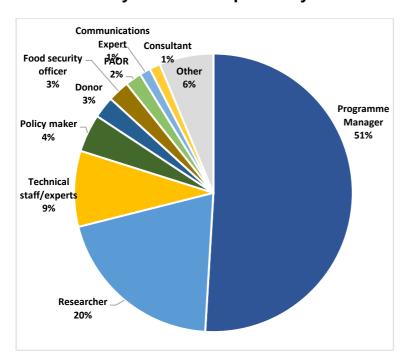
1. Respondents profiles

- 5. A series of profiling questions were asked to understand the final survey sample in more detail, and to facilitate comparative analysis across respondents' subgroups.
- 6. The pied charts below present known characteristics of the respondents.

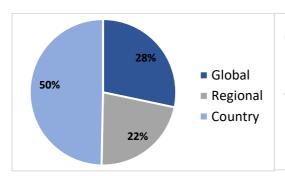
1.1. Which institution do you work for?



1.2. What is your area of responsibility?

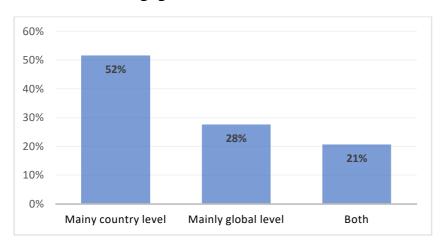


1.3. At which level do you mostly work?



Out of respondents who reported to be based at regional level, 55% are based in Africa, and out of those who reported to be based at country level, 62% are based in African countries.

1.4. Level of engagement with FAO's work on EWEA



2. Survey results

- 7. In addition to analysing survey results at the aggregate level (i.e. across all respondents), responses were also compared across sub-groups according to the following criteria:
 - **Level of interaction with FAO on EWEA:** Respondents who interacted with FAO on EWEA at Global level *vs* Country level, and
 - **Respondents' institution type:** Respondents who work at FAO *vs* respondents who work in other institutions.
- 8. The report below highlights wherever important differences between respondent subgroups were identified.
- 9. The distribution of scores is presented along with the weighted average score, whereby "marks out of 10" are calculated. The higher score the greater the familiarity / satisfaction / use / etc. expressed.

Return on Investment Plans
IASC El Nino Oscillation SOP

2.1. EWEA Products:⁴⁴ Familiarity

PRODUCTS	_
Global Report on Food Crisis	15
Quarterly EWEA Report on Food Security and Early	15
Action	
EWEA Country Plans	15
Good Practice factsheets	15
Webinars on EWEA	15
IASC EWEA and Readiness Report	15
	Global Report on Food Crisis Quarterly EWEA Report on Food Security and Early Action EWEA Country Plans Good Practice factsheets Webinars on EWEA

	0	1	2	3	4	5
58	5%	3%	13%	18%	32%	28%
58	6%	11%	9%	23%	28%	22%
56	15%	15%	17%	14%	26%	13%
57	22%	15%	13%	17%	24%	9%
57	24%	11%	15%	27%	17%	6%
55	27%	15%	20%	16%	17%	4%
59	30%	14%	14%	25%	9%	8%
58	36%	15%	19%	12%	15%	4%

Weighted
Average
Score (out
of 10)
7.1
6.4
5.2
4.6
4.4
3.9
3.8
3.3

2.2. EWEA products: Frequency of use

PRODUCTS		N/ A
Global Report on Food Crisis	151	4
Quarterly EWEA Report on FS and Early Action	146	5
EWEA Country Plans	143	11
Return on Investment Plans	135	18
IASC El Nino Oscillation SOP	127	25
IASC EWEA and Readiness Report	135	16
Webinars on EWEA	143	8
Good Practice factsheets	143	9

0	1	2	3	4	5
		13	25	21	25
7%	10%	%	%	%	%
		12	20	27	17
12%	13%	%	%	%	%
		13	17	19	15
26%	10%	%	%	%	%
		14	14	13	10
38%	11%	%	%	%	%
		13	14	10	
35%	19%	%	%	%	8%
		15	13	13	
33%	19%	%	%	%	9%
		15	17	12	
29%	18%	%	%	%	8%
		14	16	19	10
24%	17%	%	%	%	%

Weighted Average Score (out of 10)*
6.4
5.8
4.7
4.4
3.8
3.7
3.6
3.4
*Excludes

*Excludes N/A

⁴⁴ The evaluation identified products in focus for the survey based on suggestions from the project management team.

119

115111111110106105105

2.3. EWEA products: perception of value

PRODUCTS

. 11020015
Global Report on Food Crisis
Quarterly EWEA Report on FS and Early
Action
EWEA Country Plans
Good Practice factsheets
Webinars on EWEA
Return on Investment Plans
IASC EWEA and Readiness Report
IASC El Nino Oscillation SOP

0	1	2	3	4	5
3%	3%	10%	18%	40%	26%
3%	7%	8%	27%	37%	18%
9%	7%	8%	29%	32%	14%
9%	6%	11%	30%	30%	14%
12%	9%	17%	24%	25%	13%
15%	9%	17%	22%	27%	9%
15%	14%	10%	24%	30%	7%
15%	15%	16%	20%	26%	8%

Weighted Average Score (out of 10)
7.4
6.8
6.2
6.2
5.6
5.3
5.2
5.0

2.4. Synthesis on EWEA products

PRODUCTS

Global Report on Food Crisis
Quarterly EWEA Report on FS and Early
Action
EWEA Country Plans
Good Practice factsheets
Webinars on EWEA
Return on Investment Plans
IASC EWEA and Readiness Report
IASC El Nino Oscillation SOP

Weighted	hted Average Score (out of 10)							
Familiarity	Frequency of use	Added value						
7.1	6.4	7.4						
6.4	5.8	6.8						
5.2	4.7	6.2						
4.6	4.4	6.2						
4.4	3.8	5.6						
3.8	3.7	5.3						
3.9	3.6	5.2						
3.3	3.4	5.0						

- i. When comparing the first set of questions, products have the <u>same ranking</u>, featuring similar scores too: respectively, respondents scored higher (7.0 and above) the **Global Report on Food Crisis (GRPC)**, followed by the **Quarterly EWEA Report**.
- ii. On the other hand, the **Return on Investment Plans (ROIs)**, the **IASC EWEA** and **Readiness Report** and **IASC EI Nino Oscillation SOP** are relatively unknown, not frequently used and with an added value rated 5 out of 10.
- 10. The overall score of the perception of EWEA products' added value is on average slightly higher than the score on the *Familiarity* and *Frequency* of use; and the score on the *Frequency* of *Use* is slightly lower than the other two.

2.5. Type of decisions EWEA products help inform

PRODUCTS	Advoc	Coordin with partners	Other program decisions	Choice of intervent types	Target decis	Policy develop	Account & report	Budget alloc
Global Report on Food Crisis	68	61	52	46	44	39	22	17
	00	01	52	40	44	39	22	17
Quarterly EWEA Report	54	49	46	55	42	26	17	16
EWEA Country Plans	32	36	35	44	32	27	19	24
Good Practice factsheets	31	29	28	31	24	17	11	10
IASC EWEA & Readiness Report	28	29	26	19	15	15	9	8
Webinars on EWEA	30	23	30	21	14	15	10	4
Return on Investment Plans	27	19	17	25	9	15	12	16
IASC El Nino Oscillation SOP	19	23	22	12	11	10	7	6
Total Checks	289	269	256	253	191	164	107	101
Total Checks %	18%	17%	16%	16%	12%	10%	7%	6%

- Overall, EWEA products, when used to inform decisions, are mostly used for **Advocacy** purposes (18 percent of checks) and for **Coordination with Partners** (17 percent of checks).
- ii. Decision which are not very much informed by EWEA products are *Accountability* and *Reporting* (7 percent of checks) and *Budget Allocation* (6 percent of checks).
- iii. The <u>products mostly used</u> to inform decisions are the Global Report on Food Crisis (**GRFC**) for *Advocacy* purposes (19 percent); the **Quarterly EWEA Reports**, for *Choosing type of interventions (18 percent)* and for *Advocacy (18 percent)*; the EWEA Country Plans are mostly used for *Choosing type of interventions (18 percent)*.
- iv. Over 40 percent of checks received by IASC El Niño Oscillation SOP identified the product as "non relevant", followed by the ROI Plans (with 35 percent of checks).

2.6. Disaggregation of results by respondent type:

- 11. When comparing respondents whose interaction with FAO on EWEA was at country level *vs* those whose interaction was at global level, the decision mostly informed by EWEA products varies:
 - i. <u>Those interacting at global level</u> rather used EWEA products for being <u>Advocacy</u> <u>purposes</u> (24 percent of checks)
 - ii. Those <u>interacting at country level</u> rather used EWEA products to inform <u>Other</u> <u>Programmatic Decisions</u> (18 percent of checks)

2.7. Perceptions about data quality, utility, timeliness and release frequency⁴⁵

Weighted

PRODUCTS		0	1	2	3	4	5	Average (out of 10)
I have confidence in the data they generate	145	2%	6%	8%	19%	29%	36%	7.5
The information provided is readily usable for decision-making	144	4%	4%	8%	27%	31%	26%	7.1
They release timely information to support decision-making	145	4%	6%	14%	24%	29%	23%	6.7
Their release frequency meets my decision- making needs	143	4%	6%	15%	31%	29%	15%	6.4

12. All scores indicate that respondents have a high level of confidence in the data generated and that the information products provide is readily usable for decision-making. Overall the higher percentage of positive scores (between 4-5) was in regards to the perception of *data quality* (65 percent) and *timeliness* (61 percent). The lowest rating was for the *release frequency* of products, with 44 percent of positive scores (4-5), 46 percent for medium score (2-3), and 10 percent for low score (0-1).

2.8. Disaggregation of results by respondent type

	Weighted Average Score (out of 10)								
PRODUCTS		All responses		Country Level	Global Level	FAO	Other Institutions		
I have confidence in the data they generate		7.5		7.0	7.9	7.3	7.7		
The information products provide is readily usable for decision-making		7.1		6.8	7.5	6.9	7.3		
They release timely information to support decision-making		6.7		6.3	7.0	6.3	7.1		
Their release frequency meets my decision-making needs		6.4		6.1	6.4	6.1	6.6		

2.9. Utility of EWEA products

- 13. In the next question, respondents were asked in an open text question to indicate how to improve the utility of some products. A total of 41 responses received have been analysed to identify the most frequently raised issue, and accordingly grouped in nine categories.
- 14. A word cloud was then created to illustrate visually the most commonly cited sources; word sizes are weighted according to the quantity of responses received.

 $^{^{45}}$ Ratings and scores ranged from « 0 » for fully disagree to « 5 » for fully agree:

Suggestions on how to improve the utility of EWEA products:

More focus on Action
Technical
DATA quality and reliability

Access to information/format

Dissemination

Timeliness of information

Partnerships/engagement with other actors

Need for data/products at country level

- i. Suggestions to <u>improve products' dissemination</u> of products prevailed, followed by <u>technical-related suggestions</u> (i.e. requests to include specific data such as a focus on agro-climate zones and soil type).
- ii. Interesting and recurrent in following open-text questions too: it emerges the <u>need for greater partnerships and engagement with other actors</u>, in particular at country level.

2.10. EWEA perceived value

- 15. Respondents were then asked if EWEA related products would be missed if they were to cease, resulting in a total of 125 responses, out of which 26 percent reported NO and 74 percent YES.
- 16. The 92 respondents who answered positively to the above question, were asked an additional open text question requesting to qualify their response. A total of 38 responses were analysed to identify the emerging issues, and a word cloud was generated.

2.11. Why EWEA would be missed

Provide relevant information

Resources allocation

Prioritisation Policy
Advocacy Tare

Programming

Other decision making

Provide trustworthy information

Enhance learning

17. The majority of responses (61 percent) reported the utility of EWEA products to their *usefulness for decision making purposes* (such as for programming, resources allocation, advocacy, etc.).

2.12. Most used Food Security and Nutrition information sources

18. 115 responses were received and analysed to identify the most frequently mentioned source, and a word cloud was generated:

EWEA Country Plans
Global Report on Food Crisis
FSIN EWEA

Webinars PC
SOFI
FEWSNET
EWEA Reports GIEWS
EWEA Quarterly Report

- 19. Sources developed under the INFORMED programme, namely the **IPC**, **EWEA products** and the **GRFC**, were the first three mostly mentioned sources.
 - i. Products falling under the **FAO EWEA** area of work have been grouped to capture the extent to which various EWEA products were mentioned (these included generic *EWEA reports*, the *Quarterly EWEA Report*, *EWEA Country Plans*, *Webinars*, *Good Practice fact sheets*, *ROIs*, the *IASC EWEA Report*, and the *IASC El Niño Southern Oscillation*).

2.13. EWEA Inter-agency processes at Country Level: FAO's collaboration, contribution and usefulness of contribution

- 20. This question was addressed only to respondents who stated in the last profiling question to engage with FAO on EWEA mainly at country level; however, out of this respondents' group (count 115), 29 percent reported to interact with FAO on EWEA also at global level.
- 21. In the following analysis all respondents whose engagement with FAO on EWEA was at <u>country level, but not only</u>, have been considered.

Disaster Risk Prioritization		1	2	3	4	5	N/A	Weighted Average Score (out of 10)*
Usefulness of FAO Contribution	61	3%	5%	20%	36%	36%	16	7.9
Extent of FAO Collaboration	63	3%	8%	30%	29%	30%	18	7.5
Extent of FAO Contribution	62	3%	8%	26%	37%	26%	15	7.5
Developing Triggers and Thresholds for ea action	rly							
Usefulness of FAO Contribution	58	3%	14%	16%	28%	40%	20	7.7
Extent of FAO Collaboration	59	5%	8%	25%	29%	32%	23	7.5
Extent of FAO Contribution	57	5%	16%	16%	30%	33%	19	7.4
Developing EWEA plans								
Usefulness of FAO Contribution	59	7%	7%	24%	25%	37%	18	7.6
Extent of FAO Collaboration	59	7%	10%	24%	29%	31%	24	7.3
Extent of FAO Contribution	57	5%	11%	25%	33%	26%	17	7.3
Launching anticipatory actions								
Usefulness of FAO Contribution	60	8%	7%	28%	23%	33%	16	7.3
Extent of FAO Collaboration	62	8%	10%	24%	27%	31%	21	7.3
Extent of FAO Contribution	62	8%	11%	31%	24%	26%	14	7.0

*Excludes N/A

- 22. All scores are very positive (7.0 or above), indicating that FAO's collaboration, contribution and usefulness in relation to the above inter-agency processes is very well valued.
- 23. Out of the four processes, when combining <u>FAO's contribution</u>, <u>collaboration</u> and <u>usefulness</u>, *Disaster Risk Prioritization* overall received the highest score, and *Launching anticipatory actions* the lowest, although the scores do not differ in a significant way from the rating received by the other inter-agency processes.

2.14. Results disaggregated by respondents' institution type (FAO vs other institutions)

	Weighted .	Average Score	e (out of 10)
Disaster Risk Prioritization	Country Level	FAO	Other Institutions
Usefulness of FAO Contribution	7.9	7.7	8.3
Extent of FAO Collaboration	7.5	7.2	7.9
Extent of FAO Contribution	7.5	7.5	7.5
Developing Triggers and Thresholds for early action			
Usefulness of FAO Contribution	7.7	7.5	8.0
Extent of FAO Collaboration	7.5	7.1	7.9
Extent of FAO Contribution	7.4	7.1	7.8
Developing EWEA plans			
Usefulness of FAO Contribution	7.6	7.4	7.8
Extent of FAO Collaboration	7.3	7.3	7.4
Extent of FAO Contribution	7.3	7.0	7.7
Launching anticipatory actions			
Usefulness of FAO Contribution	7.3	6.9	7.9
Extent of FAO Collaboration	7.3	6.9	7.7
Extent of FAO Contribution	7.0	6.7	7.3

- 24. In this case, similarly to the results from the aggregated data, scores are quite high (from 6.7 above).
 - However, when compared to aggregated responses, scores from respondents working at **FAO** are overall <u>slightly lower</u>, while scores are <u>slightly higher</u> among respondents who work in **other institutions.**

2.15. EWEA inter-agency processes at Global Level: FAO's collaboration, contribution and usefulness of contribution

- 25. This question was directed to respondents who stated to engage with FAO on EWEA mainly at global level, however out of all respondents from this group (count 77), 29 percent of them reported to engage with FAO on EWEA <u>also at country level</u>.
- 26. In the following analysis all respondents whose engagement with FAO on EWEA was at global level, but not only, have been considered.

Food Security Information Network		1	2	3	4	5	N/A	Weighted Average Score (out of 10)*
Usefulness of FAO Contribution	39	3%	0%	13%	23%	62%	18	8.8
Extent of FAO Contribution	39	3%	0%	21%	31%	46%	19	8.4
Extent of FAO Collaboration	41	0%	7%	15%	32%	46%	18	8.3
IASC Global Analysts Group	_							
Usefulness of FAO Contribution	27	0%	7%	22%	33%	37%	32	8.0
Extent of FAO Contribution	27	0%	11%	30%	26%	33%	32	7.6
Extent of FAO Collaboration	27	0%	15%	30%	19%	37%	32	7.6
Early Action Focus Task Force	_,							
Usefulness of FAO Contribution	25	0%	8%	16%	36%	40%	31	8.2
Extent of FAO Contribution	28	0%	14%	21%	29%	36%	29	7.7
Extent of FAO Collaboration	27	0%	7%	26%	26%	41%	32	8.0

*Excludes N/A

27. Scores from this question are extremely high (above 7.0). Overall the *Food and Security Information Network (FSIN)* received the higher score when combining FAO's collaboration, contribution and usefulness, but again, the scores' difference compared to the other inter-agency processes is not particularly meaningful.

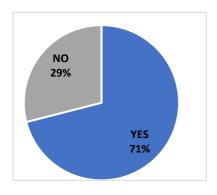
2.16. Results disaggregated by respondents' institution type (FAO vs other institutions)

	Weighted Average Score (out of 10)							
Food Security Information Network	Global Level	FAO	Other Institutions					
Usefulness of FAO Contribution	8.8	8.5	9.0					
Extent of FAO Contribution	8.4	8.1	8.5					
Extent of FAO Collaboration	8.3	8.1	8.5					
IASC Global Analysts Group			_					
Usefulness of FAO Contribution	8.0	8.4	7.8					
Extent of FAO Contribution	7.6	7.8	7.5					
Extent of FAO Collaboration	7.6	8.2	7.1					
Early Action Focus Task Force			_					
Usefulness of FAO Contribution	8.2	7.6	8.5					
Extent of FAO Contribution	7.7	7	7.4					
Extent of FAO Collaboration	8.0		7.6					

- 28. When compared to the aggregate responses:
 - i. Scores from respondents working at **FAO** are <u>slightly lower</u>, while scores from respondents working in **other institutions** are <u>slightly higher</u>.
 - ii. With the exception of the *IASC Global Analysts Group* (monthly call, 6 monthly forecast to EDG, El Niño Southern Oscillation SOP), which is overall scored higher by respondents from FAO, compared both to aggregated responses and other institutions' responses.

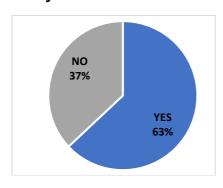
2.17. Good (and promising) practices on Anticipatory Action

Do you know that FAO collects information on GP?

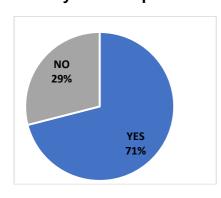


The first question received a total of 128 responses, and out of the 91 (71%) of respondents who reported to know about good and promising practices related to anticipatory action, a set of two more questions was asked:

Do you know where to find this information?



Have you ever capitalized on GP in your own work?



As an interesting note, 71% of respondents reported to having capitalized on GP, which means that 5 respondents who reported not to know how to access information on GP, have actually capitalized on them in their work.

2.18. Information gaps in relation to EWEA

29. From this question, 61 responses were received and analyzed to identify recurrent themes; then a word clouds was generated to provide a quick overview of responses received:

Guidance on Anticipatory Actions
Evidence on ROI

Context specific information
Data disaggregation

Timeliness

Dissemination

Conflict dimension

Link to decision makers

Data raliability

Lack of capacities and budget

- i. Although the question explicitly enquired about <u>information gaps</u>, only 29 responses (46 percent) **indicated gaps related to information** (such as the need for further data disaggregation, for country/context specific information, for the inclusion of the social and conflict dimension, among others);
- ii. Other gaps reported: the most predominant one was related to the need for higher timeliness, followed by that for more collaboration/partnerships, gaps in data reliability, in capacity and budget, and the need for more guidance on anticipatory actions.

2.19. Final comments

30. A total of 22 responses was received to the final open-text question and a word cloud generated:



31. Most responses (7) were related to **country level processes and products**, highlighting the lack for inter-agency processes, and the need to expand the work and collaboration with other actors at country level. Other comments (5) were **general appreciation of EWEA** work/products, followed by comments reporting the need to **improve dissemination**, the **timeliness** and the **link to early action**. Only one comments judged FAO EWEA very poor.

Appendix 4. INFORMED results

Table 1: RIMA reports

Year	Туре	Title	Country	
2015	Resilience report	Resilience Analysis in Senegal 2005	Senegal	
2015	Resilience report	Resilience analysis in Burkina Faso 1998-2003	Burkina Faso	
2015	Resilience report	Resilience analysis in Niger 2011	Niger	
2015	Resilience report	Resilience analysis in Mali 2009/2010	Mali	
2016	Resilience report	Resilience Analysis in Sudan 2009	Sudan	
2016	Resilience report	Resilience Analysis in the Triangle of Hope: Mauritania 2015	Mauritania	
2016	Resilience report	Analyse de la résilience dans le Triangle de l'Espoir: Mauritanie 2015	Mauritania	
2016	Resilience report	Resilience Analysis in Senegal: Matam 2016	Senegal	
	Тероге	Analyse de la résilience au SÉNÉGAL: Matam 2016	Senegal	
2017	Resilience report	Resilience Analysis in Senegal 2011	Senegal	
2017	Resilience report	Resilience Analysis in Isiolo, Marsabit and Meru: Kenya 2016	Kenya	
2018	Resilience report	Resilience analysis of Karamoja, Uganda 2016	Uganda	
2018	Resilience report	Resilience analysis of Jordan 2013	Jordan	
2018	Resilience report	Food security, resilience and well-being analysis of refugees and host communities in northern Uganda	Uganda	
2019	Resilience report	Resilience analysis of North Kivu, Democratic Republic of the Congo (in FRENCH)	DRC	
2019	Resilience report	Resilience analysis of Mauritania (in FRENCH)	Mauritania	
2019	Resilience report	Resilience analysis of Chad (in FRENCH)		
2019	Resilience report	Resilience analysis in Borno State, Nigeria	Nigeria	
2019	Resilience report	Resilience analysis of pastoral and agropastoral communities in South Sudan's cross-border areas with Sudan, Ethiopia, Kenya and Uganda	Sudan	
2019	Resilience report	RESILIENCE ANALYSIS IN THE TARGET AREAS OF "CARBON SEQUESTRATION THROUGH CLIMATE INVESTMENT IN FORESTS AND RANGELANDS (CS-FOR)" PROJECT IN THE KYRZYK REPUBLIC	Kirgiztan	
2019	Resilience report	Food security and resilience of refugees and host communities in southwest Uganda		
2017	IE report	Karamoja region (Uganda) - Baseline report for impact evaluation of Uganda Ugan		
2019	IE report	RAPPORT DE L'ENQUÊTE DE BASE POUR L'ÉVALUATION DE L'IMPACT Niger DU PROGRAMME DE RÉSILIENCE DE PAM-FAO-FIDA DANS LES RÉGIONS DE MARADI ET ZINDER, NIGER		
2016	IE report	DOLOW 2016 Evidence from mid-term review of the impact evaluation for the "Building Resilience in Somalia" joint strategy	Somalia	

Year	Туре	Title	Country		
2017	IE report	RESILIENCE ANALYSIS OF THE IMPACT OF THE JOINT RESILIENCE SO STRATEGY (JRS) IN BURCO AND ODWEYNE, SOMALILAND			
2016	Policy brief	Resilience analysis in Sudan: a policy brief	Sudan		
2016	Policy brief	Resilience analysis in the Triangle of Hope (Mauritania): a policy brief			
2016	Policy brief	Investing in education, healthcare and productivity: how to strengthen resilience in Matam			
2017	Policy brief	Strengthening resilience in Senegal through agricultural productivity and Senegal education			
2017	Policy brief	Strengthening resilience in Isiolo, Marsabit and Meru counties	Kenya		
2017	Policy brief	ENHANCING RESILIENCE OF CROSS-BORDER COMMUNITIES: THE Kenya MANDERA CLUSTER			
2018	Policy brief	Building resilience of livelihoods in Karamoja, Uganda	Uganda		
2019	Policy brief	Pathways to self-reliance for refugees and host communities in Northern Uganda	Uganda		
2016	Technical material	RIMA-II: Resilience Index Measurement and Analysis - II			
2018	Technical material	Resilience Index Measurement and Analysis - Short questionnaire			
2019	Technical material	Medición y análisis del índíce de resiliencia - Cuestionario abreviado			
2019	Technical material	Mesure et analyse de l'indice de résilience - Version réduite du questionnaire			
2018	Technical material	Resilience Marking: how to classify projects for more resilient livelihoods			
2019	Technical material	FAO video tutorial: how to measure resilience with Excel			
2019	Technical material	Tutoriel vidéo de la FAO: Mesure de la résilience à l'aide d'Excel			
2017	Dashboard	Resilience analysis in Karamoja, Uganda			
2018	Dashboard	Resilience analysis in Mauritania			
2018	Dashboard	Refugees and host communities in northern Uganda: snap-shot of the food security, resilience and well-being situation			
2019	Dashboard	Resilience analysis in Nigeria by LGAs and profiles			
2019	Working	Paving the way to build the resilience of men and women. How to conduct a gender analysis of resilience			
2017	paper Working paper	The 2012 crisis in Mali and its implications on resilience and food security			
2016	Working paper	A dynamic analysis of resilience in Uganda			
2020	Working paper	Core Indicators for Resilience Analysis			
2017	Journal article	Resilience and child malnutrition in Mali			
2018	Journal article	Resilience mobility in Uganda: A dynamic analysis			
2018	Journal article	Household resilience to food insecurity: evidence from Tanzania and Uganda			
2018	Journal	Cross-country Evidence of the Relationship Between Resilience and the			
	article	Subjective Perception of Well-being and Social Inclusion: Evidence from the Regions of Matam (Senegal) and the Triangle of Hope (Mauritania)			
2019	Journal article	Whose resilience matters? Like-for-like comparison of objective and subjective evaluations of resilience			

Year	Туре	Title	Country
2019	Journal	The effects of violent conflict on household resilience and food security:	
	article	Evidence from the 2014 Gaza conflict	
2019	Journal	Food security and violent conflict: Introduction to the special issue	
	article		
2019	Journal	Resilience Thresholds to Temperature Anomalies: A Long-run Test for	
	article	Rural Tanzania	

Table 2: Early action interventions

Year of approval	Region	Country	Objective	Total (USD)	Ad-hoc or Pilot
2019	RAP	Philippines	To increase resilience of vulnerable rice farmers by safeguarding production and complementing with livelihood activities	400 000	Pilot
2019	RAP	Pakistan	Early Actions in Tharparkar district to mitigate the impact of drought on herders	207 000	Ad hoc
2019	RAF	Madagascar	Southern Africa regional drought induced by El Nino	400 000	Pilot
2019	RAF	Zimbabwe	Southern Africa regional drought induced by El Nino	400 000	Ad hoc
2019	RAF	Malawi	Southern Africa regional drought induced by El Nino	400 000	Ad hoc
2019	RAF	Zambia	Southern Africa regional drought induced by El Nino	400 000	Ad hoc
2019	RAF	Namibia	Southern Africa regional drought induced by El Nino	400 000	Ad hoc
2019	RLC	Nicaragua	Mitigate the impact of El Nino induced Drought on vulnerable farmers	200 000	Ad hoc
2019	RLC	Guatemala	Mitigate the impact of El Nino induced Drought on vulnerable farmers	200 000	Ad hoc
2018	RAF	Madagascar	To face the cumulative effect of drought of past years coupled with a chronic food insecurity situation	400 000	Pilot
2018	RAP	Mongolia	To reduce the vulnerability of the poorest pastoralist households in the upcoming dzud winter.	290 000	Ad hoc
2018	RAF	Sudan	To establish an early warning system to monitor drought and dry spells in both Kassala and North Darfur states.	400 000	Pilot
2018	RAF	Niger	Provision of livestock feed and vaccination in two areas (Tahoua / Zinder)	400 000	Ad hoc
2018	RLA	Colombia	Incrementar la resiliencia de cumunidades rurales de La Guajira afectadas por la sequía y la crisis migratoria de Venezuela de La Guajira.	400 000	Ad hoc

Year of approval	Region	Country	Objective	Total (USD)	Ad-hoc or Pilot
2017	RAF	Kenya	Improved food security and nutrition situation of targeted beneficiaries through the protection of livelihood assets in anticipation of worsening drought situation	400 000	Pilot
2017	RAF	Ethiopia	Horn of Africa Drought	400 000	Ad hoc
2017	RAF	Somalia	Horn of Africa Drought	400 000	Ad hoc
2017	RAF	Horn of Africa - REOA - Cross Border	Horn of Africa Drought	400 000	Pilot - Kenya

Table 3: KORE webinars

#	Dete	Tial		
	Date	Title		
1	May 2016	Confronting Drought in Africa's Drylands: Opportunities for resilience		
2	June 2016	Resilience Index Measurement and Analysis model – RIMA-II: what's new?		
3	July 2016	Caisses de résilience		
4	August 2016	Social Protection Webinar I - Shock-responsive social protection for resilience building		
5	September 2016	Gender equality for resilience in protracted crises		
6	September 2016	Caisses de résilience (in French)		
7	November 2016	The experience of the global food security assessment for strengthening resilience		
8	April 2017	Webinar on the 2017 Global Report on Food Security Crises		
9	May 2017	DRM Webinar I - Governing and managing disaster risk in the agriculture sector		
10	May 2017	DRM Webinar II - Assessing risks and impacts from extreme events/natural hazards on the agriculture sector		
11	June 2017	Dimitra Clubs: Enhancing the resilience of rural men and women through community mobilization		
12	July 2017	DRM Webinar III - Benefits of farm-level disaster risk reduction practices in agriculture		
13	September 2017	SAFE Webinar I - Overview of Terminology, Cross-cutting Issues, Challenges and Coordination		
14	September 2017	SAFE Webinar II - Approaches, tools and case studies		
15	October 2017	FbF Webinar I - FAO Early Warning Early Action: What's new?		
16	December 2017	FbF Webinar II - Reducing disaster risk vulnerability in Bangladesh: Partner perspectives		
17	January 2018	Sustaining Peace Webinar I – The role of conflict-sensitive natural resource management approaches		
18	June 2018	DRM Webinar IV - Building resilience to natural hazards and climate-related disasters in the Caribbean		
19	July 2018	FbF Webinar III - From Early Warning to Early Action in Mongolia: Bracing for the cold to protect livestock and livelihoods		
20	October 2018	Social Protection Webinar II - FAO and Cash+: How to maximize the impacts of cash transfers		
21	October 2019	The UN Common Guidance on Resilience for Humanitarian-Development-Peace Actors		
22	October 2019	Les Clubs Dimitra - Améliorer la résilience des femmes et des hommes ruraux grâce à la mobilisation communautaire (in French)		

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