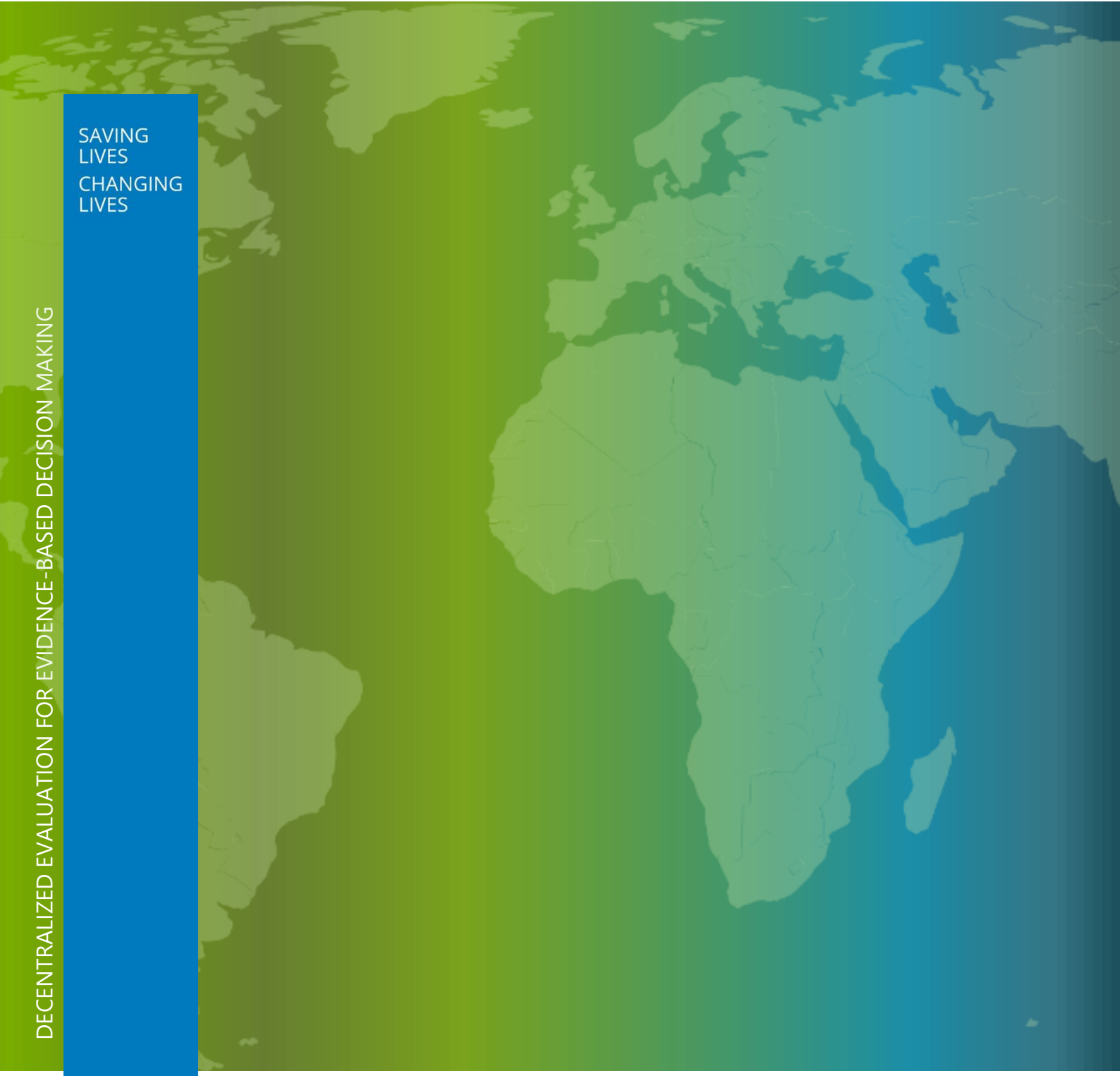
SAVING LIVES
CHANGING LIVES

DECENTRALIZED EVALUATION FOR EVIDENCE-BASED DECISION MAKING



Decentralized Evaluation

Mid-Term Evaluation of Integrated Risk Management and Climate Services Programme in Malawi from 2017-2019

Final Evaluation Report: Volume I

October 2019
WFP Malawi
Evaluation Manager: Jason Nyirenda

Prepared by
Catherine Longley, Team Leader
Sithabiso Gandure, International Evaluator
Assa Maganga, National Evaluator

WFP
World Food Programme

Acknowledgements

The Evaluation Team is very grateful to the WFP Country Office in Malawi as well as the Regional Bureau in Johannesburg (RBJ) – especially Hegel Balayanga (Evaluation Data Analyst) – for the support provided throughout the evaluation. In particular, we thank the many respondents from Government departments (at national and district levels), non-governmental organisations, research institutes, the private sector, United Nations and other agencies who provided inputs into this evaluation. We are particularly indebted to the beneficiaries at community levels who took time to talk to us and answer our many questions. We also wish to thank the three Field Assistants, Elizabeth Ndenguma, Gerard Malija, and Gift Noniwa.

Disclaimer

Table of Contents

List of Figures

List of Tables

Executive Summary

ES1. This is a mid-term activity evaluation commissioned by the Malawi World Food Programme (WFP) Country Office (CO). The evaluation subject is the 3-year programme titled "Reducing Food and Nutrition Income Insecurity among Vulnerable Households in Malawi through Climate Services and Integrated Risk Management Programme" (IRMP). The evaluation covers the period from January 2017 to April 2019 and serves the mutually reinforcing objectives of accountability and learning, with greater emphasis given to learning. The purpose of the evaluation is to provide evidence-based findings and key lessons on the performance of the IRMP at mid-term to inform the implementation of the remainder of the program. The main users of the evaluation are the Malawi CO, the IRMP partners; the WFP Regional Bureau (RB) and headquarters (HQ), also the donor (Government of Flanders) and the Government of Malawi.

ES2. The overall objective of the IRMP is "To reduce food and income insecurity among vulnerable smallholder households in the context of increasing climatic risks and climate variability over the project cycle through delivery of integrated resilience interventions." There are three key activities: (i) climate services activities, i.e. the provision of climate and weather information and associated agricultural advisories; (ii) risk mitigation activities, i.e. the design and provision of weather index-based micro-insurance; and (iii) financial services activities, i.e. the creation and training of Village Savings and Loan (VSL) groups. The project is implemented in three districts of southern Malawi (Chikwawa, Blantyre Rural and Mangochi) by a combination of NGO, government and private sector partners. The evaluation covers all IRMP activities implemented in the three districts and how IRMP activities are integrated with other Resilience activities in these districts, notably the Food Assistance for Assets (FFA) Program

Context

ES3. Over the last two decades, Malawi has increasingly been affected by extreme weather events due to the impact of climate change. Agriculture drives economic growth and development, accounting for approximately 28 percent of the gross domestic product (GDP) and employing 64.1 percent of the country's workforce. Agriculture contributes significantly to national and household food security and nutrition. Extreme weather conditions negatively impact on food security and in 2015 and 2016 led to the contraction of agricultural growth from 6.0 percent to 2.0 percent in 2015 and 2.3 percent in 2016.

Methodology

ES4. The evaluation was designed to assess the IRMP against the following evaluation criteria: relevance, effectiveness, efficiency, impact, sustainability, plus gender equality and women's empowerment (GEWE) and learning. The overarching evaluation question was "What has been the progress in the implementation and performance of the IRMP up to April 2019, and what are the emerging lessons which could inform the implementation of the second cycle (from July 2019) and the conduct of a credible final evaluation?" The Terms of Reference include 17 specific evaluation questions. In order to respond to these questions, the evaluation team (ET) used a mixed-methods approach, relying on existing quantitative datasets, including baseline and three outcome monitoring surveys, plus two recent activity-specific surveys undertaken by implementing partners. Qualitative data were compiled by the ET and included information from a review of documentation, key informant interviews, focus group discussions (FGDs) with female and male beneficiaries in six sites, and two FGDs with extension officers.

ES5. Limitations in the quantitative data included: various data gaps in the documentation available, including overall beneficiary numbers and figures for planned outputs (these are noted in the report); gaps in the quantitative datasets (notably in the coverage of the districts and gender disaggregation); and the timing of the monitoring surveys which limits the comparability of seasonally-sensitive quantitative indicators. For the qualitative data, the main limitation was that some partners, stakeholders

and key beneficiaries were not available for interview. Remote interviews and consultations continued well into the analysis and report-writing phase. Data from the recent monitoring surveys undertaken by implementing partners, University of Reading and Farm Radio Trust, were used to fill specific gaps relating to climate service provision.

Key Findings

ES6. The key findings of the evaluation team are summarised below, structured according to the main evaluation criteria and indicating the type and strength of evidence supporting each finding.

ES7. **Relevance:** The objectives of IRMP are fully coherent with and aligned to a range of national policies and strategies in Malawi, including climate change, disaster risk management, agriculture, social protection, and resilience. IRMP is consistent with WFP's policies on disaster risk reduction and management, climate change, and capacity development; it is partially in line with the WFP gender policy. The "3-pronged approach" was applied at national, district and community levels and ensured that IRMP is addressing the food security needs of men and women in three districts that are prone to frequent drought and floods.

ES8. **Effectiveness:** All planned activities have been implemented, as appropriate. Despite difficulties in assessing achievement of outputs and outcomes due to some of the indicators not having planned targets, it is thought that good progress has been achieved across two out of the three main activity areas. Climate services information provided through extension officers and radio is effective in that it is received by farmers and they have reportedly made changes to their farming practices as a result, as confirmed by outcome monitoring data and FGDs. Information conveyed by 'push' SMS does not appear to be effective; data from outcome monitoring surveys and FGDs show that relatively small proportions of farmers appear to be receiving the text messages sent. The activities linked to radio and SMS communication channels are referred to as Interactive Weather and Climate Adaptation Radio Programming (IWCARP).

ES9. The insurance-for-assets (IFA) approach is reported by farmers to be effective in creating community assets relating to watershed management. The insurance mechanism was designed to cover only drought and is ineffective in covering crop losses caused by flood or pests; as such, the design of the insurance product is considered by farmers to be inappropriate to the local context. Evidence from FGDs and key informants suggest that VSLs are effective in strengthening the capacities of smallholder farmers to invest and diversify their livelihoods, provided that the training is sufficient to avoid asset losses through loan arrears. Overall, the main factor affecting achievement is the annual use of short-term contracts (Field Level Agreements, FLAs) for implementing partners, leading to delays in the implementation of activities in each agricultural season. This must be addressed as a priority for the next implementation cycle. The limited capacities of extension officers (i.e. training, time, and transport) to implement the Participatory Integrated Climate Services for Agriculture (PICSA) approach also affects the effectiveness of the climate services component.

ES10. **Efficiency:** Various delays in the implementation of climate services activities were experienced due to the contractual arrangements with partners mentioned above. Implementation of IFA and VSL activities was timely, though late payments made to farmers under the FFA program affected their ability to save and invest in the VSLs. There was an overall underspend of 17.6 percent for the first two payment tranches (out of the three tranches agreed for the whole program). The close link between IRMP and the FFA program allows for greater efficiency in IRMP implementation, but also creates challenges for contractual arrangements (as above). Poor planning and coordination affect efficiency in some districts. Coordination at national level remains a challenge, with insufficient sharing of information and lessons learned among the many different agencies involved in climate change / resilience programming. A lot of monitoring data is being collected, but it is not systematized; essential information is not regularly compiled and updated in a way that it can be used for programming decisions. The timeliness of PICSA implementation is constrained by the capacity of extension officers (i.e. training, time, transport, and stationery). The current design of the index-based insurance mechanism may not be the most

appropriate to farmers' preferences or the local context, in which floods have been almost as frequent as drought in the period since 2000.

ES11. **Impact:** The IRMP design is particularly innovative in combining climate services with risk management strategies for the poorest and most vulnerable farmers, and in the PICSA approach's emphasis on empowering farmers as decision-makers. Farmers' perceptions confirm that the draft impact pathway (based on that developed for the preceding Global Framework for Climate Services (GFCS) Adaptation Programme for Africa) is playing out in practice, strongly suggesting that the integration of FFA and IRMP activities will lead to outcomes that are likely to contribute to progress towards the higher-level results. The combination of learning, decision-making and money (available at the right time) gives farmers the capacity to plan ahead in relation to seasonal forecasts and make the informed choices needed to achieve improved production and increased diversification in the face of climate change. This ability to plan ahead is regarded as a key aspect of resilience.

ES12. **Sustainability:** It is highly likely that smallholder households will be able to continue to build their resilience after the end of the project through their increased capacity for making informed agricultural choices, supported by the continued operation of the VSLs as well as the knowledge gained about watershed management structures. There is an emerging demand for climate services among smallholder farmers; continued increased demand is dependent on the perceived reliability of seasonal forecasts which, in turn, will require continued capacity development for weather forecasting within the Department for Climate Change and Meteorological Services (DCCMS). The continuation of PICSA will require government commitment and on-going external support to both the Department of Agricultural Extension Services (DAES) and the Lilongwe University of Agriculture and Natural Resources (LUANAR) (for PICSA training). Despite not being included as a prominent feature of IRMP design, WFP and IRMP partners are successfully working alongside other projects to help strengthen capacities at national level and to progress towards institutionalizing key structures needed for the sustainability of climate service provision in Malawi. Demand for insurance will depend on farmers' trust in the insurance provider, the cost and type of insurance provided, and farmers' ability to pay for the premiums. There is reported evidence to suggest that weather-based index insurance might be a "bad buy" for smallholder farmers in Malawi. There is a high level of demand for financial services among smallholder farmers; the current VSL model is broadly sustainable and will most likely continue after the end of the project without external assistance.

ES13. **GEWE Dimensions:** Very little explicit attention was given to gender dimensions in the IRMP design, yet women play a considerable role in the project as beneficiaries. Sex-disaggregation of data and reporting has been applied inconsistently. There appears to be a reasonably good level of capacity for gender-sensitive implementation among both the government stakeholders and the implementing partners at district levels; there is also a reasonably good representation of women among project teams. Gender is mainstreamed in various PICSA tools, though neither the methodology itself nor the training is designed to address gender-related issues explicitly. The content of the radio programs often includes gender as a cross-cutting issue, and every program ensures that women's voices are included. Women and men both benefit from the climate services provided through PICSA and the radio program. Available evidence appears to show that PICSA might be more effective among men than women. The uptake of mobile platforms for women is considerably lower than for men, largely because women often do not have regular access to a mobile phone. Both FFA and VSL activities were perceived (by women and men beneficiaries) to have improved the lives of women.

ES14. **Key Lesson:** The integration of climate services, FFA/IFA, and VSL at the household level provides a powerful combination of knowledge and money that is available at the right time to allow smallholder farmers to plan ahead for the forthcoming agricultural season. The combination or layering of different IRMP activities at the household level requires effective targeting of the various IRMP activities at the GVH level.

Overall conclusions

ES15. Despite gaps in monitoring data and planned targets, the evaluation team concluded that the IRMP has achieved good progress to date, particularly in making effective climate services available to farmers and in strengthening the capacities of smallholder farmers to invest and diversify their livelihoods through VSLs. Greater attention is now needed to ensure the quality and sustainability of climate services and the capacity of extension officers to deliver and support them. The appropriateness of the insurance model is questionable, and alternative models that can cover risks relevant to the context should be explored. Greater emphasis should also be placed in targeting the different IRMP activities implemented by different partners at the GVH level to increase the likelihood that the various IRMP activities will be combined or layered at the household level.

ES16. The main factor affecting both effectiveness and efficiency is the annual use of short-term contracts or Field-Level Agreements (FLAs) for implementing partners, leading to delays in the implementation of activities in each agricultural season. This must be addressed as a matter of urgency. Poor planning and coordination negatively affect efficiency in some districts, and coordination at national level remains a challenge, with insufficient sharing of information and lessons learned among key related projects as well as the many smaller projects currently being implemented. Monitoring data is essential for coordination and integration within IRMP; monitoring and data management tools for use by partners and WFP are needed for the systematic collection and synthesis of monitoring data so that it can be used for programming decisions. There is also an on-going challenge in streamlining the indicators used to measure resilience outcomes across different donor-funded projects.

ES17. This increased capacity to plan ahead and make informed agricultural decisions, together with the continued operation of the VSLs in making money available for agricultural inputs and livelihood investments, will allow smallholder households to continue to build their resilience after the end of the program, provided that the seasonal forecasts continue to be disseminated effectively. GEWE-related issues identified within the climate services component need to be better understood and addressed.

Recommendations

ES18. The findings and conclusions of this evaluation led to the evaluation team making the following recommendations. These may be revised and expanded following consultations with the CO in relation to their feasibility:

ES19. ***Recommendation 1:*** Address pending issues relating to administrative, financial and partnership arrangements. Short-term (6-month) Field Level Agreements for implementing partners must be replaced with longer-term contracts where necessary. It is strongly recommended that WFP requests a 6- or 7-month no-cost extension from the donor to allow for the continuation of IRMP activities throughout the forthcoming agricultural season (October 2019 – July 2020) and to be able to conduct a learning event at the end of the season (June/July 2020). Before a no-cost extension can be requested, it is essential that the IRMP budget codes in the financial management system are corrected where necessary so that an up-to-date financial statement can be produced.

ES20. ***Recommendation 2:*** Strengthen capacities for more effective and sustainable provision of high-quality climate services. Continued capacity strengthening for DCCMS is needed for the sustainable production of historical climate information and accurate, high-quality, and timely down-scaled weather forecasting. This should be based on a capacity assessment as well as a multi-source assessment to generate consensus on the quality parameters and down-scaling levels required for seasonal forecasting products. Lessons learned to date might be identified and shared through a joint event with DAES and others; this might become an annual learning event. Also recommended is capacity development for LUANAR for PICSA curricula development and continued activities to engage with commercial and community radio stations for the dissemination of climate services.

ES21. ***Recommendation 3:*** Capacity strengthening and support for high-quality PICSA implementation by Extension Officers. Additional types of short-, medium- and long-term support to

be provided to extension officers in facilitating the PICSA approach should be explored and agreed with DAES and others. Suggested options are put forward in this report; additional suggestions should be sought from extension officers and others through future PICSA training and workshops and the proposed Climate Services event (as in Recommendation 2).

ES22. ***Recommendation 4:*** Enhance the integration and effectiveness of radio / ICTs. An assessment of all existing Community ICT Hubs (CIHs) is needed to determine the extent to which CIHs are active/inactive, and appropriate follow-up support should be provided. Changes to the overall IWCARP design should consider a more integrated communication strategy design that clearly identifies how the different communication channels will support each other to achieve impact, and gender equity relating to access to and use of the different services.

ES23. ***Recommendation 5:*** GEWE considerations for climate services. GEWE-relevant effects of climate service provision should be monitored and analysed through sex-disaggregated data at both the individual and household levels, and existing sex-disaggregated quantitative and qualitative data should be used to explore the reasons for the apparent differences between men and women in their perceptions of PICSA and their access to radio/ICTs. Where necessary, these gender-based differences should be addressed within PICSA and IWCARP. Lessons emerging through the implementation of this recommendation should be articulated and documented for future application in the design of GEWE-sensitive climate services.

ES24. ***Recommendation 6:*** Design of improved monitoring systems and a theory-based evaluation framework. Output and outcome targets against which to assess achievement are needed. Simple tools and systems are needed to compile, synthesize and manage different types of data so that they can be used by those who need it for learning and decision-making purposes. A streamlined, integrated and systematic approach to outcome monitoring for resilience should be designed. A theory of change relevant to the IRMP approach that can be 'nested' within the relevant 'steps' of the existing WFP Malawi Framework for Integrated Resilience can help to improve both monitoring and coordination.

ES25. ***Recommendation 7:*** Improved targeting of climate services to enhance the overlap of activities implemented by the different partners at group village level. This is necessary to increase the layering or combination of activities at the household level. In future projects, clear guidance must be given to implementing partners responsible for the provision of climate services to ensure that they target those sites where other integrated activities are being implemented.

ES26. ***Recommendation 8:*** Assess the appropriateness and sustainability of the current weather-index insurance model in southern Malawi and explore alternative options. The current insurance model should be reviewed in comparison to alternative options in relation to the multiple risks faced by farmers, their ability to pay, and the willingness of the insurance sector to provide alternative models. If deemed to be necessary and viable, an alternative insurance model should be designed and piloted in a future project.

ES27. ***Recommendation 9:*** Improved coordination and lesson-learning at district and national levels. Coordination among IRMP partners and stakeholders can be improved through regular (quarterly) meetings organized by the key NGO implementing partner (as currently occurs in Chikwawa District) to share information, enhance coordination, address challenges and learn lessons. Learning in relation to climate service provision at national level can be enhanced through the joint event proposed in Recommendation 2. If such an event took place on an annual basis, this would also contribute to improved national coordination of climate service provision.

ES28. ***Recommendation 10:*** Regional, corporate and global learning on resilience programming. Identify and document lessons on integrated resilience programming learned from the Malawi experience, and share these through internal and external fora to enhance WFP organisational learning and improvement in resilience programming on the one hand, and to contribute to wider knowledge and development on the other.

1. Introduction

1. This report provides the mid-term evaluation of the programme titled "Reducing Food and Nutrition Income Insecurity among Vulnerable Households in Malawi through Climate Services and Integrated Risk Management Programme" (herein referred to as IRMP), Malawi. The evaluation was commissioned by the Malawi World Food Programme (WFP) Country Office (CO) and undertaken by the KonTerra Group. The evaluation covers the period from January 2017 to April 2019.

2. The evaluation serves the mutually reinforcing objectives of accountability and learning, with greater emphasis given to learning (see Terms of Reference, Annex A, Volume II). The purpose of the evaluation is to provide evidence-based findings and key lessons on the performance of the IRMP at mid-term to inform the implementation of the second cycle of the project (due to start in July 2019). The Malawi CO is particularly interested in learning lessons relating to integration, monitoring, scaling, and sustainability. The evaluation will also ensure that the necessary data will be available for a credible final evaluation (due in 2020).

3. The main stakeholders in the evaluation are the Malawi CO and the IRMP partners; the WFP Regional Bureau (RB) and headquarters (HQ). The evaluation findings will be used by WFP and IRMP partners to make adjustments to ongoing activities and to inform similar resilience programmes in future. The Government of Flanders is likely to use the evaluation to understand the extent to which the programme met its objectives, key challenges, lessons learnt and good practices for decision making and replications in future support. The Government of Malawi and other stakeholders (including United Nations (UN) agencies, academia and NGOs) involved in resilience programs in Malawi may use the evaluation to inform particular approaches and collaboration for the delivery of programs.

1.1. Context

4. Agriculture is the mainstay of Malawi's economy, accounting for around 28 percent of the gross domestic product (GDP) and employing 64.1 percent of the country's workforce.[1] Farm sizes, however, are comparatively small, averaging 0.24 hectares in Malawi, compared the sub-Saharan African average of 0.40 hectares.[2] This is related to the dense and rapidly increasing population,[3] which places intense pressure on farm holdings.

5. Malawi's Human Development Index (HDI) value for 2017 was 0.477, placing the country in the low human development category and positioning it at 171 out of 189 countries.[4] Poverty is both widespread and stubbornly high, with households headed by women more affected than households headed by women, though inequality levels have decreased since 2010.

6. **Gender inequalities** affect all aspects of social, economic and environmental development.[5] Rates of girl marriage are high, and women lack land rights and access to education,[6] health and financial services and to justice and protection against sexual and other forms of violence.[7] Women and girls are disproportionately affected by climate change and are more vulnerable to its impacts. Gender inequality, including inequitable social/gender norms, is relevant to the evaluation subject because it can potentially limit women's access to climate services and risk mitigation measures. The National Gender Policy (2015) aims to mainstream gender in the national development process to enhance

[1] 2013 Malawi Labour Force Survey report.
[2] Cited in the IRMP Evaluation Terms of Reference.
[3] The latest population figure stands at 17,563,749, up from 13,029,498 in 2008, representing an intercensal growth rate of 2.9 percent per annum (National Statistics Office (2018): Malawi Population and Housing Census Preliminary Report, December 2018).
[4] http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MWI.pdf
[5] WFP (2019): Malawi Country Strategic Plan (2019–2023)
[6] The literacy rate for women is 66 percent, compared to 81 percent for men (World Bank, 2018: Malawi Economic Monitor-Investing in Girls' Education).
[7] Government of Malawi. 2014. National Plan of Action to Combat Gender-Based Violence in Malawi 2014–2020 (cited in WFP, 2019).

participation of women and men, girls and boys for sustainable and equitable development for poverty eradication.[8] The empowerment of youth, women and vulnerable groups in agriculture is among the policy priority areas of the national agriculture policy, and gender equality is among the guiding principles of the climate change policy. Women's ability to contribute to reducing disaster risks can otherwise be lost if women are left out of decision-making processes and leadership positions to promote community resilience.

7. The country has a complex **food and nutrition situation**. Over the past two decades, there has been a decline in the rates of undernutrition, though stunting remains high. The percentage of children under five years of age who are stunted has decreased from 47.1 in 2010 to 37.1 in 2015/16, underweight from 12.8 to 11.7 and wasting from 4.0 to 2.7.[9] Even with the noted decline in undernutrition, continued efforts are needed to address micronutrient deficiencies and the high rates of stunting if the country is to reach the "Zero Hunger" target of the second Sustainable Development Goal (SDG2) by 2030. The situation is exacerbated by the high prevalence rate of human immunodeficiency virus / acquired immunodeficiency syndrome (HIV/AIDS), estimated at 8.8 percent for the 15-49 age group in 2015. The prevalence rate of HIV/AIDS is higher among women (10.8 percent) than men (6.4 percent).[10] Despite making significant progress, Malawi did not meet the hunger targets of the Millennium Development Goals.[11] Agriculture contributes significantly to national and household food security and nutrition. Extreme weather conditions in 2015 and 2016 led to the contraction of agricultural growth at the rate of 2.0 percent in 2015 and 2.3 percent in 2016, down from 6.0 percent or more in 2013 and 2014.[12]

8. **Climate shocks.** Scientific evidence for Malawi shows an increase in frequency, intensity and magnitude of extreme weather events over the last two decades due to the impact of climate change. Most drought episodes have occurred in El Niño years, during which the country experiences rainfall deficits. Nearly half of Malawi's 28 districts have experienced at least four major shocks in the last decade, including drought, flooding and hailstorms.[13] Tropical Cyclone Idai (March, 2019) is the most recent example of such a shock, affecting more than 868,900 people across 15 districts, including the IRMP district of Chikwawa.[14] Chikwawa District was also among those most affected by the floods of 2015.[15] Vulnerability to climate shocks is highest in Malawi's Southern Region, which accounts for 80 percent of the most vulnerable districts. The frequency of both drought and flood for the period 2000-13 can be seen to be high for the three focal districts; in Mangochi there was a slightly higher incidence of flood, whereas in Blantyre and Chikwawa there was a slightly higher incidence of drought (Annex 7). In addition to the risks associated with climate change, other recent disasters include the Fall Army Worm infestation of 2017/2018.[16]

9. **Policy context:** The National Climate Change Management Policy[17] integrates climate change into development planning and implementation and emphasises the role of capacity building, training and awareness in building resilience at various levels. The National Meteorological Policy[18] complements and strengthens the operationalization of the climate change policy by supporting the growth and development of the meteorological sector. The National Disaster Risk and Management

[8] The policy is rooted in Malawi's constitution which recognises and promotes gender equality, and in the various versions of the Malawi Growth and Development Strategy.
[9] Malawi Demographic and Health Survey (MDHS, 2015-16)
[10] Malawi Demographic and Health Survey (MDHS, 2015-16)
[11] WFP (2019): Malawi Country Strategic Plan (2019–2023)
[12] Government of Malawi (2018): National Agricultural Investment Plan (NAIP)
[13] WFP Malawi (2019) Country Programme-Malawi (2012-2017) Standard Project Report 2018
[14] Republic of Malawi 2019 Floods Response Plan and Appeal (March-May 2019)
[15] Ibid.
[16] http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1180394/
[17] Government of Malawi (2016): National Climate Change Management Policy, Ministry of Natural Resources, Energy and Mining Environmental Affairs Department, June 2016.
[18] Government of Malawi (2019): National Meteorological Policy.

Policy (2015), focuses on developing and strengthening people-centred early warning information with the participation of affected populations, allowing them access and to act timely and appropriately.[19]

10. The Agriculture Policy prioritises risk management in the sector through a diversified portfolio of measures including use of weather index crop and livestock insurance.[20] Similarly the National Agriculture Investment Plan (NAIP),[21] builds on achievements and lessons from the Agriculture Sector Wide Approach (ASWAp) 2010/11 and 2014/15 and emphasises training of rural households on risk management and disaster preparedness, and early warning information disseminated in a timely way.

11. Other national policies relevant to the evaluation subject include the Malawi Growth and Development Strategy (MGDS III) which is aligned to the country's long-term national development aspirations, as articulated in Vision 2020. One of the five key priority areas of the MGDS III is "Agriculture, Water Development and Climate Change Management", which emphasises the need for local level, site specific and accurate weather forecasts and timely climate services.[22] The National Social Support Policy (NSSP) (currently under revision) is operationalized through the Malawi National Social Support Programme (MNSSP) 2018-2023.[23] The MNSSP provides a comprehensive implementation framework for social protection in Malawi. Village Savings and Loans Programmes, and Micro-Finance Programmes (both included in IRMP) are among the interventions prioritised under the MNSSP.

12. Malawi relies heavily on international assistance;[24] the four largest donors currently include the World Bank, the European Commission, the United Kingdom, and United States.[25] The US, UK and EC all contribute towards WFP's FFA program. Other relevant donor-funded programs are described in Annex 6.

13. The United Nations Development Assistance Framework (UNDAF) Malawi (2019-2023) guides the UN Agency programmes ensuring UN-wide coherence and represents a strong collaborative link with the Government of Malawi's development aims in support of SDG17: strengthen the means of implementation and revitalize the global partnership for sustainable development. UNDAF is structured around three pillars, the first of which is "Peace, Inclusion and Effective Institutions."[26] WFP, through its Country Strategic Plan, is particularly concerned to enhance institutional capacity.

14. **WFP's Malawi Country Strategic Plan** (CSP) (2019-2023) describes how WFP will assist the Government in implementing its own policies as part of WFP's own phased withdrawal from direct operations and its transition to providing technical assistance and capacity-strengthening support. Strategic outcomes 1 and 2 of the CSP together constitute an integrated shock-responsive hunger safety net that will build the recovery capacity of smallholders, first through complementary productive assets as part of a crisis response, then through asset creation and access to insurance, savings, credit, climate services and markets. Overall, the CSP is a five-year strategy to help Malawi better coordinate national efforts to tackle hunger, improve nutrition and reduce vulnerability to food insecurity and malnutrition – particularly that related to gender and age – and to strengthen resilience to recurrent shocks.

15. Details of WFP's other resilience interventions in Malawi are provided in Annex 6, which also describes relevant projects implemented by other agencies: the Government of Malawi/UNDP Scaling up the Use of Modernised Climate Information and Early Warning Systems (M-CLIME) (2015-2023); and

[19] Government of Malawi (2015): National Disaster Risk Management Policy.
[20] Government of Malawi (2016): National Agriculture Policy.
[21] Government of Malawi (2018): National Agricultural Investment Plan (NAIP). Prioritised and Coordinated Agricultural Transformation Plan for Malawi: FY 2017/18-2022/23, January 2018.
[22] Government of Malawi (2017): The Malawi Growth and Development Strategy (MGDS) III: (2017-2022): Building a Productive, Competitive and Resilient Nation (November 2017).
[23] Republic of Malawi (2018): Malawi National Social Support Programme II (MNSSP II), March 2018.
[24] In 2012, donor aid from western countries accounted for 28% of gross national income (The Economist, 2016: https://www.economist.com/international/2016/06/11/misplaced-charity)
[25] Malawi Aid Management Portal: https://amp.finance.gov.mw/TEMPLATE/ampTemplate/dashboard/build/index.html

[26] The other two pillars are 'Population Management and Inclusive Human Development', and 'Inclusive and Resilient Growth'.

a research project, 'Improving Preparedness to Agro-Climatic Extremes in Malawi' (IPACE-Malawi), led by the University of Leeds.

1.2. Overview of the Evaluation Subject

16. This evaluation is a mid-term activity evaluation. The IRMP grant agreement was approved (fully signed) on 30 November, 2016. The total duration of the programme is three years, January 2017 to December 2019. The evaluation was undertaken April-August, 2019 (somewhat after the middle of the project timeframe). The project is implemented in three districts of southern Malawi: Chikwawa, Blantyre Rural and Mangochi districts, as indicated by the map in Annex 1. The evaluation covers all IRMP activities implemented in the three districts and how IRMP activities are integrated with other Resilience activities in these districts, notably the Food Assistance for Assets (FFA) Program (as indicated by the table in Annex 1).

17. The overall, general objective of the IRMP is "To reduce food and income insecurity among vulnerable smallholder households in the context of increasing climatic risks and climate variability over the project cycle through delivery of integrated resilience interventions." There are three specific objectives (as presented in Annex 2) which correspond to the three key IRMP activities: (i) climate services activities, i.e. the provision of climate and weather information and associated agricultural advisories;[27] (ii) risk mitigation activities, i.e. the design and provision of a weather index-based micro-insurance; and (iii) financial services activities, i.e. the creation and training of Village Savings and Loan (VSL) groups. The project is implemented by a combination of NGO, government and private sector partners. More detailed information about the project activities and the partners is provided in Annex 2.

18. As a climate services and risk management program, IRMP has a strong information dissemination and capacity building focus (as opposed to food distribution or cash distribution); outputs are therefore not measured in terms of amounts of food / cash / vouchers distributed but in terms of the number of beneficiaries reached through different communication channels and risk management mechanisms. The project document states that, by the end of three years, climate services information will reach ***up to*** 40,000 vulnerable households through extension workers, radio and SMS platforms; this translates into 220,000 individual beneficiaries, of which 50 percent will be women. Under the risk mitigation activity, a pilot-scale weather index-based micro-insurance product was expected to reach 2,000 farmers in one district in the first year, to be expanded thereafter. No target figures were provided for the financial services activities.

19. Implementation followed a phased approach, both in terms of geographical targeting and the different project components implemented. Actual beneficiary numbers for the different activities and components are presented in Table 1; planned numbers (where available) are shown in brackets. The total number of beneficiaries is not currently known due to the challenges of double-counting individuals who benefit from more than one project component.

Table 1. Beneficiary numbers disaggregated by year, activity and component

	Channel of Climate Services Provision			Insurance	VSL
	Extension Service	Radio	SMS		
2017	2,821	6,000	NA (16,000)	2,000* (2,000)	566**
2018	4,574	7,410	NA (20,000)	4,171	12,250***

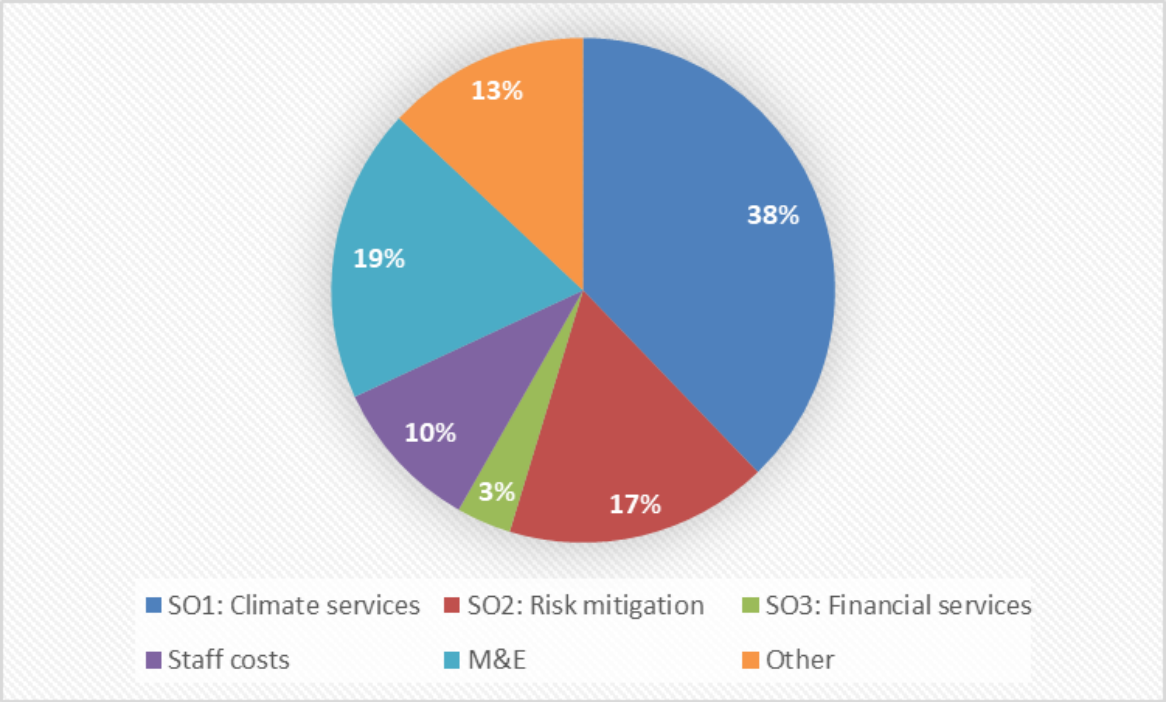
NA=not available. Figures in brackets are planned number of beneficiaries (where available and realistic).
*Including 600 men, 1,400 women. ** including 136 men, 410 women. *** including 3,320 men, 8,930 women.
Source: Annual IRMP Donor Reports (2017, 2018), Partner reports, and Planning and Review workshop reports.

[27] "Advisories" are understood by the Evaluation Team to refer to a range of options for agricultural practices appropriate to the particular forecast from which farmers can decide was is best for their own context.

20. Planned and actual outputs (by year) are detailed in Tables 11 and 12 of Annex 3, though there are very few numbers for planned outputs contained in the project documents. Available outcome results are presented in Section 2.2; figures for planned outcomes are not provided in the project documents.

21. The Government of Flanders is the sole donor for the IRMP. The total grant agreement is 2,500,000 EUR over three years, allocated as shown in Figure 1 (see also Table 16, Annex 8); the largest proportion of the budget (38 percent) was allocated to climate services, whereas financial services received just three percent. There was an underspend of 17.6 percent of the money received from the first two payment tranches (out of a total of three payment tranches agreed for the overall 3-year project); this is further discussed in Section 2.3. Associated FFA activities are funded by the United States Agency for International Development (USAID), the United Kingdom's Department for International Development (DFID), Germany's Federal Ministry of Economic Cooperation and Development (BMZ) and the European Commission's Humanitarian Aid Office (ECHO).

Figure 1. IRMP Planned budget allocation



22. The IRMP logical framework is presented in Annex 4, with changes made by the ET indicated in red. A critique of the logical framework from an evaluation perspective is provided in Section 2.2 (paragraph 77). Gender is mainly perceived in terms of numbers of men and women participating in programme activities rather than in terms of empowerment or decision-making processes.

23. The IRMP design gives very little explicit attention to gender dimensions. A GEWE analysis for IRMP does not appear to have been undertaken. Apart from targeting 50 percent of women, the project lacks an explicit statement on how gender will be integrated and measured in the project. The project design did not include any gender specific objective.

24. IRMP is part of a broader portfolio of integrated, multi-year, and multi-partner resilience programming. Since 2014, the CO has been developing an integrated resilience approach based on a graduation model out of food insecurity through risk management strategies, climate adaptation and market-based opportunities, as elaborated in Annex 5. Other related interventions within WFP's resilience portfolio are described in Annex 6. They include: FFA; the Global Framework for Climate Services (GFCS) Adaptation Programme for Africa (Phases I and II) funded by the Norwegian Agency for Development Cooperation (NORAD); the R4 Rural Resilience Initiative (2017-2022) funded by The Swiss

Agency for Development Cooperation (SDC); Building Resilience and Adaptation to Climate Change (BRACC) funded by the UK Department for International Development (DFID); and collaboration on the Government of Malawi/UNDP Scaling up the Use of Modernised Climate Information and Early Warning Systems (M-CLIME) (2015-2023) funded by Green Climate Fund.

25. An evaluation of the GFCS climate services interventions was completed in May 2017.[28] Much of the learning generated through the GFCS project experience was incorporated into the design and implementation of IRMP. Though mainly aimed at the corporate and/or HQ levels, another relevant evaluation is the 2019 Strategic Evaluation of WFP Support for Enhanced Resilience, which included Malawi among the country case studies. At least one of the recommendations is potentially relevant to the IRMP evaluation, i.e. that country offices should consider measuring differences in resilience outcomes using dedicated econometric analysis such as Resilience Index Measurement and Analysis II. It is not known whether this recommendation was taken up; at the time of writing, the CO was still discussing which indicators to be used for future resilience monitoring.

1.3. Evaluation Methodology and Limitations

26. The overarching question addressed by the evaluation is "What has been the progress in the implementation and performance of the IRMP up to April 2019, and what are the emerging lessons which could inform the implementation of the second cycle (from July 2019) and the conduct of a credible final evaluation?" Details of the 17 evaluation questions, including respective data collection methods, are provided in the evaluation matrix (Annex B, Volume II), grouped according to the criteria of relevance, effectiveness, efficiency, impact, and sustainability. These are the criteria of the Organisation for Economic Cooperation and Development / Development Assistance Committee (OECD/DAC) and were articulated in the TOR (Annex A, Volume II). Given this is a mid-term evaluation, sustainability and impact were not a key focus, but their inclusion allowed for assessment of the factors likely to affect impact and sustainability and how impact and sustainability can be increased. Two additional criteria, on gender equality and women's empowerment (GEWE) and learning, were also included at the request of the WFP Regional Bureau (RB).

27. The evaluation used a mixed-methods approach, relying on existing quantitative datasets, including baseline and three outcome monitoring surveys.[29] Qualitative data were compiled by the Evaluation Team (ET) and included information from a review of documentation (Annex C, Volume II), key informant interviews with over 45 individuals (as listed in Annex D, Volume II), 12 focus group discussions (FGDs) with 144 female and 105 male beneficiaries in six sites, and two FGDs with 21 extension officers. Interview and FGD guides are presented in Annex E, Volume II. The in-country field mission took place from 11th to 26th June 2019. Additional details of the methodology are provided in Annex F, Volume II.

28. Two members of the Evaluation Team visited each of the three IRMP districts (Blantyre Rural, Chikwawa, Mangochi). Within each district, two sites were selected for the beneficiary FGDs, selected from a list of village clusters defined by Group Village Headmen (GVH) where IRMP activities had been implemented. To allow for data to be collected on the integration of the different project components, sites selected were those where all IRMP component activities (plus associated FFA activities) had been implemented for the longest duration. For logistical reasons and to ensure geographical representation

[28] Statistics for Sustainable Development and Cramer-Njihia Consultants, 2017. Evaluation of Climate Services Interventions in the GFCS Adaptation Programme for Africa: Beneficiary Assessment. Final Evaluation Summary Report. Prepared for the World Food Programme and CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

[29] Baseline data were collected in June/July 2017, and outcome monitoring surveys were undertaken in December 2017, March 2018, and June 2018. Each of these surveys covered a broader geographical area than that targeted under IRMP. The district-aggregated data presented in this report are for the two IRMP districts (Blantyre Rural and Chikwawa) for which comparative baseline and outcome monitoring data results are available.

with each district, the selected sites were located within a 2-hour drive from the district town and situated – where possible - in different Traditional Authorities (TAs).[30]

29. At the end of the fieldwork, the Field Team (two members of the ET and the three Field Assistants) participated in an internal analysis workshop to discuss and develop the emerging findings from the beneficiary FGDs. Gender aspects were considered and addressed by this workshop which highlighted specific GEWE-related findings. The end-of -fieldwork debriefing with key staff from the CO and Blantyre Sub-Office (SO) allowed for the verification and correction of facts. Qualitative data were further analysed by identifying key themes and patterns, which were then triangulated by comparisons across different data sources and methods of collection. A presentation of preliminary findings to key CO, SO, RB and HQ staff elicited discussion and feedback which was used to further verify and expand on the analysis and preliminary recommendation areas. After additional follow-up correspondence with key WFP staff and implementing partners, the Evaluation Team collectively reviewed the conclusions and further developed the recommendations.

30. The methodology was gender-responsive in all aspects of the evaluation process, including the design (e.g. gender equality was integrated into the evaluation matrix and subsequently into the interview/FGD guides for data collection); the methodological protocols (e.g. selection of participants; timing and location of interviews and discussions) and analysis (e.g. by going beyond gender-based comparisons of results to explore the underlying reasons for gender-based differences). In all cases, FGDs with female beneficiaries were conducted separately from male beneficiaries, and women's FGDs were facilitated by the female team members, ensuring that the voices of women were heard, used and triangulated. GEWE issues were addressed in the FGDs through questions about the nature of changes in household roles and control over decision-making. A GEWE-responsive methodology was supported by expanding the evaluation team from two members (as stated in the TOR) to three members, to include a gender specialist.

31. Four main types of limitations were encountered, as detailed in Table 2, which also describes the corresponding mitigating strategies. Despite these limitations, the ET believes that the mid-term evaluation mandate has been reliably fulfilled, based on the data available. It will be important for all the necessary monitoring data and additional variables (as proposed in Recommendation 6, paragraphs 158 and 159) to be made available for the final evaluation.

Table 2. Methodological limitations and mitigation strategies

	Limitation	**Mitigation strategy**
1	*Gaps and discrepancies in the project documentation / monitoring figures*	
1.1	Total overall number of beneficiaries (as opposed to the number of beneficiaries for each of the various different activities / components) is not available due to the challenges of double-counting individuals who benefit from more than one project component.	Missing figures are noted where they occur. Recommendations include suggestions for tracking total number of beneficiaries.
1.2	Some figures for planned number of beneficiaries are lacking, as are some figures for planned number of outputs.	Missing figures are noted where they occur.
1.3	Some of the planned output figures are exactly the same as the actual figures and – given the numbers themselves (e.g. 49 as opposed to 50 for the planned number of extension workers to be trained) – appear to have been inserted retrospectively.	Ambiguous figures are noted where they occur.

[30] In Mangochi District, the selected GVH sites were Kalino and Nkuchira (TA Mponda); Kadzumba (TA Maseya) and Mpama (TA Machinjiri) in Chikwawa District; and Somba (TA Lundu) and Masaka (TA Machinjiri) in Blantyre Rural District.

1.4	Some discrepancies in the actual output figures reported in different documents (e.g. IRMP annual donor reports vs. partner reports), raising questions about the reliability of some of the figures.	Discrepancies are noted where they occur.
2	*Delays and gaps in the quantitative outcome monitoring datasets*	
2.1	Challenges in sourcing and preparing the outcome monitoring datasets, leading to delays in the analysis and finalization of the outcome indicator results figures.	RBJ Evaluation Analyst successfully sourced and analysed the datasets. This also required inserting district labels into one dataset which only contained group village labels.
2.2	The baseline data survey covered only two out of the three districts targeted by the IRMP, making it difficult to use the baseline as a source of comparison for the project as a whole.	Outcome indicator results are presented for the two districts for which the data are complete.
2.3	The June 2018 dataset and the March 2018 dataset both contain many cases that are missing the variable to indicate the gender of household (HH) head.	Data results drawing on these two datasets cannot be disaggregated by gender of HH head.
3	*Comparability of datasets*	
3.1	Seasonally-sensitive quantitative indicators may not be comparable because the monitoring surveys were implemented at different times of year.	Comparisons are only drawn between the June 2017 and June 2018 datasets.
4	*Gaps in the qualitative data collected by the ET*	
4.1	Some partners and stakeholders were not available for interview.	Remote interviews and consultations continued well into the analysis and report-writing phase. Key informants who could not be interviewed are noted in Annex D (Volume II).
4.2	Limited information relating to Participatory Integrated Climate Services for Agriculture (PICSA) was collected from Chikwawa district due to poor communication regarding beneficiary FGD arrangements; farmers who had been trained in the PICSA approach were not present for the FGD. It was also not possible to conduct a FGD with extension officers in Chikwawa District.	Reference was made to recent PICSA monitoring data provided by the University of Reading.

Source: Evaluation Team

32. No particular ethical issues were encountered. The following safeguards and measures were applied: the selection of ET members with no conflicts of interest; ensuring informed consent from all key informants and FGD participants (see Annex E (Volume II) for the standard narrative used in verbally obtaining informed consent); protecting privacy, confidentiality and anonymity of participants; ensuring cultural sensitivity; respecting the autonomy of participants; ensuring fair recruitment of participants (including women); and ensuring that the evaluation results in no harm to participants or their communities.

33. The approach, methodology and actual implementation of the evaluation adhered to the core humanitarian principles of impartiality and operational independence. Impartiality was assured by relying on a cross-section of information sources from different stakeholder groups, including beneficiaries. Independence was maintained by the transparent selection of fieldwork sites, as described

in Annex F (Volume II). The principles of humanity and neutrality were not considered to be relevant to the context of Malawi and the subject under evaluation.

34. This report aims to comply fully with WFP's Decentralized Evaluation Quality Assurance System (DEQAS). Quality assurance has been integrated throughout, initially by the team leader, internally by a KonTerra quality advisor, externally by the independent quality support service managed by OEV, and finally by the WFP Evaluation Manager.

2. Evaluation Findings

35. The evaluation findings and the evidence to substantiate them are presented below. They are structured according to the six evaluation criteria and the evaluation questions. Square brackets are used to indicate the specific evaluation question (EQ) to which the text refers.

2.1. Relevance

2.1.1 Validity of objectives [EQ1]

36. IRMP's objective to strengthen the capacities of communities to adapt to climate related shocks is directly in line with the National Climate Change Management Policy[31] and the National Disaster Risk and Management Policy (2015).[32] Both policies emphasise training and awareness and improving access to early climate and weather information that allows affected communities to act in a timely and appropriate manner in the face of climate risk. IRMP is also aligned to climate services programming approaches outlined in the national framework for climate services developed under the GFCS project.[33]

37. By building the capacity of communities to manage climate and other risks through a diversified portfolio of measures including the use of weather-index micro-insurance and financial services, IRMP is in line with the National Agriculture Policy.[34] IRMP also addresses three of the five components of the National Resilience Plan.[35] It does this by focusing on interventions that contribute to catchment protection and management; risk reduction, flood control and Early Warning responses as well as interventions that build household resilience. Through supporting the generation of local-level, accurate, and up-to-date weather forecasts, IRMP is in line with the Malawi Growth and Development Strategy (MGDS III)[36] national development aspirations of developing resilience of Malawians to climate variability and change.

38. More broadly, IRMP's focus on high poverty areas - particularly the three districts in the Southern Region - is in line with the country's national social protection strategy. The Village Savings and Loan (VSL) form a critical part of the safety nets prioritised under the Malawi National Social Support Programme (MNSSP)[37] which are meant to protect the vulnerable and poor from various shocks and stresses.

39. In relation to WFP's policies and frameworks, IRMP is in line with WFP's policies on disaster risk reduction and management (DRRM),[38] climate change,[39] and capacity development. Both the DRRM and climate change policies support the implementation of interventions that build resilience and

[31] Government of Malawi (2016): National Climate Change Management Policy, Ministry of Natural Resources, Energy and Mining Environmental Affairs Department, June 2016.
[32] Government of Malawi (2015): National Disaster Risk Management Policy.
[33] According to one of our key informants, this framework states that farmers should receive climate information relevant for their decision making; the framework document was not reviewed for verification.
[34] Government of Malawi (2016): National Agriculture Policy
[35] Department of Disaster Management Affairs (2017): National Resilience Plan – Breaking the cycle of food insecurity in Malawi
[36] Government of Malawi (2017): The Malawi Growth and Development Strategy (MGDS III)- 2017-2022- Building a Productive, Competitive and Resilient Nation.
[37] Republic of Malawi (2018): Malawi National Social Support Programme II (MNSSP II), March 2018
[38] WFP (2017): WFP policy on Disaster Risk Reduction and Management
[39] WFP (2017): WFP Climate Change Policy

protect the most vulnerable through social protection, innovative risk finance transfer and insurance for food security. They also promote complementarity with the resilience-building programmes of other actors. Although it is not explicit within the project document and no capacity needs assessment appears to have been undertaken, IRMP is broadly consistent with WFP's policy on capacity development in that it supports capacities at the policy, organizational and individual/community levels.[40] IRMP broadly consistent with the four objectives of the WFP Gender Policy[41] (food assistance is adapted to different needs; equal participation; decision-making by women; gender and protection), but the collection and use of sex-disaggregated data has not been applied consistently in monitoring.

40. The WFP Malawi Country Strategic Plan (2019-2023) supports five mutually reinforcing strategic outcomes. Strategic outcome 4 focuses specifically on an integrated package of resilience building activities within which the IRMP is implemented. This is further elaborated by the WFP Malawi Framework for an Integrated Resilience Approach (see Annex 5). There are strong linkages and integration with other strategic outcomes focusing on school meals, nutrition, crisis response and support to government of Malawi. By integrating asset creation under FFA/Insurance for Assets (IFA) with interventions to strengthen access to finance (VSL), IRMP aligns with WFP's resilient food systems approach.[42]

41. WFP's "3-pronged approach" (3PA) is undertaken as part of WFP's broader resilience programming approach in Malawi to identify needs at various levels. National-level Integrated Context Analysis (ICA) was undertaken prior to the start of the IRMP to identify districts that are chronically food insecure and prone to frequent drought and floods. The three IRMP target districts - Chikwawa, Blantyre Rural and Mangochi Districts – were among those identified through this process and also through coordinated efforts to avoid overlaps with other resilience projects. At district level, Seasonal Livelihood Programming (SLP) consultations for Blantyre and Chikwawa Districts were undertaken before the start of the IRMP. The SLP for Mangochi was undertaken in 2017.

42. The scale of needs at district level is regularly monitored through the country's agriculture and food and nutrition security information systems, generated by the National Statistical Office, sector ministries, and the Malawi Vulnerability Assessment Committee (MVAC). MVAC annual projected figures for the proportions of total district populations classified as food insecure across the three IRMP districts for the 3-year project period (2017-2019) vary from five percent up to 30 percent, representing a total food insecure population for the three districts combined of between 142,917 and 611,692 (Annex 7). Clearly, not all of these people reside in the catchment areas targeted by IRMP, but the level of fluctuation in the annual figures illustrate that the scale of needs varies considerably over time. IRMP is not designed to meet short-term needs of those affected; the long-term objective of IRMP is to reduce the scale of needs by building resilience to climatic shocks.

2.1.2 Relevance to needs of women and men [EQ2]

43. Also under 3PA, Community-Based Participatory Planning (CBPP) was implemented as part of the FFA program to identify needs at community level. Particular efforts made to engage female community members in the CBPP process were seen by the ET to be successful. The CBPP reports reviewed by the ET included the need for climate services and knowledge about modern agricultural practices, various types of assets and activities that were subsequently supported under FFA/IFA (e.g. natural resources management and restoration, irrigation farming, backyard vegetable gardens, etc), and access to loans to support financial independence. The CBPP reports reviewed did not specifically mention the need for insurance, though this would not have been expected since farmers are generally

[40] WFP (2009): Capacity building (2009). This differentiates three levels of capacity building: (i) Enabling environment (Policy and law framework development); (ii) Enhancing organisational capacity (development of mechanisms, systems, partnerships, funding, tools, technical assistance, etc.); and (iii) Individual and communities capacities: these are the trainings to individuals (no matter the level: at community or Ministry or other levels).
[41] WFP (2015): Gender Policy 2015–2020.
[42] WFP (2018): Systemic Food Assistance WFP's Strategy for Leveraging Food Assistance to Improve Food System Performance. Available at https://docs.wfp.org/api/documents/WFP-0000064159/download/

not aware of the recent developments in micro-insurance products available to smallholders. With this exception, IRMP activities are considered to be appropriate to address the needs identified by the communities. This was confirmed by the FGDs and stakeholder interviews undertaken by the ET.

44. In the implementation of IRMP, priority has reportedly been given to vulnerable women, though sex-disaggregated data are not available to be able to verify this for all components (Table 1). For VSL, women form 73 percent of the participants; this is thought to be the component with the highest level of participation by women. Differences in the effectiveness of the different components among men and women are highlighted in Section 2.6.

45. Beneficiary targeting of the climate services component was done through existing farmer groups and other types of groups (e.g. VSLs). Targeting of the IFA and VSL beneficiaries was based on the FFA participants and existing VSL groups. FFA participants had been identified through community-based participatory processes to identify vulnerable and food insecure households with able-bodied household members capable of undertaking the work activities required. Women were involved in the participatory selection processes. Women were also actively encouraged to join the FFA and IRMP activities, as evidenced by the high proportion of female participants reported above.

2.1.3 Complementarity with other Resilience activities [EQ3]

46. Among WFP's other resilience activities, IRMP is very closely linked to the FFA program; all of the three targeted IRMP districts are also under the FFA program, and the IRMP IFA participants are self-selected from the FFA participants. Through FFA, there are also links with nutrition and hygiene; FFA activities include the construction of backyard gardens for vegetable cultivation, pit latrines, and dish racks, and participants are taught about the different food groups needed for good nutrition. In addition, a small pilot involving 22 farmer organizations in Mangochi District was established in early 2019 to link IRMP with the Home-Grown School Meals (HGSM) Program.

47. WFP's FFA program underwent a significant shift in 2017 to focus explicitly on watershed management, including forest and landscape rehabilitation, thus bringing it in line with Malawi's National Resilience Plan through the creation of soil and water conservation assets at both community and household levels.

48. IRMP is complementary to UNDP's Scaling Up the Use of Modernized Climate Information and Early Warning Systems" (M-CLIMES) project, which is being implemented in 21 out of Malawi's 28 districts. UNDP and WFP mapped out target areas to avoid geographical overlaps between IRMP and M-CLIMES, something which is still ongoing. Both GFCS (Phase 1) and IRMP have provided a learning ground for the PISCA methodology, allowing for UNDP to benefit from the PICSA experience, including the utilisation of the same institution (University of Reading) for technical support, thus creating uniformity and synergies between the two projects.

49. IRMP complements the DFID-funded Building Resilience and Adaptation to Climate Change (BRACC) - Promoting Sustainable Partnerships for Empowered Resilience (PROSPER) project in terms of objectives, approach and targeted sites. As for IRMP, BRACCC/PROSPER aims at strengthening resilience of vulnerable households against weather and climate-related shocks and stresses. To achieve its objectives, it combines an integrated package of interventions that are similar to IRMP (productive asset creation, VSL, micro-finance and crop/weather insurance). The project sites include two of the IRMP targeted areas - Chikwawa and Mangochi districts, thus allowing for greater synergies, particularly as IRMP will soon be coming to an end.

Key findings and conclusions – Relevance (EQs 1-3)

- The objectives of IRMP are fully coherent with and aligned to a range of different national policies and strategies in Malawi, including climate change, disaster risk management, agriculture, social protection, and resilience

- IRMP interventions are aligned to climate services programming approaches outlined in the national framework for climate services
- IRMP is consistent with WFP's policies on disaster risk reduction and management, climate change, and capacity development; it partially aligns with WFP's gender policy.
- IRMP is implemented within the WFP Malawi Country Strategic Plan (2019-2023) and guided by the WFP Malawi Framework for an Integrated Resilience Approach which ensures strong linkages and integration between strategic outcomes while also being aligned to the broader National Resilience Plan.
- IRMP addresses the food security needs of men and women in three districts that are prone to frequent drought and floods; the targeting mechanisms are appropriate, though IRMP alone is unlikely to be able to meet the scale of needs in these districts
- IRMP prioritizes vulnerable women as beneficiaries
- IRMP is very closely linked to WFP's FFA program (which also includes strong nutrition elements) and also complements various other resilience programs in Malawi, both those implemented by WFP and others.

2.2. Effectiveness

2.2.1 Achievement of outcomes and outputs [EQ4]

50. Table 3 contains outcome results from four monitoring surveys to date, with additional outcomes in Table 9 of Annex 3. Figures in the table are for Blantyre and Chikwawa Districts only as Mangochi District was not included in the baseline survey's sample frame. Figures for planned outcomes are not provided in project documents. A comparison of results between June 2017 and June 2018 suggest that livelihoods have diversified (as evidenced by the increase in income sources), though this has not necessarily translated into increased food security, as measured by the Food Consumption Score and spending patterns, which do not show strong, consistent, positive changes.

Table 3. Outcome indicator results by gender of household head and monitoring survey dataset (Blantyre and Chikwawa Districts only)

Indicator	Gender of HH head	Date of monitoring survey and sample size			
		June 2017 (Baseline) (N=409)	December 2017 (N=410)	March 2018 (N=445)	June 2018 (N=866)
Food Consumption Score (% acceptable)	Male	64%	63%	-	-
	Female	60%	56%	-	-
	Total	**62%**	**61%**	**44%**	**50%**
% of households using neutral coping strategies[43]	Male	52%	54%	-	-
	Female	46%	69%	-	-
	Total	**50%**	**57%**	**33%**	**54%**
Mean number of income sources	Male	1.64	1.64	-	-
	Female	1.51	1.51	-	-
	Total	1.59	1.61	2.3	2.5
Mean HH food expenditure (30-day recall) *(MK)*)	Male	14164 (12680)	13781 (12040)	-	-
	Female	10836 (9200)	10050 (9325)	-	-

[43] The full range of recorded coping strategy categories is presented in Table 8 in Annex 3.

	Total	12675 (10800)	12949 (11300)	14417 (12300)	12033 (10350)
Mean HH non-food expenditure (6-month recall) *(MK)*)	Male	8076 (5918)	10044 (5375)	-	-
	Female	5442 (3216)	4245 (2189)	-	-
	Total	6897 (4810)	8752 (4685)	7489 (4550)	6332 (3774)
% of HH expenditure on food	Male	64%	62%	-	-
	Female	67%	65%	-	-
	Total	**65%**	**63%**	**70%**	**69%**

Figures in brackets are median values.

51. The remainder of this section presents the findings relating to effectiveness for each activity in turn. **Climate Services activities** are implemented through three different communication channels: (i) through the training of extension officers and application of the PICSA approach;[44] (ii) through weekly radio programs and farmer listening groups, supported by a call centre[45] that farmers can call for additional information (known as the Mlimi Hotline); and (iii) through both 'push' and 'on demand' text messages. The effectiveness of each of these channels is assessed below. The activities linked to radio and SMS communication channels (implemented by Farm Radio Trust) are referred to as Interactive Weather and Climate Adaptation Radio Programming (IWCARP).

52. These communication channels rely on the provision of historical climate information and seasonal and weekly weather forecasts by the Department of Climate Change and Meteorological Services (DCCMS) and the ability of the partners and the National Agriculture Content Development Committee (NACDC) to use these forecasts to generate locally-relevant agricultural advisories (options for agricultural practices that are appropriate to the specific forecast) which can then be communicated through the different communication channels. Although the IRMP logframe did not include a result or any indicators for the work of DCCMS and NACDC in generating and approving this information (Annex 4), key informants and extension officers agree that it appears to be done well: there is good collaboration between DCCMS and the Department of Agriculture Extension Services (DAES); the seasonal and weekly forecasts and associated advisories are generated in a consistent manner and shared with the project partners and extension officers on a regular basis. The general consensus among the FGD farmers was that the advice provided across the various different information channels was broadly consistent; messages received through different channels did not conflict with one another in any way. However, both male and female FGD farmers in one out of the six sites commented that the seasonal forecasts for the past season (2018-19) were either considered to be 'wrong'[46] or insufficiently downscaled to be useful for agricultural planning purposes. Outcome monitoring data results show an overall increase in the percentage of households who received agro-climatic advice (Figure 2). Of these households, 74 percent reported to have used the agro-climatic advice in their decision-making relating to disaster risk reduction, agriculture and/or livelihood choices in the June 2018 survey (Table 9, Annex 3).

53. Details for each communication channel are provided in the paragraphs below. Overall, data from the outcome monitoring surveys show increases in the percentages of households receiving agro-climatic advice through PICSA and radio, whereas the figure for SMS was less than 1 percent in both years.

[44] The PICSA approach involves: (i) the provision and consideration of climate and weather information (including historical records and forecasts) with farmers; (ii) the joint analysis of information on crop, livestock and livelihood options and their risks by field staff and farmers; and (iii) the use of participatory tools to enable farmers to use this information in planning and decision-making for their own circumstances.

[45] The call centre is funded directly by Farm Radio Trust, not through IRMP.

[46] The forecasts are presented in terms of probabilities, so – technically – they are not wrong, only that the likely probable forecast was not realized.

Figure 2. Percent of households within targeted communities receiving seasonal climate services with agro-climatic advice

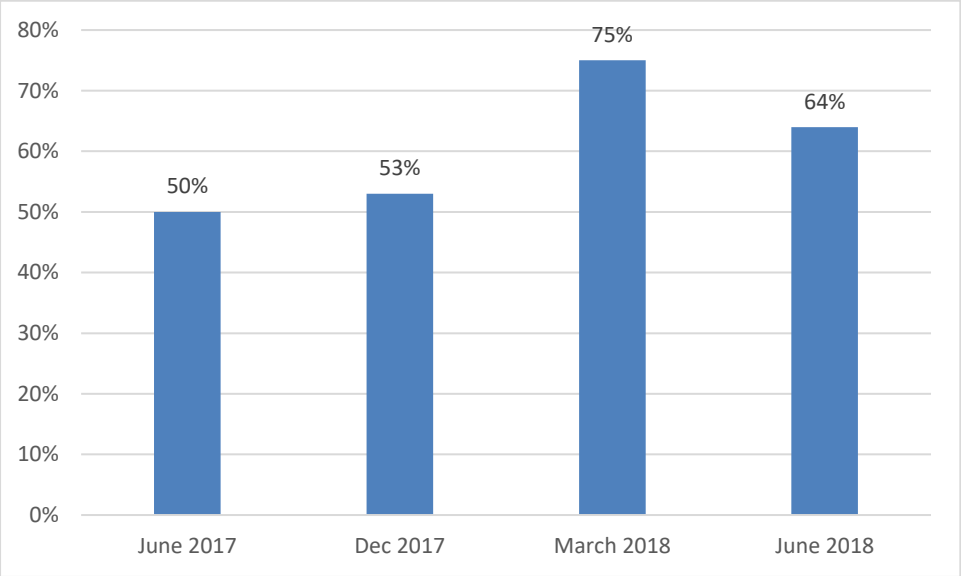
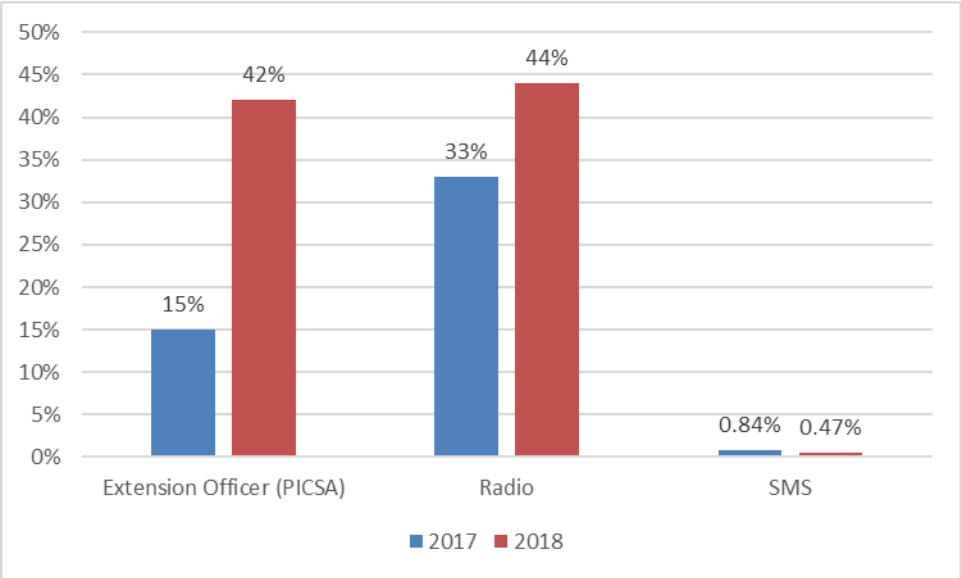


Figure 3. Percentage of farmers receiving climate services information through different channels



54. The implementation of **PICSA** involves two stages: the training of trainers (TOT), i.e. extension officers; and the training of farmers. The main PICSA TOT consists of a five-day workshop that include three days of participatory classroom work, one day of field practice, and one day for feedback and planning. The PICSA TOT approach was expanded to include annual Planning and Review Workshops which provide essential refresher training and the opportunity to share and discuss the seasonal forecast and associated advisories. The training of extension officers was implemented in a more-or-less uniform manner across the three districts. In 2017, a total of 91 extension officers (64 male, 27 female) from Blantyre and Chikwawa Districts were trained in PICSA. In 2018, a total of 137 extension officers (96 male, 41 female) from all three districts were trained (Annex 3). There was some variation in the number and timing of the various workshops across the two years and across the districts. Some officers were trained to use the conventional PICSA method involving paper flip charts, and others were trained to use electronic tablets (e-PICSA). There was no clear consensus among the officers met as to which was

preferable.[47] With some exceptions, the general consensus among the extension officers met by the ET was that the PICSA training provided was insufficient; this finding is further supported by the assessments compiled at the Planning and Review (P&R) workshops, in which the majority of the participating extension officers indicated that the training should have been longer. However, the multiple duties of extension officers are such that it is difficult to keep them away from their work for more than one week at a time. The addition of the end-of-season workshops (conducted in 2018 only) and the P&R workshops usefully provided additional learning opportunities. Additional on-the-job support for the extension officers is recommended as another way of building their capacity (see Recommendation 3).

55. Information from the KIIs and FGDs conducted by the ET with extension officers and farmers show that the ways in which farmers were trained involved considerable variation in the number and frequency of training sessions[48] (ranging from a single one-off half-day training session to regular sessions throughout the season), and whether or not the NGO implementing partner was involved in the training (one site only). The PICSA training manual recommends six meetings / training sessions with farmers during the course of a season (starting well before the onset of the rains and continuing until after the harvest) to implement all 12 steps involved in the PICSA approach, and extension officers are encouraged to adapt the number of sessions to meet farmers' needs. Although the sample was small and non-representative, in some FGDs conducted by the ET, the number of training sessions that was reported to have been received by some farmers was clearly inadequate. In contrast, initial analysis provided by the University of Reading (UoR) PICSA monitoring survey among a sample of 484 randomly selected PICSA-trained farmers across the three IRMP districts shows that the average number of training sessions the farmers attended was four (Poskitt et al, 2019). The same survey also shows that the training received was relatively complete (e.g. more than 87 percent of sample farmers reported to have been trained in six key tools) and extremely useful (the disaggregated figures show that at least 88 percent of men and at least 88 percent of women considered that each tool was useful for their planning and decision-making) (Table 4).

Table 4. PICSA training received by sampled farmers and usefulness of PICSA tools

PICSA Tool/Step	Respondents trained in each tool (n=484)	Trained respondents who found each tool useful for their planning and decision-making		
		All	Male	Female
Resource Allocation Map	420 (87%)	396 (94%)	143 (97%)	253 (93%)
Historical Climate Information	442 (91%)	418 (95%)	157 (88%)	261 (94%)
Probabilities and risks	434 (90%)	414 (95%)	155 (97%)	259 (95%)
Crops and varieties	459 (95%)	449 (98%)	170 (99%)	279 (97%)
Options tables	443 (92%)	431 (97%)	162 (96%)	269 (98%)
Participatory budgets	432 (89%)	417 (97%)	152 (97%)	265 (96%)
Seasonal forecast	381 (79%)	364 (96%)	131 (96%)	233 (95%)
Short term forecasts	288 (60%)	259 (90%)	100 (92%)	159 (88%)

Source: Poskitt et al, 2019

56. When asked during the FGDs conducted by the ET what they had learned, men tended to talk about the decision-making tools that constitute the PICSA approach (i.e. historical climate trends, resource mapping, budgeting, etc), whereas women talked about various technologies and best practices (e.g. short duration varieties; early planting; crop diversification; post-harvest handling; use of

[47] A comparison of conventional PICSA with e-PICSA is considered to be beyond the scope of this evaluation.
[48] Some variation would be expected, depending on the circumstances and the skills of the extension officer, though the ET considers that a single training session is inadequate.

organic fertilizer, etc).[49] Quantitative UoR monitoring data also reveal a subtle finding regarding gender in that slightly lower proportions of women as compared to men were positive about statements related to agricultural decision-making (Statements 3, 5, 6, 7 in Table 5), though this is not thought to be significant.[50] The extent to which the trained farmers then shared their knowledge with others was reported by the FGDs to be highly variable; the UoR data showed that 61 percent of trained farmers (65 percent of men and 58 percent of women) shared some information and/or tools from PICSA (Poskitt et al, 2019). On average, these farmers shared with seven men and 10 women. Overall, farmers in the FGDs stated that their training should have been longer, more structured, involving more sessions, and more frequent refresher trainings. UoR monitoring data further revealed that 86 percent of sampled farmers were able to fully participate in the training sessions attended, and only 10 percent (8 percent men; 11 percent women) regarded the training as too difficult to understand (Table 5).

Table 5. Selected Likert statements about PICSA training

	All (n=484)	**Male (n=179)**	**Female (n=305)**
1. I was able to fully participate in the training sessions I attended and the activities that were held	86%	86%	87%
2. The extension worker who provided the training ensured that everybody was included in the activities during the training sessions	90%	92%	89%
3. The training that I have received has made me more confident in planning and making decisions about my farming and livelihood	90%	94%	88%
4. I trust the historical climate information that I was given during the training	90%	93%	93%
5. The decisions that I have taken because of this training have improved my household food security	81%	85%	78%
6. The decisions that I have taken because of this training have improved the amount of income that my household receives	70%	78%	65%
7. Following the training I feel that I am more able to cope with bad years (caused by the weather)	86%	92%	82%
8. Thinking about the training I felt that it took too much of my time	23%	17%	27%
9. I felt that the training needed to be conducted earlier in the year so that there was more time before the season for me to plan and make changes	71%	67%	73%
10. The training was too difficult to understand	10%	8%	11%

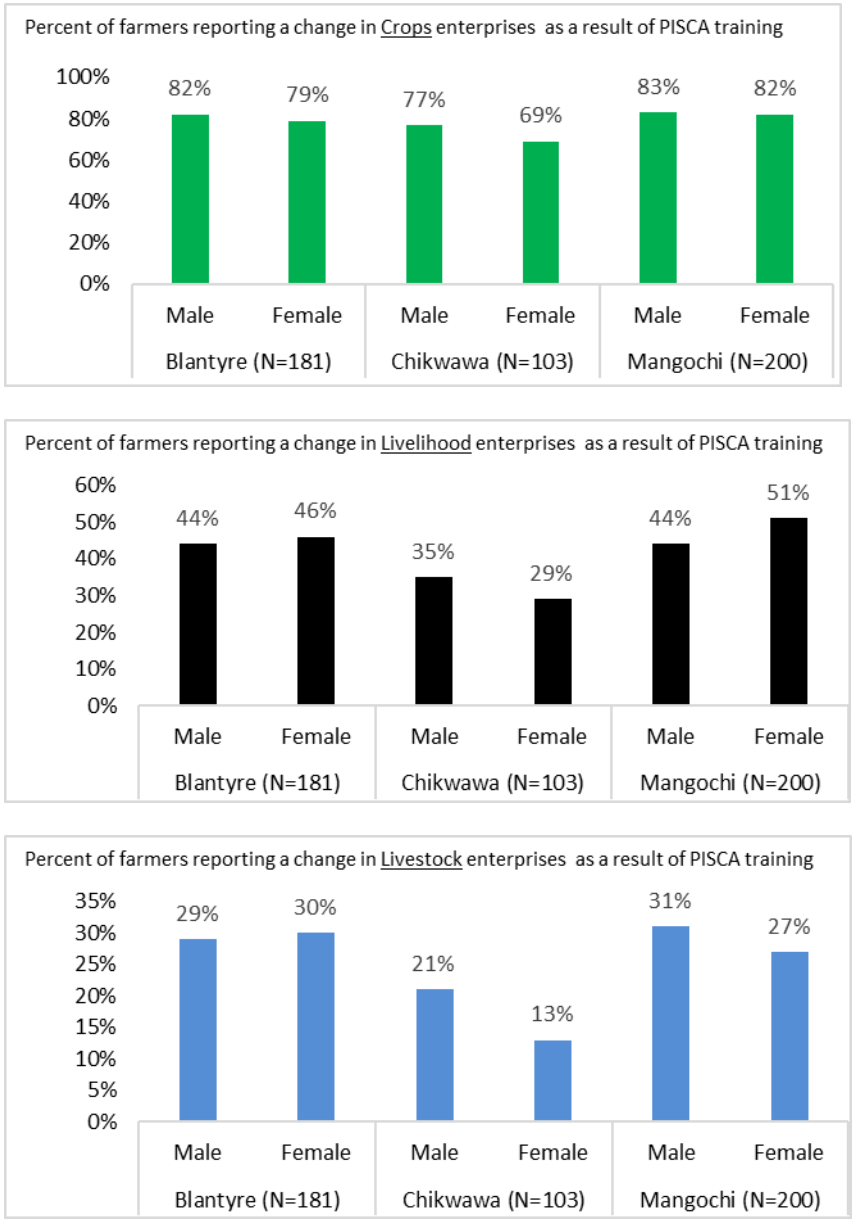
Source: Adapted from Poskitt et al, 2019

57. Many PICSA-trained farmers participating in the FGDs reported to have changed their agricultural practices (e.g. types of crops and crop varieties grown, application of manure, planting times), This is confirmed by the preliminary results from the more detailed, quantitative farmer survey, which show that up to 83 percent of men and 82 percent of women sampled farmers at district level reported to have changed their crop, livestock and/or livelihood enterprises as a result of the PICSA training, with changes to crop enterprises (e.g. new variety of crop, changed management practice, new crop) being most predominant (Figure 4).

[49] Further investigations would be needed to verify and substantiate this finding. Possible explanations might be related to: different levels of comprehension for men and women; different ways of articulating what they have learned; or different ways in which the question was asked in the male and female discussion groups.

[50] Interestingly, the earlier GFCS evaluation report (Stats4SD & Cramer-Njihia Consultants, 2017) states that 'There is evidence that women used the [PICSA] training activities more frequently for their planning and decision making than men.'

Figure 4. Changes in different enterprises inspired by the PICSA training



Source: Adapted from Poskitt et al, 2019

58. Climate services information is conveyed via **radio** through a weekly show called '*Ulimi ndi Nyengo*' which is broadcast through national radio (and in some areas also a community radio channel) on Fridays and repeated on Mondays. Representatives from existing community-based farmer groups (in some cases VSL groups) were trained so that the group functioned as a radio listening club, known as a Community ICT Hub (CIH). Each group was provided with a solar-powered FM/AM radio with a built-in memory card for recording radio broadcasts. Group members are expected to listen to the radio show together on a weekly basis and make recordings for those unable to attend so that they can listen at another time. Extension officers were also trained together with the farmers and are expected to visit the CIH whenever possible when they are meeting and to provide additional agricultural information. The IRMP partner, Farm Radio Trust (FRT), also manages a telephone call centre (staffed by trained agricultural extensionists) that farmers can call for additional information.

59. The annual donor reports indicate that 52 programs were broadcast in 2017 and 55 in 2018. The 2018 donor report, however, also states that it was not possible to broadcast the programs for

several weeks in November and December 2018 due to a delay in finalizing the partner contract. Some of the farmers in the FGDs commented on this but did not know the reason for the lack of broadcasts. Data provided by the partner show that 405 CIH across the three districts have been trained to date, though this is not included among the output indicators in the IRMP logframe (Annex 4).

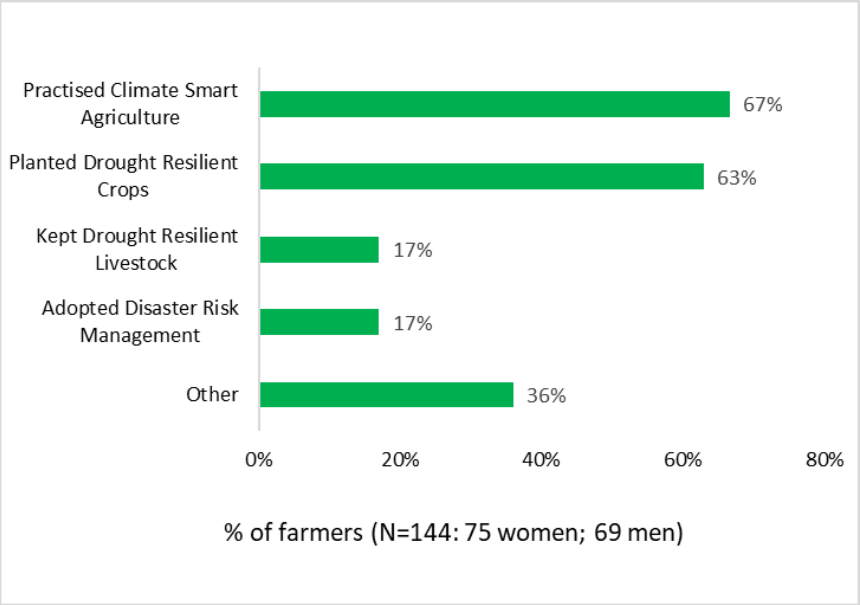
60. The FGDs confirmed that the radio show is well-liked by the farmers who listen to it; farmers said that they like the format of the show and the messages are very well explained. This is confirmed by the FRT monitoring survey, which found that 99 percent out of 144 respondents felt that the radio is either "very good" or "good", Farmers in the FGDs also like the fact that they can call the hotline number in case they need more information, though some of those who had tried to call could not get through. Those that had got through to the hotline said that they received good responses. Many farmers in the FGDs reported to have made changes to their farming practices as a result of listening to the radio show; the FRT monitoring survey found that a total of 93.8 percent of sampled farmers (N=144) who listened to the program practised what they had learned, as detailed in Figure 5.[51]

61. Only one of the Radio Listening Clubs that was represented in the FGDs appeared to make use of the recording feature on the radios provided, most likely because the training in the use of the radio and the management of the clubs was generally considered (by both FGD farmers and extension agents met by the ET) to be inadequate; there was not enough time given to the training (one day only) and not enough group members were trained. Some of the extension workers felt that they should have been trained separately from farmers. FGDs also revealed that some of the training and the radios themselves were delivered late in the main growing season (February, after crops had been planted), thus limiting their impact.

62. Feedback from both the FGD farmers and the extension officers suggest that many clubs are not actively meeting, either because they never received a radio, or their radio had developed a fault, or because the members simply lack motivation.[52] In one case, the person who kept the radio failed to turn up for meetings, thus preventing the others from listening to the broadcast. An FRT monitoring exercise found that 95 percent of the 34 Listening Clubs visited across six districts meet at least once a week to access information from the radio programs. However, it is assumed that the monitoring team purposely selected active Clubs, and that inactive Clubs were not represented in the survey. The same survey found that 25.0 percent out of 144 respondents had used the hotline number; of those who did not, many (51 percent) reportedly did not know it existed, and 25 percent do not have a mobile phone. The FGDs gave similar results; some of those who had tried to call the hotline number were unable to get through.

[51] The data reported by FRT are not disaggregated by gender, and the specific agricultural practices within the categories indicated on the graph (e.g. climate smart agriculture, disaster risk management) are not elaborated.
[52] Quantitative data on this does not appear to be available.

Figure 5. Farmers reporting to practise what they learnt from climate services information via radio



Source: Adapted from FRT Monitoring Report (2019)

63. The mobile phone numbers of CIH members and other farmers were registered by implementing partners and extension officers so that they might receive text messages. The 'push' **SMS platform** is essentially used to send two different types of messages (see Annex 2 for examples of the types of messages sent via SMS): (i) those to create awareness of the 'Ulimi ndi Nyengo' radio program and the Beep4Weather service; and (ii) tips on specific agricultural practices and technologies that are in line with the seasonal forecasts. The latter are necessarily short statements only so the messages also encourage the farmer to consult their local extension officer and also provide the hotline number for more information. In addition to the 'push' SMS service described above, there is an on-demand service known as "Beep for Weather" (B4W). Users "beep" the B4W phone number by dialling it and then hanging up, and they then receive a message containing the local weather forecast for that day.

64. Figures in Table 1 indicate the number of mobile phone numbers that were targeted for SMS services: 16,000 in 2017 and 20,000 in 2018, but it is not clear how many SMS were actually sent out, and whether or not all farmers actually received the SMS. Data from the 2018 outcome survey indicate that less than 0.5 percent of sampled households reported to have received agro-climatic information via SMS (Table 11, Annex 3). It can perhaps be assumed that text messages themselves are less effective in conveying agricultural advice, though might usefully stimulate the recipient to seek out additional information from other sources. In this respect, it is important that the specific purpose of the SMS platform is clearly articulated in the IWCARP strategy in relation to the other communication channels, rather than as a communication channel on its own. The FGDs were unable to compile clear details, mainly because many farmers had either not received SMS and/or were simply unaware of the services available. The FRT monitoring survey (May 2019) found that 45.1 percent of respondents had received SMS on weather and climate services.[53] Among the farmers in the FGDs who had received SMS after having their phone numbers registered, there appeared to be little consistency in the number or types of messages received; this is partly because messages are tailored to different types of farmer groups, but might also be due to some farmers not receiving all the messages that are sent out. In general SMS communication in Malawi is challenging due to poor network coverage, low literacy (especially among women), and access to mobile phones that are charged and switched on.

[53] It is not clear whether this refers only to the push SMS or the Beep4Weather service as well.

65. The FRT survey found that 36.1 percent of respondents had used their mobile phone to access weather and climate information, though it is not clear whether this figure refers only to the Beep4Weather (B4W) service, or also includes use of the hotline number. The FGDs were not able to collect any clear information about B4W because there was very little awareness about it. The B4W service is accessed through different phone numbers, each dedicated to a specific district. With the projected increase in the number of districts, it is foreseen that there will be need to have many phone numbers, so FRT have opted for an SMS4Weather service which uses one or two dedicated numbers through which district-specific information can be accessed through district codes.

66. The **risk mitigation mechanism** is provided in the form of weather index-based insurance to self-selected FFA participants. All of the FFA participants were sensitized about the insurance scheme and then allowed to choose whether or not to work an extra 14 days in order for WFP to pay for the cost of their insurance premium.[54] As such, the mechanism operates as an insurance-for-assets (IFA) scheme targeting self-selected FFA participants who receive insurance premiums in exchange for their work in constructing community assets (e.g. check dams, swales, etc) to support watershed management. The IFA component can be regarded as an optional "add-on" to the FFA programme. Insurance was provided to 2000 farmers in Blantyre Rural District on a pilot basis in the 2017/18 season, and then expanded to a total of 4,171 farmers across all three districts in the 2018/19 season (Table 1).

67. The insurance product is designed with technical support from Columbia University's International Research Institute (IRI) and provided through NICO Insurance. The technical parameters of the insurance index are designed according to the amount of rainfall received in two critical time periods ('windows') during the growing season. If the rainfall is less than the agreed minimum in either window, then this triggers an insurance pay-out. Communities were also provided with rain gauges and trained to make daily rainfall recordings to help monitor whether or not the level of rainfall received during the two 'windows' would trigger an insurance pay-out (which is determined using satellite data together with ground-truthing). A pay-out was triggered in 2017/18, as detailed in Table 6.

Table 6. Insurance pay-outs to date by district

Season	Parameter	Blantyre Rural	Chikwawa	Mangochi
2017-18	Number of farmers insured	2,000	0	0
	Number of farmers receiving pay-out	2,000	0	0
	Average amount received per farmer	MK 38,178 (approx. $52)	0	0
2018-19	Number of farmers insured	2,171	1,000	1,000
	Number of farmers receiving pay-out	0	0	0
	Average amount received per farmer	0	0	0

Source: IRMP Annual Report (2018) and CO staff

68. A pay-out was triggered in 2017/18, totalling MK 76,356,026.17 for all 2,000 farmers, who received varying amounts, ranging from MK25,655 to MK46,586 (approx. US$35 – US$65) depending on the rainfall levels within their areas. Male and female farmers in the FGDs who had received the pay-out in 2017/18 reported that the payments were timely and allowed them to purchase food (and in some cases agricultural inputs), providing them with the energy needed to prepare and plant their winter gardens. These farmers had a good understanding of the insurance scheme, though they also expressed the desire for insurance to cover flood and pests as well as drought. The range and frequency of different types of shocks are explored in paragraph 95.

69. Farmers in Mangochi and Chikwawa Districts who participated in the insurance scheme in 2018/19 did not receive a pay-out, and had a more limited understanding of the mechanism, especially

[54] FFA participants normally work for 12 days per month (one hour per day) for three months during the lean season. If they choose to participate in the insurance scheme, then they work an additional seven days per month (one hour per day) for two months (totalling 14 days).

in Chikwawa, where crops had been ruined by floods. At the time of the ET's visit, the insurance company had not yet visited the communities to explain why there had not been any insurance pay-out, contributing to a lack of trust in the insurance provider. Despite this, some FGD participants said that they would participate again in the scheme; all FGD participants said that they would participate if the scheme covered drought, flood and pests, though the additional cost implications (in terms of the additional working days that would be needed to qualify) were not discussed.

70. The physical assets constructed through the IFA scheme are reported to include swales, shallow wells, and vegetable gardens (Tables 11 and 12, Annex 3), though FGD participants did not distinguish assets constructed under the FFA program from those constructed under IFA. Other assets mentioned by FGD participants included check dams, trenches, tree nurseries, vetiver grass ground cover and compost ('manure') production, as well as fuel efficient stoves and latrine toilets. Farmers had seen the benefits of the various assets in helping to reduce water run-off and soil erosion, contributing to increased crop yields and greater food availability.

71. **Financial services activities** are focused on training and support to both existing and newly-formed VSLs. It was reported by the implementing partners that FFA participants were encouraged to become VSL members if they were not already members of existing groups. Within a VSL, members contribute small amounts of money each week (up to a maximum amount agreed by the group) which are put into two separate funds: a savings fund and a social fund. Individual contributions are recorded. The money accumulated in the savings fund can be loaned out to individuals for agreed income-generating activities. These creditors are expected to re-pay the loan with interest, thus increasing the amount of money in the savings fund. Money from the social fund can be loaned to individual members to help cover the cost of emergencies such as those caused by illness or death of a household member. After an agreed period of time (usually about nine months, often coinciding with the start of the agricultural season), the money in the savings fund is shared out to the members according to the amount of their own individual contributions. Over time, once a VSL has developed sufficient experience, it is expected that the IRMP partner micro-finance institutions (FISD, CUMO) will provide formal credit services to the VSL members. The provision of formal credit services by micro-finance institutions for VSL members in 'graduated' VSLs recently started in Mangochi and Chikwawa Districts. Key informant interviews suggested that the precise criteria that define a 'graduated' VSL were not clear, raising concerns about the possibility that formal credit might be made available to VSL members (and VSLs) who lacked the experience necessary to be able to pay back the loans. This concern relates to the negative effects described in paragraph 99.

72. The use of mobile banking in conjunction with VSLs was explored (as in IRMP project document; see logframe in Annex 4) and was deemed to be inappropriate because VSLs tend to use the savings as loans and thus have a zero-balance account. Under the financial services component, IRMP also strengthened the capacities of key stakeholders on integrated risk management services through training workshops for implementing partners. In 2017, 7 training sessions were conducted for 6 partners in Blantyre Rural District. In 2018, 7 training sessions were conducted for 14 partners in each of the three districts. Some of these sessions were conducted as part of the broader partner orientation workshops, which also included training in gender and accountability.

73. Output indicator results show that a total of 12,250 VSL members (3,320 men and 8,930 women) across the three districts were trained by the end of 2018. Data from the most recent outcome survey (June 2018) show that 36 percent of targeted households were members of a formal/informal savings scheme, representing a 12 percentage point increase from the baseline (Table 9, Annex 3). As will be shown in Section 2.4, VSLs play a crucial role in the IRMP integrated impact pathway so it is important that those targeted for VSL support are those who are also participating in FFA and the climate services activities. For example, VSL members reported that they are able to save more money during the months of the year when they are involved in the FFA program. Similarly, the VSL allows for money gained from the FFA incentive to be saved and made available when it is needed.

74. Ultimately, the intended outcome of the financial services component is to allow households to invest and diversify their livelihoods, as measured by the mean number of income sources.[55] Outcome monitoring results (Table 3) show that the average number of household income sources increased from 1.59 at baseline (June 2017) to 2.5 by June 2018,[56] suggesting that livelihoods have indeed diversified, though attribution cannot be ascertained.

75. Negative consequences relating to VSLs were described in three out of six women's FGDs[57] in which participants spoke about household assets being seized by the VSL in lieu of payment on defaulted loans. Members from one VSL explained how they had learned from experience that creditors must only take out loans for productive, income-generation activities (rather than consumption) and that the VSL itself needs to be more cautious in loaning out money (i.e. to balance this against the desire to loan out all the savings so that it can earn interest). Though monitoring data from the implementing partners suggest that this was not common, it is better for VSLs to be thoroughly trained in these aspects rather than having to learn from experience.

76. Feedback from the FGDs shows that the VSLs are important for household financial planning and in dealing with shocks causes by illness, death and other emergencies. Farmers save what they can afford and they know when they will receive the money from the share-out; they can borrow money from the social fund to deal with medical expenses and funerals; and they can take out a loan if they want to invest in income-generating activities. The ways in which VSL participants spend the money from the share-out support resilience in various ways, both through investments in productive and non-productive assets. The purchase of roofing sheets for a house, for example (an item commonly purchased with VSL share-out money), helps to prevent the spoilage of stored grain and seed due to leaking thatch, and also avoids the need for women to spend time in re-thatching the house on a regular basis, potentially making women's labour available for other productive purposes. The ways in which households choose to spend their share-out money appears to reflect their level of resilience and needs at the time, e.g. the most vulnerable households spend their money on food, whereas those who are more resilient may choose to spend their money on productive assets and to support livelihood diversification.

77. **Monitoring and Evaluation (M&E).** In line with the Country Strategic Plan (CSP), the current M&E system is designed to operate at the program (integrated resilience) level rather than the project (IRMP) level. Although this creates some challenges in reporting at the project level, it is considered to be entirely appropriate in relation to the current way in which WFP structures its work at the country level. The organic way in which the integrated resilience program has evolved and expanded over time, involving multiple donors and multiple projects, has created challenges for the sampling procedures and the choice of indicators used in the implementation of baselines and outcome monitoring surveys. Efforts are currently on-going within the CO to streamline the M&E framework and the indicators used for evaluating and monitoring resilience programs. Existing monitoring tools are very well-developed for FFA activities (e.g. the asset tracker and quarterly targets) but have yet to be developed to the same extent for broader resilience programming.

78. The IRMP **logical framework** (Annex 4) presents some challenges from an M&E perspective. As detailed in the Inception Report, the original wording used for outcomes 1 and 2 was a mixture of outcomes and results and was not articulated in a way that contributed to the general objective. One important result relating to climate services was missing from the logframe design, i.e. the generation

[55] The IRMP logframe actually includes "% change in number of income sources", but this is rather complicated to calculate so the data analyst has instead used an average number to determine whether there has been any change.
[56] The monitoring survey questionnaire asked respondents whether their household "was engaged in any of the following income generation activities during the last 12 months?" and provided a list of options specifying different crops, livestock, etc relating to: A Sale of crops; B Sale of animals and animal products; C Casual labour; D Self-employment; and E Remittances.
[57] Women make up the majority of VSL membership.

and dissemination of district-level seasonal weather forecasts. Overall, four indicators were irrelevant[58], one indicator could have been more meaningful,[59] one indicator was not clearly articulated,[60] and at least two output indicators relating to climate services activities were missing.[61] Otherwise, the indicators are largely specific, measurable, attainable, relevant, and time-bound (SMART), although they are not all gender disaggregated.

79. The gap in targets for some indicators creates a challenge for monitoring, reporting coordination and integration within the IRMP. Current monitoring and reporting at the partner level appear to be used to monitor progress and to report to the donor, but do not appear to be used to enhance aspects of programming, coordination, integration, and learning. Other internal factors affecting achievement relate to staffing changes and staffing gaps within WFP,[62] as well as changes of staff in government departments, all of which have affected continuity and information management.

2.2.2 Key factors influencing the results [EQ5]

80. Key informant interviews suggest that the main internal factor affecting the implementation of activities is the contractual arrangement for the Field Level Agreements (FLAs) with the implementing partners and the lengthy process involved in setting up the FLAs, often leading to a late start to activities at the start of each season. Up to now, short-term (6-month) FLAs have been agreed on an annual basis and then subsequently extended. In most cases, implementing partners can only employ project staff for the duration of the FLA, making it difficult to recruit and retain high quality staff from one contract to the next for the duration of the project. In some cases, this necessitates having to retrain new staff each season. The CO has reportedly agreed to have longer-term (2-year) contracts from this year onwards, with on-going monitoring to provide the necessary quality control measures. Although this will not necessarily reduce the time that it takes to agree on a contract (generally about three or four months) - this simply requires that the process starts early enough - it will avoid the need for contracts to be negotiated and agreed on an annual basis. The contractual arrangement is a high priority that will need to be addressed in the next project cycle.

81. In relation to PICSA and the CIHs, the capacity of the extension officers is affected by the number of farmers they are expected to serve, the geographical areas and the associated distances that they are expected to cover, combined with the lack of transport facilities. Their workload is also high, not only with their DAES responsibilities but with various different donor-funded projects and implementing partners expecting them to play a supporting role, yet their incentives in terms of salaries and allowances are generally low. Overall, the limited number of extension officers is a constraint to the implementation of climate services, both through PICSA and in supporting the CIHs.

82. External factors affecting achievement include climate and related shocks that have affected the community assets and agricultural production, i.e. the Fall Army Worm infestation of 2017/18 and the floods of early 2019. Although the project is designed to increase resilience in response to climate change, it is primarily designed to deal with drought rather than flood. The 2019 flood literally washed away many of the community assets that had been constructed, particularly in Chikwawa District.

[58] Irrelevant output indicators are: (i) number of extension workers placed within target communities; (ii) % of HH purchasing insurance with cash; (iii) number of HHs covered by a program-subsidized insurance policy – this is the same as "number of farmers insured"; (iv) number of farmers insured – this is mentioned twice in the logframe

[59] The indicator "% change in total assets" could have been better be presented in terms of "% change in total value of household assets". However, data on asset values was not included in the monitoring survey. As such, it is not possible to include this indicator.

[60] It is not clear if the outcome indicator "% targeted HH accessing credit" refers to formal credit services or the informal credit provided through VSLs.

[61] Missing output indicators include: the number of listening clubs trained; the number of radios provided

[62] For example, the M&E Officer responsible for IRMP left WFP, and the Climate Services Officer was transferred elsewhere; neither had been replaced by the time of the evaluation.

Key findings and conclusions – Effectiveness (EQs 4-5)

- All planned activities have been implemented; mobile banking linked to the VSLs was deemed by the project team not to be necessary, so there are no outputs relating to mobile banking
- Despite difficulties in assessing achievement of outputs and outcomes due to the lack of planned targets, and confusion in the reporting of some indicators, it is thought that good progress has been achieved across two out of the three main activity areas
- Climate Services information provided through extension officers and radio is effective in that it is received by farmers and they have reportedly made changes to their farming practices as a result. Information conveyed by SMS does not appear to be effective; farmers do not appear to be receiving the text messages sent. SMS messages are appropriate in stimulating the recipient to seek out additional information from other sources.
- The IFA approach is effective in creating community assets relating to watershed management.
- The insurance mechanism is designed to cover only drought. It was an effective response to crop losses in 2017-18, but crop losses in recent years have been caused by drought, flood and pests. The current insurance mechanism is ineffective in covering crop losses caused by flood or pests.
- VSLs are effective in strengthening the capacities of smallholder farmers to invest and diversify their livelihoods, provided that the training is sufficient to avoid asset losses through loan arrears.
- The M&E system is designed (appropriately) for the program (resilience) level, not the project (IRMP) level. Challenges have been experienced due to the expansion of the resilience program over time and a lack of streamlined indicators and well-defined monitoring tools
- Outcome monitoring data suggest that livelihoods have diversified, though this has not necessarily translated into increased household food security
- Overall, the main factor influencing achievement is the annual use of short-term contracts (FLAs) for implementing partners, leading to delays in the implementation of activities in each agricultural season. This must be addressed as a priority for the next implementation cycle.
- The limited capacities of extension officers (i.e. training and transport) in relation to their expected areas of geographical coverage also affects the effectiveness of the climate services component

2.3. Efficiency

2.3.1 Timeliness of the program [EQ6]

83. The timeliness of activities – notably Climate Services - has been negatively affected by various factors, including the timing and short-term duration of the contracts with the main NGO implementing partners working in each district, particularly in the second year of the project. In general, farmers start to prepare their fields in October, rains are normally expected in the latter half of November, and planting takes place soon after the onset of the rains. According to the PICSA manual, extension officers should implement the first seven out of the 12 steps (which ideally involve three separate meetings with farmers) at least 8 to 12 weeks before the rainy season starts (i.e. July / August / September). The seasonal forecast is normally released by DCCMS in mid-September.[63] If they are to be useful, the seasonal forecasts and associated agricultural advice (whether conveyed via extension officers through PICSA or via radio broadcasts and SMS) should be communicated to farmers before they have made their planting decisions, i.e. by about October / November.

84. In 2017 and 2018, the aim was to have FLAs agreed and signed with the lead NGO implementing partners in each district by August each year.[64] In 2018, however, some of the partner FLAs were not actually signed until September. If the implementing partners are expected to organize the training workshops and provide stationery to allow the extension officers to implement PICSA from July / August,

[63] In 2017, the seasonal forecast was not released by DCCMS until the end of September which reportedly led to a delay in the production and dissemination of associated agricultural advisories.

[64] The timing of this arrangement is thought to be due to the timing of the FFA activities which take place over a six-month period from October to March, for which the lead NGO implementing partner is also responsible.

yet the FLAs are not agreed until August or September, then the implementation of PICSA will inevitably be delayed, as occurred in 2018-19. In Blantyre Rural district, for example, the training workshop for the extension officers did not take place until December 2018, after the rains had already started.[65] Contractual arrangements also affected the radio communication channel; the radio show was not aired between November and December 2018 because there was no FLA in place with the radio/ICT partner during these months. The training of the Radio Listening Clubs and the distribution of the radios did not take place until late January/early February 2019 for all three districts.[66] Farmers taking part in the FGDs commented on the late initiation of the radio listening clubs in relation to the agricultural season.

85. Implementation of the IFA activities was reported to have been done on time. Farmers in Blantyre Rural District commented that the pay-out for the 2017-18 season was timely; project documentation reports that the pay-out was made in April 2018. In Chikwawa District, farmers said that no one had come to explain why there had not been any insurance pay-out for the 2018-19 season, contributed to a lack of trust in the insurance company. WFP staff later confirmed that this would be done.

86. Since the financial services activities were partly targeting existing VSL groups who operate according to their own schedule (i.e. in terms of the timing of the sharing-out of the accumulated savings), training for existing groups can be done at any time of year. To support integration with FFA, the training and establishment of new VSLs should ideally start when the FFA activities start in October (when FFA participants start receiving the incentive payments that can then be invested in the VSL). The identification and contracting of the financial partners were planned to take place in the second quarter of 2017, but this did not actually take place until the fourth quarter of 2017. Although FFA is not funded through the IRMP, farmers in the FGDs complained about various problems with the mobile money transfers for FFA, which then affected their ability to invest in the VSLs. Problems with mobile money transfers were reported to occur in geographical areas where the Airtel network signal is weak and/or local Airtel agents lack capacity to provide cash payments on the scale required. In 2019, some payments were late because the capacity of the Airtel system was overwhelmed by the additional mobile payments being made as part of the response to Cyclone Idai. Other problems occur on an individual beneficiary basis due to mis-matches between the registered names and ID cards, loss of SIM cards, and apparent 'theft' by other household members who collect the money from the agent. WFP and the partners are working with Airtel to address these issues, and there is an accountability system in place to log and address issues at the individual level.

2.3.2 Use of resources [EQ7]

87. A summary of the financial expenditure up to the end of April 2019 (as prepared for the donor) is provided in Annex 8, and shows an underspend of 17.6 percent of the money received from the first two payment tranches (out of a total of three payment tranches agreed for the overall 3-year project).[67] The Malawi CO financial management system was completely restructured at the end of 2018 with the

[65] For the 2017-18 season, the PICSA training workshops in Blantyre Rural and Chikwawa Districts took place in July, followed by P&R workshops at the end of November 2017 at which the seasonal forecasts were presented and related agricultural advisories developed. There was a delay in distribution of the android tablets to the extension officers who had been trained in e-PICSA, affecting the roll-out of e-PICSA. End-of-season reviews (which had not originally been planned but were deemed to be necessary) took place in Blantyre and Chikwawa Districts in August 2018. For the 2018-19 season, the PICSA training workshops in Chikwawa and Mangochi Districts took place in October (including the presentation of the seasonal forecasts and the development of related agricultural advisories), but the Blantyre workshop did not take place until December 2018. Delay with the Blantyre workshop was reportedly because the implementing partner did not have funds to support this at the time (noting that WFP gives funds to partners on re-imbursement basis).

[66] The distribution of radios was also late in some place in 2017. The FLA with FRT was signed in April 2017, and radios for the three districts had been procured by November 2017. Orientation of the Listening Clubs and distribution of the radios took place from September 2017 through to February 2018.

[67] The income from the first two payment tranches totals $1,888,194, and the expenditure up to the end of April 2019 (including commitments) was $1,388,744.27. The difference between these two figures is $499,449.73 (26.5 percent), though the balance amount indicated is $333,158.40 (17.6 percent). The underspend was confirmed by the CO to be 17.6 percent, though no information to explain the figures in Table 12 was provided.

shift to the new Country Strategy Plan. Although the migration to the new system was reportedly completed in early 2019, a number of IRMP costs were back-charged to the wrong budget codes during the transition period and had yet to be corrected at the time of drafting this report (July, 2019). From a project management perspective, it is difficult to manage a budget without up-to-date expenditure tracking.

88. For the reasons stated above, the finance office was unable to provide an accurate statement of the actual costs of the various project components compared to the FFA component. Figure 1 (also Table 13, Annex 8) provides the budget allocations for the various project activities / components. Although the figures are not yet available, the ET would expect to see that the expenditure on the climate services and financial services components is somewhat dwarfed by expenditure on FFA and IFA activities. Given this, it is perhaps not surprising that the current contractual arrangements, monitoring and reporting tools are largely focused on FFA requirements rather than climate services or VSL.

2.3.3 Factors affecting efficiency [EQ8]

89. Overall, the close link between IRMP and the FFA program allows for greater efficiency in IRMP implementation. IRMP effectively 'piggy-backs' on FFA's geographical targeting, participatory design and beneficiary targeting processes. There are also considerable economies of scale realized for the IFA component; given the time that it takes to construct community assets for watershed management, combined with the level of technical expertise and monitoring required, it would not be efficient for the IFA component to be implemented on its own.

90. Some implementing partners reported that poor planning and coordination within the IRMP also affected efficiency. Examples of poor planning included late decision-making and/or communication of decisions to implementing partners in relation to sites to be targeted for scaled-up activities, and short notice regarding field visits made by WFP staff and others (including the Evaluation Team), disrupting the workplans of extension officers and other field-based staff. Coordination arrangements at district level vary across the three districts; in one district (Chikwawa), the NGO implementing partner organizes quarterly review meetings which were considered to be effective in sharing information and addressing bottlenecks. In other districts, however, there was reported to be insufficient sharing of information. WFP organizes monthly coordination meetings at the regional level for all resilience partners, but only some of these meetings were considered to be useful or effective, particularly given the distances that some partners had to travel to participate. The quarterly review meetings organized by WFP were considered to be more useful.

91. Whilst all key NGO implementing partners appreciated the closer working relationship with government departments through IRMP, this also brought some challenges, e.g. government's lack of capacity for timely reporting (both technical and financial). Since 2017, WFP has had an MoU with each District Council where resilience activities are being implemented. This is generally considered to be working well, and there are plans to extend the existing MoUs to include additional activities under the Home-Grown School Meals Program.

92. More broadly, beyond the IRMP, coordination among government, NGO and UN agencies involved in resilience activities is a challenge. There is a plethora of small-scale projects and pilot activities implemented by a wide range of different NGO partners, making both coordination and achieving impact at scale a challenge. At district level, development activities are coordinated through the District Council, but the capacity of the DCs is variable. At national level, there is a large number of agencies involved in resilience programming. Although the National Resilience Strategy provides an overall framework, resilience coordination is effectively split across different ministries (MoIARD and Ministry of Finance) and sector working groups (Disaster Risk Management and Social Protection). Though there have been improvements in recent years, duplication of effort still reportedly occurs at different levels. Among the UN agencies, coordination has improved since the introduction of the UN's 'Delivering as One' approach.

93. As mentioned above, the current monitoring system has well-developed tools for FFA activities, but less so for other resilience activities. There appears to be a lot of monitoring data being collected and reported, but this is not necessarily being done in a systematic manner and it is not clear how it is being used, other than for tracking the progress of individual activities implemented by individual partners.[68] Essential information such as the number of beneficiaries and the layering of different activities appears not to be regularly compiled and updated.

2.3.4 Efficiency of implementation compared to alternatives [EQ9]

94. The efficiency for the implementation of the **PICSA approach** is constrained by the limited capacity of extension officers, in terms of the training that they have received, their time constraints,[69] and the support (i.e. transport facilities, stationery)[70] available for them to visit and train the farmers. The delays in the provision of flip charts (possibly related to the delays in the annual contracts with the NGO implementing partners) and the limited transport facilities available to extension officers are such that the PICSA training provided to farmers is thought to have involved less than the recommended number of visits, often starting later than planned in relation to the agricultural calendar; 71 percent of sampled farmers (67 percent men; 73 percent women) felt that the training needed to be conducted earlier in the year so that there was more time to plan and make changes before the season (Table 5).

95. An alternative to the current model of **index-based insurance** may also be needed, given the range and frequency of different types of shock experienced by farmers in southern Malawi in recent years; e.g. 16 out of Malawi's 27 districts experienced five or more instances of drought in the period 2000-2013; almost as many (13 districts) experienced five or more instances of floods in the same period (Annex 7). A series of papers on "best buys" recently commissioned by DFID's Chief Economist reveals weather-based index insurance as a "bad buy" in terms of cost-effectiveness, which is likely to be too expensive for farmers in the long term.[71] This would appear to be supported by the farmer FGDs; although farmers would be willing to participate in insurance that covers drought, flood and pests, they are less in favour of insurance that only covers drought. Many farmers, especially those who had experienced crop loss due to floods, simply could not comprehend why insurance could not cover crop losses due to flood; whether they lose their harvest due to flood or drought, their households still need to purchase food to make up for the losses. Even those farmers who had a better understanding of the drought-only insurance mechanism expressed a preference for a broader type of insurance cover. Group insurance and insurance that focuses on yields rather than weather are among the alternative types of micro-insurance that should be explored. The challenge with yield-based insurance is in measuring yield. Insurance companies may also be less willing to provide cover for yield-based insurance since yield depends not only on weather but also the capacity of farmers in terms of knowledge, labour, crop varieties, seed quality, among other factors. There is currently considerable research being undertaken into various different crop insurance mechanisms suitable to the needs of smallholder farmers, and the 'state of the art' is rapidly changing as more evidence becomes available.[72]

[68] Considering that a relatively large amount was budgeted for M&E (nearly 19 percent of the total budget, see Figure 1), it is disappointing that the monitoring system is not more efficient and effective in analysing and using the data collected. It is also possible that too much data is being collected and that this can be streamlined for greater efficiency.

[69] Extension officers are expected to coordinate various other agriculture programmes and thus have many demands on their time. Due to a shortage of extension officers, some are covering wide geographical areas and a large number of farmers, further stretching their capacity.

[70] The lack of refreshments provided for the training sessions with farmers was also noted as a constraint, but some extension officers also mentioned that farmers themselves can bring their own food to share at the training sessions.

[71] This was reported by two key informants. The papers are internal to DFID and are not publicly available. The ET was therefore unable to verify this information.

[72] Note that this year's International Microinsurance Conference (5-7 November 2019, Dhaka, Bangladesh) will focus on the theme of "Coping with climate risk".

Key findings and conclusions – Efficiency (EQs 6-9)

- Various delays in the implementation of climate services activities were experienced due to the contractual arrangements with partners, i.e. the need for new contracts each year, the timing of the start of the contracts, delays in finalizing contracts, and – in one case – a lack of partner funds
- Implementation of IFA and VSL activities was timely, though late payments made to farmers under the FFA program affected their ability to save and invest in the VSLs
- An up-to-date financial statement is not available for the program due to on-going challenges resulting from the migration to a new financial management system brought in with the shift to the Country Strategy Plan
- There appears to be an overall underspend of approximately 20 percent for the first two payment tranches (out of the three tranches agreed for the whole program)
- The close link between IRMP and the FFA program allows for greater efficiency in IRMP implementation, but also creates challenges for contractual arrangements (as above)
- Poor planning and coordination affect efficiency in some districts, though the introduction of MoUs with the District Councils (in 2017) are regarded to have improved coordination between NGOs and government departments
- Coordination at national level remains a challenge, with insufficient sharing of information and lessons learned
- A lot of monitoring data are being collected, but it is not systematized; essential information is not regularly compiled and updated in a way that it can be used for programming decisions
- The efficiency of PICSA implementation is constrained by the capacity of extension officers
- The current design of the index-based insurance mechanism may not be the most appropriate to farmers' needs or the local context because it does not cover other risks such as losses through floods, pests, etc.

2.4. Impact

2.4.1 Contributions to higher level results [EQ10]

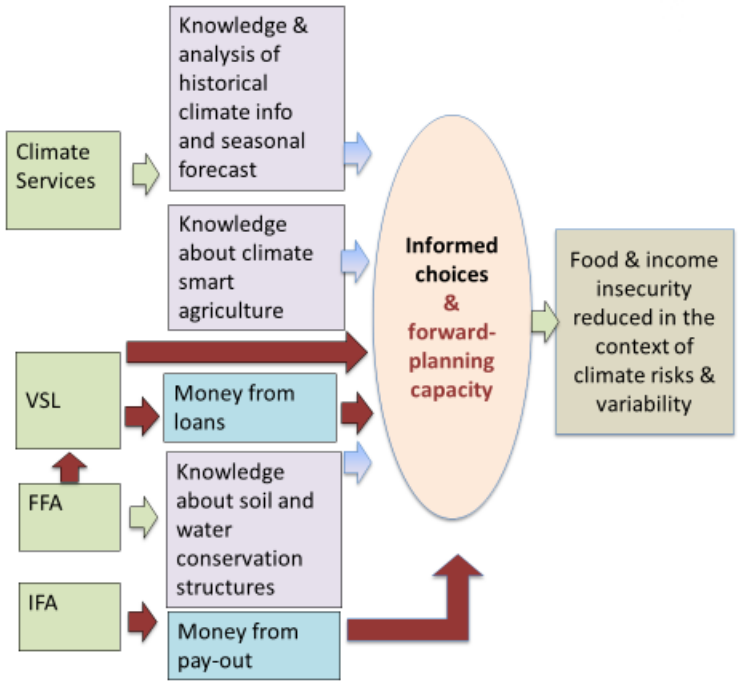
96. In terms of climate services provision, the design of IRMP is particularly innovative in two ways. Firstly, by targeting the poorest and most vulnerable farmers (through FFA) and combining climate services provision with risk management strategies (through IFA, VSL, and the construction of soil and water conservation structures), these farmers are potentially better able to survive shocks and enhance their food security status. Secondly, the PICSA approach itself is innovative in its underlying aims and principles of empowering farmers as decision-makers through new participatory but scalable tools and new climate and agricultural information. Quantitative data (as presented in Section 2.2.1) show that PICSA is effective in promoting farmers to change to their farming and livelihood practices, i.e. adapting to increased climate variability.

97. The qualitative data collected among both stakeholders and beneficiaries strongly suggest that the outputs and outcomes are likely to contribute to progress towards the higher-level results. This is well-illustrated by the impact pathway developed by the GFCS evaluation, as shown in Annex 9. A much simpler version of this impact pathway is summarized in Figure 6, which is based on the perspectives of the male and female farmer beneficiaries taking part in the FGDs.

98. Farmers explained how knowledge about the weather and seasonal forecasts, plus knowledge about climate-smart agriculture (from Climate Services), plus knowledge about soil and water conservation structures (from FFA and IFA) allows them to make informed agricultural choices, tailored to the forecast for that particular season. FGD participants also talked about the linkages between the different IRMP components in terms of money (as depicted by the red arrows in Figure 6): part of the money from the FFA incentive is invested in VSL shares, making it available at the time when it is needed

to buy agricultural inputs.[73] For example, a farmer can use their knowledge from the PICSA training and – depending on the seasonal forecast - plan to buy seed of a short-duration variety, or establish a kitchen garden, or perhaps diversify their livelihood options by starting a small business (e.g. selling homemade doughnuts, or through poultry production). Through FFA, combined with VSL, the money that they need to actually buy this seed is available at the right time. Also through VSL, beneficiaries can access loans for specific income-generating activities. What is not shown on the diagram is that the money that farmers earn from increased production – whether from the sale of vegetables from the backyard gardens established through FFA, or the diversified production achieved through PICSA knowledge and VSL savings – the money earned from agricultural sales and income-generating activities is then re-invested back into VSL shares. If, however, there is a drought and agricultural production is low, then – in theory – this triggers an insurance pay-out.

Figure 6: Simplified impact pathway based on farmers' perspectives on linkages between activities



99. In summary, the combination of learning and money (available at the right time) gives farmers the capacity to plan ahead in relation to seasonal forecasts and make the informed choices needed to achieve improved production and increased diversification in the face of climate change. As such, smallholder households that participate in both FFA and the various different IRMP activities (Climate Services, IFA, VSL) regard the different components as an integrated package of support.

100. In order for farmers to benefit from the combination of the different IRMP components, it is necessary for the different activities to be implemented in the same locations. The data available for the locations of the different activities implemented by the different partners suggest that the level of overlap of activities at the GVH level is relatively low; just 32 out of 286 GVH sites (11 percent) include a combination of climate services, IFA and VSL. This is largely due to poor targeting of climate services, particularly the CIHs; out of 191 GVH sites with CIHs, just 15 (8 percent) include other IRMP activities.

[73] In general, the share-out from the VSL savings is timed to take place at the start of the planting season.

Out of the 109 GVH sites with PICSA, 45 (41 percent) include other IRMP activities. At the household level, the layering of activities appears to be relatively good in the few sites where a combination of activities is implemented: data collected by the ET among the 249 farmers who took part in our FGDs show that 57 percent of farmers (64 percent of women; 48 percent of men) took part in at least three IRMP activities including climate services (whether PICSA or ICT).

2.4.2 Positive and negative effects [EQ11]

101. Overall, the combination of FFA and IRMP activities was reported by male and female beneficiaries to have very positive effects at both individual, household and community levels; e.g. increased individual and household incomes and investments in farming and livelihoods; increased respect for women within the household due to own income; diversified livelihoods; diversified agricultural systems; increased production; more frequent meals; reduced soil and water erosion.

102. Two negative effects were also mentioned by the FGD participants in cases relating to inefficiencies in implementation: the inability to save money caused by the late distribution of money from the FFA program; and the loss of assets that occurs when someone is unable to repay a loan from the VSL, resulting in the seizure of the assets that had been agreed as surety. As mentioned in Section 2.2, the latter relates to a lack of training / experience of the VSL).[74]

Key findings and conclusions – Impact (EQs 10-11)

- Feedback from beneficiaries confirms that the draft impact pathway is playing out in practice, strongly suggesting that the integration of FFA and IRMP activities will lead to outcomes that are likely to contribute to progress towards the higher-level results.
- The combination of learning and money (available at the right time) gives farmers the capacity to plan ahead in relation to seasonal forecasts and make the informed choices needed to achieve improved production and increased diversification in the face of climate change.
- The level of overlap of the different IRMP activities implemented by different partners at the GVH level is relatively low (11 percent) and must be improved to allow for farmers to benefit from the layering of activities at the household level.
- A range of positive effects at individual, household and community levels were articulated by beneficiaries, e.g. increased incomes; increased respect for women; diversified livelihoods; reduce soil and water erosion, etc.
- Negative/unintended effects include the inability to save money in VSLs when the FFA distribution is late, and loss of assets when households are unable to repay their VSL loans.

2.5. Sustainability

2.5.1 Sustainability of results [EQ12]

103. The IRMP project document includes a section on sustainability which highlights that ownership and engagement are central within IRMP in fostering national take-up. The project document mentions capacity development, contributions to ongoing processes to establish climate services structures,[75] institutionalization of key interventions, the involvement of private sector actors, and ensuring that lessons learnt are used to inform national policies and processes. As illustrated below, almost all of these efforts are being implemented, yet - with the exception of capacity development - none were included

[74] The sale of assets in order to acquire cash for saving as VSL shares was also mentioned in one case. The same FGD also highlighted that defaulting on credit payments prevented others from borrowing when they needed credit.

[75] These include a sustainable platform for co-production of climate service at the national level (NACDC) and the development of national framework for climate services (NFCS) to ensure continuous dialogue between users and producers of climate information and mechanism to collect feedback from users on the climate services.

in the IRMP logframe. This is perhaps partly because some of these efforts are the focus of other projects such as GFCS and M-CLIMES (see Annex 6),[76] but it also diminishes the extent to which sustainability was regarded as a core element of the project at the design stage. This means that many of the high-level efforts to promote sustainability (at the national level) are perhaps regarded as "extra" activities, rather than being fully embedded in project activities and the framework against which progress and achievements are assessed.

104. The sustainability of climate services provision depends on the ability of the DCCMS to produce timely, accurate and appropriately down-scaled seasonal and short-term weather forecasts, and for these to be disseminated to farmers, accompanied by corresponding agricultural advisories. The National Agricultural Content Development Committee (NACDC) provides the platform through which the forecast information is used to generate locally-relevant agricultural advisories. Neither capacity-strengthening of DCCMS nor support to NACDC feature prominently in the IRMP project document or logframe, yet both are being implemented. In collaboration with UoR, DCCMS Meteorological Officers were trained in R-INSTAT[77] and then applied their new skills in developing the 2018-19 climate products. Though various stakeholders commented on the need to continue to enhance the capacity of DCCMS (something which is also being supported through the M-CLIMES and GFCS-APA II projects (Annex 6), the willingness and commitment shown by DCCMS in taking ownership of climate services provisioning is encouraging. DCCMS's weather-related predictions are becoming more accurate due to investments and support made through various projects to date.

105. NACDEC (established in 2015 under GFCS (Phase 1) is regarded as an essential and innovative platform involving technical specialists from DCCMS, DAES, and other MoAIWD departments, WFP, FAO, international and local NGOs. DAES provides the secretariat to NACDEC, which sits within government structures and operates at both national and district levels. NACDEC has the flexibility needed to respond to the changing need for agricultural advisories[78] appropriate to the district-level weather situation as the season progresses. Since the start of the IRMP, NACDEC meetings have become more regular.

106. The National Framework for Climate Services (NFCS) offers another national-level structure that is currently in the process of finalization. WFP/IRMP has contributed to the NFCS initiative, which is coordinated by DCCMS and forms part of the GFCS-APA II project. NFCS is a replication of the GFCS at national level and aims to improve the availability and use of tailored weather and climate services.[79] The establishment of the NFCS is considered key to the sustainable development and use of climate information and services to inform coordinated and integrated action, decision and policy making.

107. Regarding private sector engagement, the 2018 IRMP Donor Report stated that NICO General Insurance, the Insurance Association of Malawi (IAM)[80] and the Reserve Bank of Malawi have shown keen interest in managing the insurance interventions.[81] An MoU between WFP and IAM is currently being drafted to set out a three-year transition plan with clear commitments with the insurance sector, through IAM, to take charge of the insurance servicing. Opportunities for distribution of pay-outs via mobile phone money transfers are reportedly being explored by the market players. The FFA program experience of transferring money through the mobile phone company and the level of dissatisfaction among the beneficiaries suggests that additional capacity within the private sector may be needed for

[76] The ways in which essential aspects of Malawi's broader resilience development agenda are split across multiple projects emphasizes the need for good coordination among the different projects and the multiple project partners involved.
[77] R-INSTAT is a free, open source and user-friendly statistical software created to support good statistical practice.
[78] For example, following the floods caused by Cyclone Idai in Chikwawa District in 2019, agricultural advisories were developed by NACDC for growing rice in the flood waters.
[79] The NFCS covers five components: (i) User interface; (ii) Observation and monitoring (DCCMS); (iii) Climate information, i.e. the translation of forecasts; (iv) Capacity building; and (v) Research and modelling.
[80] Insurance Association is a grouping of Insurance market players that make key market decisions for the industry and facilitate product approvals to the regulator, the Reserve Bank of Malawi.
[81] It was not possible for the ET to verify this.

effective and timely phone money transfers (see Section 2.3). Engagement with private and community radio stations is also on-going through the work of FRT.

108. The application of lessons learnt to inform national policies and processes requires that relevant lessons are identified and articulated and then shared and discussed with the relevant government structures and national coordination bodies. Both national- and district-level government officials met by the ET reported that they are regularly invited to take part in various IRMP activities relating to resilience and climate issues. Some, for example, are keen to see PICSA upscaled to other districts through other, on-going projects and funding opportunities. Whilst there is a willingness to involve stakeholders in key IRMP activities, there appears to be less emphasis given to learning, articulating and actively sharing lessons in ways that can potentially influence current policy and programming. Given that the climate services sector is still relatively new, and there is a multitude of different actors, projects and donors, there is a need for experiences and evidence-based successes to be shared and replicated and up-scaled where appropriate. The effectiveness of existing coordination bodies in promoting sharing and learning is thought to be limited.

109. Community members and extension officers met by the ET who were involved in the Community-Based Participatory Planning (CBPP) process (implemented as part of the FFA program) confirmed that this promoted engagement, capacity development and a sense of ownership in relation to the types of watershed management structures to be constructed under FFA / IFA. A number of female community members met by the ET confirmed that they had been involved in the CBPP process.

110. Both male and female community members confirmed that they had gained considerable knowledge through the various IRMP activities, and the increase in their capacity was something that they considered to be sustainable. Financial capacities, including the ability to save and borrow money through the VSL, was widely considered to be the most sustainable result of the project at the community level; women in particular had a strong sense of ownership over the VSLs. Many VSLs existed before the IRMP, and many more will continue after external assistance has ended. VSL members contribute their time and their savings to the VSL, which – after training - effectively operates without any external support. The widespread and continued presence of VSLs is an indication of the demand for this type of financial service.

111. The knowledge and community assets relating to watershed management were also regarded to be sustainable. Many farmers expressed that they would continue to maintain the assets after the FFA/IFA program had ended; this was largely because farmers had seen for themselves the ability of the structures to combat soil and water erosion and contribute to increased crop yields. The demand for watershed management structures relates to the negative effects of soil and water erosion experienced by communities. Through the CBPP process mentioned above, the community had a sense of ownership over the assets, and community volunteer champions were responsible for organizing the work itself, ensuring that individuals completed the required hours. FFA/IFA participants are given decision-making power over when to undertake the work. The knowledge gained from FFA/IFA relating to watershed management was said to be shared with other farmers.

112. The general consensus was that farmers are beginning to demand climate services because rainfall has been so unreliable in recent years, and farmers are keen to know what to expect in the coming season. However, there is still some scepticism about the ability to predict the weather, especially in cases where the forecast is wrong, and also among those farmers who believe that only god can determine the weather. Both of these factors affect future sustainability of climate services, and it is therefore essential that the reliability of weather forecasts remains high through continued capacity development of the Meteorological Service, and that climate services are accompanied by continuous community education/sensitization. [EQ 13]

2.5.2 Factors affecting sustainability [EQ13]

113. The future sustainability of PICSA depends on the willingness and ability of the DAES and others to train and support extension officers, and for extension officers to implement it routinely as part of

their normal extension activities, rather than regarding PICSA as a separate activity. There is willingness on the part of LUANAR to develop a curriculum and support the training of extension officers in the PICSA approach, but this will require funding, either from government or external sources. Similarly, the capacity constraints within DAES in terms of the ratio of extension officers to farmers, salaries, incentives, and transport limitations suggest that external support will be needed.

114. The future demand for insurance services relies on farmers' trust in the insurance provider and their ability to ultimately pay for the insurance premium for themselves. For this reason, it is essential that: farmers have a good understanding of the insurance mechanism; there is clear and timely communication regarding whether or not a pay-out is triggered; and – in the case of pay-out – there is timely and efficient transfer of funds. Whether or not sufficiently large numbers of farmers will be able to afford to pay for the insurance premiums in the long-term remains to be seen; in addition to trust, this will also depend on the actual cost and the type of insurance cover provided (i.e. whether it covers crop losses due to flood and/or pests as well as drought). There is reportedly some evidence to suggest that weather-based index insurance might be a "bad buy" for smallholder farmers in Malawi.[82]

Key findings and conclusions – Sustainability (EQs 12-13)

- Smallholder households will be able to continue to build their resilience after the end of the project through their increased capacity for making informed agricultural choices, supported by the continued operation of the VSLs as well as the knowledge gained about watershed management structures.
- There is an emerging demand for climate services among smallholder farmers. Continued increased demand is dependent on the perceived reliability of seasonal forecasts which, in turn, will require continued capacity development for the Meteorological Service.
- The continuation of PICSA will require government commitment and on-going external support to both DAES and LUANAR (for PICSA training).
- The continuation of radio/ICT services is likely to require continued external funding in the short and medium term, until arrangements can be made for private sector investments.
- Despite not being included as a prominent feature of IRMP design, WFP and IRMP partners are successfully working alongside other projects to help strengthen capacities at national level and to progress towards institutionalizing key structures needed for the sustainability of climate service provision in Malawi.
- Demand for insurance will depend on farmers' trust in the insurance provider, the cost and type of insurance provided (i.e. whether is covers crop losses due to flood and/or pests as well as drought), and farmers' ability to pay for the premiums. There is reported evidence to suggest that weather-based index insurance might be a "bad buy" for smallholder farmers in Malawi.
- A 3-year transition plan is currently being put in place for the private sector to take charge of insurance servicing.
- There is a high level of demand for financial services; the current VSL model is broadly sustainable and will continue after the end of the project without external assistance.

2.6. GEWE

2.6.1 Gender analysis in design [EQ14]

115. Very little explicit attention was given to gender dimensions in the IRMP design, and a GEWE analysis for the project was not undertaken. Priority is given to targeting vulnerable women, though – overall - it is not known what proportion of beneficiaries are women because not all beneficiary numbers

[82] As noted above, this was reported by two key informants, but the document containing this evidence is internal to DFID and not publicly available. The ET was therefore unable to verify this information.

for the different activities are gender-disaggregated in the data compiled for the donor report (Table 1). Stakeholder interviews confirmed that women play a considerable role in the project. Data and reporting include some sex-disaggregated data, but this could be enhanced. Outcome monitoring data for March 2018 and June 2018, for example, is not sex disaggregated. The gender variable included in these data sets had a different coding from the one that was in the questionnaire. As such it is not possible to link the codes to the questionnaire. This could be an issue to do with data handling or management after it was downloaded.

2.6.2 Gender sensitivity in implementation [EQ15]

116. Among both the government stakeholders and the implementing partners in each of the districts, there appears to be a reasonably good level of capacity for gender-sensitive implementation. Each of the implementing partners had received gender training from the WFP Gender & Protection Officer. Training includes prevention of gender exploitation and abuse, gender equity (equal participation in access to assistance, e.g. targeting; and promoting the engagement of women in CBPP), among other topics. Each of the District Councils has identified a Gender & Protection Officer, and each of the key IRMP NGO implementing partners is required by WFP to employ a Gender & Protection Officer to support implementation of WFP's resilience activities at the district level. These Officers have been also been trained by the WFP Gender and Protection Officer. Although it was not possible for the ET to interview any of the Gender & Protection Officers, one of their roles is to monitor WFP's Complaint Feedback Mechanism (CFM)[83] and ensure that all complaints are resolved by the appropriate organization. It is thought that most of the complaints received in relation to the resilience program relate to problems with FFA payments rather than the IRMP activities.

117. The gender composition of extension officers and implementing partner project teams shows a reasonably good representation of women; for example out of 228 extension officers trained in 2017 and 2018, 30 percent are women.

118. There is evidence of good practices and learning on gender mainstreaming in specific IRMP and associated FFA activities (see below), but informants also spoke of uncertainties around specific gender mainstreaming requirements in the project. While many efforts are being made in ensuring the project is gender sensitive, the lack of clear gender analysis at the design stage inevitably creates challenges in integrating gender sufficiently.

119. Within PISCA, neither the methodology itself nor the training explicitly addresses gender-related issues, but the process ensures that gender is mainstreamed in various PICSA tools. For example, the PICSA manual highlights that resource allocation maps may differ according to the sex of the household head and their social standing in the community. Both the crop-related practices matrix and the livelihood options matrix are designed to capture gender differences in the provision of labour and who benefits.

120. The content of the '*Ulimi ndi Nyengo*' radio programs often include gender as a cross-cutting issue (e.g. exploring gender roles in various aspects of agriculture), and every program also ensures that both women's and men's voices (as farmers, technical specialists and presenters) are included. According to the 2018-19 message matrix, sexual exploitation and abuse was addressed as part of the "16 days of gender activism" campaign, and climate change and HIV /AIDS was the focus of a program broadcast in the week commemorating World AIDS Day. Of the five extension officers whose job it is to answer the calls made to the call centre, four are women.

121. The gender composition of the community ICT hubs (CIH) does not appear to have been recorded in the project documentation reviewed by the ET, though it is thought that there are more

[83] The CFM ensures Accountability to Affected Populations (AAP) across all WFP programs and is managed by Youth Net and Counselling (YONECO), a local NGO focusing on matters of youth, women and children. The CFM is an online, real-time platform used to track and manage complaints and their follow-up actions. Complaints are received through suggestion boxes, phone numbers, and one-on-one engagement. All complaints are logged onto the online platform which indicates which are pending or resolved.

female members than male. Women are represented among the leadership of the CIH and were also among those trained. The CIH training reportedly did not include any specific gender-related topics. Assessments conducted by Farm Radio Trust have noted that Illiteracy rates are higher among women than men and that phone ownership is lower among women, and consequently the uptake of mobile platforms by women in significantly lower than by men. Although women may have their own SIM card, many apparently share a phone handset with their husbands and therefore do not have regular access to it.

122. Among FFA / IFA participants, men and women are given the same types of work and working hours, apart from the elderly and pregnant and lactating women. Elderly FFA participants are allocated less strenuous activities such as watering nurseries. Pregnant and lactating women and mothers with children under 2 years old are allocated work on "soft assets" that promote nutrition, e.g. water and sanitation facilities (latrines, dish racks, clothes lines), home gardens, etc. FFA/ IFA participants can choose their working hours to fit it in with their other responsibilities. Although some women in the FGDs expressed pride in being seen to be capable of the same work as men, other interviewees felt that consideration should be made in terms of reviewing different work hours for men and women. Women are also given leadership positions as 'champions' who help to organize and monitor the work activities undertaken through FFA / IFA.

123. VSL group members tend to be more women than men, and both hold leadership positions. There are also some single-sex VSLs (mostly for women rather than men).

2.6.3 3Effects on gender inequality [EQ16]

124. Gender-disaggregated outcome monitoring results are not available for the March 2018 and June 2018 datasets, so it is not possible to compare changes in outcome results on gender inequality between 2017 and 2018. In general, results at baseline (June 2017) and also December 2017 show that households headed by women (HHW) are more vulnerable than households headed by men (HHM), as indicated by the food consumption score and the percentage of household expenditure on food (Table 3). HHW also have less diversified livelihood strategies than HHM, as indicated by the mean number of income sources. It is essential that all future outcome monitoring results are disaggregated by gender to determine whether there are any changes in gender inequality.

125. The PISCA survey conducted under the GFCS evaluation did not show any clear differences between men and women in terms of changes in livelihood options and wellbeing (e.g. number of changes farmers make in crops). Among the different project components, an assessment of the GFCS climate services interventions found no significant gender differences in PICSA training rates, but a higher proportion of men than women felt that their household had benefitted from the training.[84] Recent UoR monitoring results show no significant differences between men and women in the changes to crop, livelihood and livestock enterprises inspired by PICSA (Figure 4), and there were no significant gender-based differences relating to PICSA training and decision-making (Table 5). Further investigations would be needed to understand the apparent differences reported by men and women in the FGDs conducted by the ET regarding their recollection of what they had learned through PICSA training (as stated in paragraph 56). Recent FRT monitoring report of the climate services provided via radio and SMS found that the uptake of mobile platforms for women is considerably lower than for men, largely because women often do not have regular access to a mobile phone (FRT, 2019).

126. Qualitative data were collected by the ET through gender-specific FGDs. A strong finding that emerged from all the women's FGDs and most of the men's FGDs was that both FFA and VSL activities

[84] The report states that, "For example, 92% of men compared to 74% of women say that the decisions they made because of the training improved their household's income situation, and 81% of men compared to 64% of women said they have been better able to provide for their household's healthcare as a result of the training. These differences may be due to the differences in crops grown by men and women. Women are more likely to grow crops that are consumed by the household and not sold for cash; men are more likely to grow cash crops that are sold for money which is then used to improve the household's income and pay for healthcare" (Stats4SD & Cramer-Njihia Consultants, 2017: 30-31).

were perceived to have improved the lives of women. Women said that they had greater respect within their households and their communities because they had their own income through FFA and VSL. One of the men's FGDs reported that VSLs had reduced the level of gender-based violence caused by economic differences between men and women. In a small number of cases, women reported that their husbands or sons had helped with household chores to allow women the time to participate in FFA/IFA work. The training for VSL actively supports GEWE by encouraging joint financial decision-making at the household level. It was also reported that men have greater respect for women's money that is borrowed from the VSL and they do not mis-use it because they know that it needs to be paid back to the VSL. The men's FGDs reported that husbands encourage their wives to join VSL so as to access loans to support the household.

Key findings and conclusions – GEWE (EQs 14-16)

- Very little explicit attention was given to gender dimensions in the IRMP design.
- Women play a considerable role in the project as beneficiaries; they were included in the community-based participatory planning exercise; and they also hold key leadership positions in farmer groups, radio listening groups, and VSLs.
- Data and reporting include some sex-disaggregated data, but sex-disaggregation is applied inconsistently.
- There appears to be a reasonably good level of capacity for gender-sensitive implementation among both the government stakeholders and the implementing partners at district levels; there is also a reasonably good representation of women among project teams
- Gender is mainstreamed in various PICSA tools, though neither the methodology itself nor the training is designed to address gender-related issues explicitly
- The content of the radio programs often include gender as a cross-cutting issue, and every program ensures that women's and men's voices are included.
- Women and men both benefit from the climate services provided through PICSA and the radio program. Available evidence appears to show that PICSA might be more effective among men than women. The uptake of mobile platforms for women is considerably lower than for men, largely because women often do not have regular access to a mobile phone.
- Both FFA and VSL activities were perceived (by women beneficiaries) to have improved the lives of women.

3. Conclusions, Lessons Learned, and Recommendations

127. Based on the findings presented in the previous section, an overall assessment that responds to the evaluation questions is provided below. This is followed by a section on lessons that contribute to wider organizational learning; those lessons that are specific to the second cycle of the IRMP and a credible final evaluation are incorporated into the recommendations. A total of eight recommendations are outlined on how WFP and the IRMP partners and stakeholders can take action to build on the evaluation findings and the lessons learned.

3.1. Overall Assessment/Conclusions

128. **Relevance**. IRMP is aligned to the relevant national policies and strategies as well as WFP's policies and structures. It addresses the food security needs of men and women in three districts that are prone to frequent drought and floods complements various other resilience programs in Malawi.

129. **Effectiveness**. In the view of the ET, good progress has been achieved in IRMP to date, though a quantitative assessment of actual achievements is challenging due to gaps in the monitoring data and some missing target figures, notably for beneficiary numbers and key outputs (some of which were missing from the log frame design). Climate services information provided through the PICSA approach

and the weekly radio show have both been seen to be effective in reaching the majority of farmers targeted and in prompting changes in agricultural practices. Greater attention is now needed to ensure the quality and sustainability of these services and the capacity of extension officers to deliver and support them. The effectiveness of delivering climate services via SMS is questionable and needs to be redesigned.

130. The index-based insurance mechanism was initially designed as a pilot and – as such - was well-implemented. The link between FFA and IFA is considered to be appropriate and usefully helps to construct community assets to prevent soil and water erosion. Feedback from farmers, however, suggests that design of the insurance product itself may be inappropriate to the local context of climate shocks and the needs of smallholder farmers. Farmers need insurance that will cover crop losses that are not only caused by drought but might also be caused by flood or pests. At a global level, considerable experience has been generated in relation to micro-insurance for smallholder farmers in recent years, and an assessment of the various different approaches and the emerging lessons[85] is needed to determine whether the current model is the most appropriate for southern Malawi, particularly in terms of future sustainability and the ability of farmers to pay for the insurance premiums in the long term in relation to the likely frequency of pay-outs versus the likelihood of non-pay-outs in years of crop failure due to factors other than drought.

131. The VSL model is seen to be very effective in strengthening the capacities of smallholder farmers to invest and diversify their livelihoods, provided that the training is sufficient to avoid asset losses through loan arrears. The integration of cash-based FFA with VSL is seen to be very effective in allowing FFA participants to save part of their incentive payment in a VSL so that the money is then accumulated and made available for planned livelihood investments. The current VSL model is broadly sustainable and will continue after the end of the project without external assistance. Female beneficiaries perceived that their lives had improved as a result of the FFA and VSL activities.

132. **Efficiency**. The main factor affecting both achievement and efficiency is the annual use of short-term contracts or Field-Level Agreements (FLAs) for implementing partners, leading to delays in the implementation of activities in each agricultural season. Due to the nature of resilience programming (and climate services in particular), it is essential that certain activities are implemented well before the start of the agricultural season; in the southern Malawi context, contracts must be in place and partners must be ready to implement from June/July onwards. The CO already has plans to change to longer-term contracts, and this must be addressed as a matter of urgency, along with other administrative and financial management issues (see Recommendation 1).

133. Poor planning and coordination were reported to affect efficiency in some districts, and coordination at national level remains a challenge, with insufficient sharing of information and lessons learned among key related projects (e.g. GFCS-APA II, M-CLIMES) as well as the many smaller projects currently being implemented. There has been a large increase in the number of development agencies involved in resilience / disaster risk reduction / climate change programming in Malawi in recent years, many involved in pilot- and small-scale projects that have yet to achieve impact at scale. The effectiveness of existing coordination bodies in promoting sharing and learning is thought to be limited. Duplication of effort reportedly occurs at different levels. At district level, development activities are coordinated through the District Council, and the introduction of MoUs between WFP and the District Councils (in 2017) is regarded to have improved coordination between NGOs and government departments.

134. Monitoring data is essential for coordination and integration within IRMP, yet there appears to be a lack of tools for use by partners and WFP in collecting and synthesizing monitoring data; essential

[85] A recent WFP evaluation in Zambia, for example, reported that the insurance model of the R4 project was better suited to the conditions of the Horn of Africa, where droughts have become more frequent, rather than the southern Africa context, where drought is becoming more prolonged. As such, the R4 Project design was not as relevant as it should have been to the local drought context, leading to a lack of confidence in the weather index insurance mechanism. (Longley et al, 2018. Mid-Term Evaluation of Zambia Country Programme 200891 2016-2020. Final Evaluation Report. July, 2018).

information (e.g. on the layering of project components at household and community levels) is not systematically compiled and updated in a way that it can be used for programming decisions relating to integration and coordination. There is also an on-going challenge in streamlining the indicators used to measure resilience outcomes across different donor-funded projects. Data and reporting currently include some sex-disaggregated data, but sex-disaggregation is applied inconsistently.

135. **Impact**. The most exciting finding that emerges from the current evaluation is the positive effects of the integration of project components on the impact pathway, as perceived by farmers. However, the level of overlap of the different IRMP activities implemented by the different partners at the GVH level must be improved if farmers are to benefit from the layering of activities at the household level. Climate services provide farmers with information about the seasonal forecast and knowledge about appropriate agricultural advice; FFA/IFA provides knowledge about soil and water conservation structures; and the PICSA approach helps farmers to apply this knowledge to their individual context to make informed decisions and plan for the forthcoming season according to the forecast. The VSL also supports this planning process by making money available when it is needed, whether to buy agricultural inputs or invest in income-generating activities. The money earned from agricultural sales and/or income-generating activities is then re-invested back into VSL shares. If, however, there is a drought and agricultural production is low, then – in theory – this triggers an insurance pay-out. The combination of learning and money (available at the right time) gives farmers the capacity to plan ahead in relation to seasonal forecasts and make the informed choices needed to achieve improved production and increased diversification in the face of climate change. This strongly suggests that the integration of the different IRMP components will lead to outcomes that are likely to contribute to progress towards the higher-level results

136. This increased capacity to plan ahead and make informed agricultural decisions, together with the continued operation of the VSLs in making money available for agricultural inputs and livelihood investments, will allow smallholder households to continue to build their resilience after the end of the project, provided that the seasonal forecasts continue to be disseminated effectively. There is an emerging demand for climate services among smallholder farmers. Continued increased demand is dependent on the perceived reliability of seasonal forecasts which, in turn, will require continued capacity development for the Meteorological Service.

137. **Sustainability**. Despite not being included as a prominent feature of IRMP design, WFP and IRMP partners are successfully working alongside other projects to help strengthen capacities at national level and to progress towards institutionalizing key structures needed for the sustainability of climate service provision in Malawi. A 3-year transition plan is also currently being put in place for the private sector to take charge of insurance servicing.

138. **GEWE**. Very little explicit attention was given to gender dimensions in the IRMP design. Women play a considerable role in the project as beneficiaries and also hold leadership positions in the community-based groups supported by the project. Gender is mainstreamed in various PICSA tools, though neither the methodology itself nor the training is designed to address gender-related issues explicitly. The content of the radio programs often include gender as a cross-cutting issue, and every program ensures that women's voices are included. Women and men both benefit from the climate services provided through PICSA and the radio program. Available evidence appears to differ in the findings on how men and women use PICSA training in their planning and decision-making and how they perceive the benefits of the PICSA approach; the gender dimensions about PICSA use and perceptions should be explored in more detail. The uptake of mobile platforms for women is considerably lower than for men, largely because women often do not have regular access to a mobile phone; this also needs to be addressed.

3.2. Lessons Learned [EQ17]

139. **Integration**. The integration of climate services, FFA/IFA, and VSL at the household level provides a powerful combination of knowledge and money that is available at the right time to allow smallholder farmers to make their own decisions and plan ahead for the forthcoming agricultural season. In the case of IRMP in Malawi, climate services (provided through extension officers, radio and SMS) give farmers information about historical climate data, seasonal forecasts and options about agricultural practices; the PICSA approach allows farmers to use these different types of information to identify the agricultural practices appropriate to their individual contexts; the FFA incentive payment provides cash that can be saved through the VSL; the VSL enables money to be available when it is needed to purchase the agricultural inputs that had been planned. The insurance component helps to allow for this cycle of forward planning to continue into the following season in the event of drought because money is made available to purchase food and agricultural inputs needed to prepare for the following winter cropping cycle. In a good year, on the other hand, part of the proceeds from increased agricultural production can be reinvested in VSL to support the cycle of forward planning in the following season.

140. A major challenge is in targeting the different IRMP activities implemented by different partners in the same locations so that farmers can benefit from the layering of components at the household level. In future contexts where it may not be possible to include all the components above, the integration of climate services and VSL is appropriate because the money from VSL can help to implement agricultural cropping plans based on the seasonal forecast and associated advisories delivered through climate services. The integration of FFA and IFA (rather than just IFA alone) allows for economies of scale to be realized from a programming perspective. The integration of cash-based FFA and VSL is useful in that money from the FFA can be invested in VSL. Both FFA and VSL can be further enhanced by a strong GEWE element to support women's economic empowerment by allowing women to earn their own income and to enhance their role in household financial decision-making. Through FFA and VSL, it is also possible to support changes in the gender-based division of labour within a household such that women have the time needed to take part in FFA activities and/or in income-generating activities made possible through VSL.

141. **Scaling and sustainability**. Scaling can be achieved successfully through multiple projects and multiple donors, but this requires good coordination, including the active learning and sharing of lessons to ensure effective and consistent programming approaches. The example of GFCS-APA (I and II), IRMP and M-CLIMES illustrates how scaling is possible across multiple projects. Scaling is especially important in relation to resilience and climate change programming in Malawi, where there are many small, uncoordinated projects implemented at pilot scale for which learning is insufficiently shared among the stakeholders. Effective coordination structures at national level are key in promoting and sharing lessons, but the coordination for resilience activities in Malawi are split across two different sectors and ministries. WFP can play a role in promoting learning and capacity-strengthening among the stakeholders, but a national body would be the most appropriate organization to promote improvements in overall coordination at national level, possibly with support from WFP.

142. The structures, policies and capacities needed for sustainability often require a much longer time frame than is possible within a single project or program. Long-term planning for sustainability should be done at the time of project design and may require a 5-year post-project plan and/or a 10-year post-project plan, in addition to an exit plan. Such plans should be discussed and formulated not only with the government stakeholders involved but also with in-country donors and other stakeholders active in the relevant sectors to ensure that different actors are working towards the same long-term goals. Key government ministries and departments include DCCMS, DAES, and the Department of Planning within MoAIWD, including the relationships between these departments. IRMP has been very successful in promoting a closer working relationship between DCCMS and DAES.

143. Developing the structures, policy frameworks and investments needed for long-term sustainability require building relationships with various key stakeholders and decision-makers who are able to influence change within government and/or their own organizations. In some cases, some of these relationships may already exist, but in other cases, it is necessary to invest both time (on the part of the project or program manager and other WFP senior management staff) and resources (e.g. to allow for key stakeholders to participate in key project/program events) in developing them. Project / program design must allocate time and resources for developing these relationships. In some cases, it may be advantageous to incorporate relationship-building activities required for long-term sustainability into project logical frameworks to ensure that it is given adequate attention. IRMP has been successful in promoting the structures, frameworks and relationships needed for long-term sustainability, despite the fact that this was not explicit within the project design.

144. **Monitoring**. Integrated projects involving multiple partners implementing different components at the community / household level create challenges for beneficiary tracking. It is necessary to maintain up-to-date, sex-disaggregated records of beneficiary numbers in ways that avoid double-counting. Two possible options for this are outlined in Recommendation 6 below.

145. Where scaling is implemented through a phased approach within the same project, it is necessary that this is planned from the start so that the necessary baseline data can be collected from the right locations at the right time.

146. Resilience programming is still relatively new within WFP at the global level, and WFP Malawi is among the countries that is 'ahead of the curve' in implementing integrated resilience activities. Corporate monitoring tools are still under development and have yet to be fully accepted at national levels. It is therefore important that WFP Malawi continues to act as a trail-blazer and contributes towards corporate learning. This requires confidence on the part of the CO and a willingness to collaborate with others (both within WFP at the global level and other stakeholders at the national and global levels) and to actively articulate, document and share the lessons learned (both positive and negative) as part of the learning process. This is articulated in Recommendation 9. Specific steps for improving monitoring to ensure a robust end evaluation for IRMP and also resilience programming more broadly are included in Recommendation 6 below.

3.3. Recommendations

147. Based on the findings and conclusions of this evaluation, the recommendations of the evaluation team are outlined below. The recommendations are structured by activity / component categories, with additional cross-cutting recommendations. The timeline and levels of priority for each of the different steps involved and those responsible are indicated in the tables provided for each recommendation. Some of the recommendations and some of the proposed steps for their implementation go beyond the timeframe of the IRMP but are considered to be relevant to other related on-going and future resilience and climate services projects.

148. **Recommendation 1: Address pending issues relating to administrative, financial and partnership arrangements.** The CO is already planning to replace the short-term (6-month) FLAs for implementing partners with longer-term contracts where necessary. Longer-term contracts with the necessary built-in quality control mechanisms are essential for efficient implementation of resilience activities. It is strongly recommended that WFP requests a no-cost extension from the donor to allow for the continuation of IRMP activities throughout the forthcoming agricultural season (Oct/Nov 2019 – June/July 2020). Before a no-cost extension can be requested, it is essential that the IRMP budget codes in the financial management system are corrected where necessary so that an up-to-date financial statement can be produced.

Steps to implement Recommendation 1	Priority	Timeline	Responsible
1.1 Draft, approve and apply long-term (e.g. 2-year) partnership contracts (FLAs) for use in future resilience activities, ensuring that the timing of climate services activities (including associated planning, preparation, training and dissemination) is appropriate to the agricultural calendar	Very high	On-going	CO[86]
1.2 Correct the budget codes in the financial management system where necessary and produce an up-to-date IRMP financial statement	Very high	1 month	CO Finance Office with support from HQ Finance Office
1.3 Based on the IRMP budget remaining, draft a workplan and budget for activities to be implemented in 2019/20	Very high	2 months	CO Resilience staff
1.4 Prepare and submit formal request for no-cost extension from donor	Very high	2 months	HQ with inputs from CO

149. **Recommendation 2: Strengthen capacities for more effective and sustainable provision of high-quality climate services.** Effective climate services provision involves four key elements: (i) production of climate information and weather forecasts; (ii) translation / interpretation of the weather forecasts to provide appropriate agricultural advisories; (iii) climate services dissemination; and (iv) feedback on the use of climate services by farmers to inform future improvements. The evaluation has shown that there is a need for improvement in each of these elements to ensure the provision of *high quality* and *sustainable* services, as outlined below.

150. Continued capacity strengthening for DCCMS is needed for the sustainable production of accurate, high-quality and timely down-scaled weather forecasting. Specific capacity needs should first be identified through consultation with DCCMS and those who rely on their services to generate consensus on required quality parameters and down-scaling levels. Separate recommendations are provided for improvements to the dissemination of climate services through PICSA (Recommendation 3) and radio/ICTs (Recommendation 4) and the need to enhance GEWE considerations (Recommendation 5). Suggested ways in which WFP can collect feedback on the use of climate services through its regular outcome monitoring surveys are included in Recommendation 6.

151. For more general learning, coordination and capacity development on the dissemination and use of climate services in Malawi, it is recommended that a joint event might be organized with DAES, M-CLIMES, GFCS, BRACC and other projects using the PICSA and/or IWCARP approaches to identify, share and document lessons and appropriate types of support required for the future. This might become an annual learning event, funded externally initially and with Government leadership so that, over time, it might become a regular and sustainable event in the Government calendar.

152. The long-term sustainability of PICSA implementation within Malawi will require support to DAES and LUANAR for curriculum development and training. DAES and LUANAR may also need capacity support in developing and implementing tools to help ensure quality control in PICSA implementation. For the long-term sustainability of IWCARP, on-going efforts by FRT to engage with commercial and community radio stations should be supported to identify future sources of private sector funding and capacity-strengthening support needed for the dissemination of climate services.

[86] When referring to the CO, this also includes the relevant staff located in Blantyre sub-office.

Steps to implement Recommendation 2	Priority	Timeline	Responsible
2.1 Undertake a multi-source assessment to generate consensus on the quality parameters and down-scaling levels required for seasonal forecasting products for use by those agencies involved in climate services provision in Malawi.	High	6 months	CO, and including DAES, DCCMS, also M-CLIMES, GFCS, and BRACC, among other climate service providers / projects
2.2 Based on the consensus generated in Step 2.1, undertake a capacity assessment and provide appropriate capacity strengthening support to DCCMS (possibly through a follow-on project) for the sustainable production of historical climate information[87] and accurate, high-quality, and timely down-scaled weather forecasts.	High	8 months and on-going thereafter	CO & DCCMS
2.3 Plan and organize a learning event on the dissemination and use of climate services in Malawi, including the use of PICSA and IWCARP approaches. This might best be done as a joint event with DAES and various projects using PICSA and/or IWCARP. If possible, this should become a regular annual event.	High	12 months and annually if possible	CO, DAES, DCCMS, UoR, and others
2.4 Work with MoAIWD / DAES, LUANAR and others to plan and identify appropriate long-term support (including funding sources) for: (a) PICSA curriculum development and training; (b) quality control measures for PICSA implementation; and (c) regular feedback and analysis on the use and uptake of climate information and agriculture advisories by male and female farmers for use in improving climate services.	Medium	12 months	CO, DAES, LUANAR, UoR
2.5 Continue to support FRT in engaging with commercial and community radio stations for private sector funding and capacity-strengthening needed for IWCARP	Medium	12 months	CO, FRT

153. **Recommendation 3: Capacity strengthening and support for high-quality PICSA implementation by Extension Officers.** Additional types of short-, medium- and long-term support to be provided to extension officers in facilitating the PICSA approach should be explored and agreed with DAES, UoR, and others. Options to be considered might include: (i) additional resources on the e-PICSA tablets (e.g. podcasts of previous radio broadcasts; videos designed to be shared with farmers);

[87] The generation of historical climate information products from the multiple meteorological stations in Malawi is essential for effective climate services. Checking, cleaning, cataloguing etc of decades of daily records from multiple stations is a major task that has yet to be completed. Procedures are needed within DCCMS to ensure: (i) the regular updating of information onto the new database each year; (ii) that the updated products generated are communicated annually to DAES and MoAIWD. The latter may require it to become a government requirement of DCCMS for this to become sustainable.

(ii) the formalization of a cadre of "lead PICSA facilitators" among experienced extension workers at district level who can support their colleagues when necessary; this is already happening through the Planning and Review Workshops and at the start of the season where extension officers move in pairs to support each other in the implementation of the initial PICSA steps with farmers; (iii) social media (e.g. Facebook) designed for use by Extension Officers to provide information resources, share experiences and encourage one another; (iv) a certification system for Extension Officers for PICSA facilitation; (v) closer integration of PICSA with radio and ICTs. Other suggestions should be sought from extension officers and others through future PICSA training and P&R workshops and the proposed Climate Services event (as in Recommendation 2).

Steps to implement Recommendation 3	Priority	Timeline	Responsible
3.1 Identify and agree short-, medium- and long-term support to be provided to extension officers in facilitating the PICSA approach	Very high	3 months and on-going	CO, DAES, UoR, and others

154. **Recommendation 4: Enhance the integration and effectiveness of radio / ICTs.** An assessment of all existing CIHs is needed to determine the extent to which CIHs are active/inactive and the reasons for inactivity, including how many have faulty radios. This assessment could perhaps be undertaken through a phone-based survey of all existing CIHs, and/or by extension officers prior to the PICSA P&R workshops in September/October (to allow for the results to be compiled at the workshop itself and for follow-up actions to be clearly communicated to the extension officers). Findings from the assessment, together with the recent IWCARP monitoring report, as well as any additional support in relation to PICSA (as in Recommendation 2 above) should then be used to revise the IWCARP design accordingly.

155. Possible changes to the IWCARP design to be considered should include: (i) a more integrated communication strategy design that clearly identifies how the different communication channels (including PICSA and extension officers) can support each other to achieve impact, e.g. the use of radio / ICTs to support PICSA implementation; the use of SMS (in addition to the radio platform) to create awareness of the call centre and B4W, etc; (ii) the possible design of platforms (e.g. Facebook) and messaging targeting extension officers to support them in the provision of climate services, including PICSA facilitation, (iii) gender equity considerations relating to access to and use of the different services (see Recommendation 5); (iii) changes in the B4W platform to enhance its effectiveness (such changes are best identified by FRT); (iv) greater emphasis on CIH selection, training and management of radios with clear emphasis on community ownership; (v) means of providing on-going support and encouragement to CIHs (possibly provided by Extension Officers or through radio competitions); (vi) clear means of communication to be used by CIH in reporting radio faults; (vii) regular monitoring of CIHs (e.g. by extension officers) to determine whether active or not, monitoring for receipt of SMS, etc

Steps to implement Recommendation 4	Priority	Timeline	Responsible
4.1 Assess all CIHs to determine how many are active/inactive and why, including how many have faulty radios requiring repair/replacement	High	3 months	CO, FRT
4.2 Identify and provide appropriate follow-up support required by CIHs for the current season	High	Throughout the current agricultural season	CO, FRT
4.3 Revise the IWCARP design based on the IRMP experience and recent monitoring exercises.	Medium	8 months	FRT with support from CO

156. **Recommendation 5: GEWE considerations for climate services**. Results from assessments to date appear to show that there are gender-based differences in farmers' perceptions of and access to climate services provided both through PICSA and IWCARP; these differences need to be better understood. Quantitative data results from recent PICSA studies suggest that there may be differences between men and women in the perceived household benefits from PICSA training, but the reasons for this have not been confirmed (Stats4SD & Cramer-Njihia Consultants, 2017). Available studies (*ibid*; Poskitt et al, 2019) differ in their results as to how men and women apply PICSA training in their planning and decision-making, with one study suggesting that women used their training more frequently than men (*ibid*.). FRT monitoring of IWCARP shows differential access to ICT services by men and women. In general, GEWE-relevant effects of climate service provision should be monitored and analysed through sex-disaggregated data at both the individual and household levels (see Recommendation 6), and existing sex-disaggregated quantitative and qualitative data should be used to explore any apparent differences between men and women in their perceptions and use of PICSA and their access to radio/ICTs. Such gender analysis can be done as part of the on-going UoR review of PICSA, and as part of the proposed revision of the IWCARP design (as in Recommendation 4 above).

157. Where necessary, these gender-based differences should be addressed within PICSA and IWCARP. For example, within PICSA, greater attention can be given to gender-based differences when facilitating the PICSA approach, e.g. through additional questions and reflection about who has decision-making power over specific practices highlighted by the Options Matrix (as compared to who provides the labour and who benefits) and/or by involving farmers' spouses in specific PICSA facilitation sessions when gender-based roles are being discussed. There may also be emerging lessons from Tanzania, where a more gender-sensitive PICSA approach is being implemented. Within IWCARP, there are opportunities to develop targeted interventions within a revised IWCARP approach, as proposed by Recommendation 4 above. Lessons emerging through the implementation of this recommendation should be articulated and documented for future application in the design of GEWE-sensitive climate services.

Steps to implement Recommendation 5	Priority	Timeline	Responsible
5.1 Use existing quantitative and qualitative data to undertake gender analyses to explore the reasons for any apparent differences between men and women in their perceptions and use of PICSA and their access to radio/ICTs. Based on these analyses and experiences elsewhere, identify GEWE-sensitive lessons, approaches and interventions that can be incorporated into existing tools / methods / activities and subsequently piloted.	High	8 months	CO, with UoR and FRT (for PICSA and IWCARP respectively), and support from RBJ Regional Gender Adviser
5.2 Ensure that gender analyses and associated GEWE-sensitive lessons, approaches and interventions (as described in Step 5.1 above) are documented and followed-up to determine the effects on gender-based differences.	Very high	12 months and on-going thereafter	CO, with support from RBJ Regional Gender Adviser
5.3 Ensure that gender-disaggregated data are routinely collected and analysed at individual farmer and household levels – both for partner studies / reviews and regular outcome monitoring surveys (see also Recommendation 6).	Very high	On-going	CO and partners

158. **Recommendation 6: Design of improved monitoring systems and a theory-based evaluation framework**. Output and outcome targets against which to assess achievement are needed. Simple tools and systems are needed to compile, synthesize and manage different types of data so that it can used by those who need it for learning and decision-making purposes (i.e. update it on a regular basis and ensure that it is accessible when needed). This requires the identification of the types of data that are actually needed by different managers for different purposes and putting in place the relevant tools and systems needed to collect and manage the data in an efficient and effective manner. For example, the monitoring system should be able to differentiate households receiving different types of assistance to determine the extent to which layering is taking place and to measure the impacts of different combinations of assistance. This can be done by including a question in the outcome monitoring questionnaire that identifies the types of assistance received by members of the household (i.e. FFA, IFA, VSL, Climate Services (whether PICSA and/or radio/CIH), etc). All output and outcome monitoring data (including that collected by partners) must be gender-disaggregated at individual farmer and household levels.

159. To help monitor the effectiveness and quality of climate service delivery, simple questions might be included in the regular resilience outcome monitoring surveys among farmers. For farmers who have been trained in PICSA, such questions might include: "How many training and/or refresher sessions did you receive from the extension officer in the past season?" and "Which PICSA tools were covered?" (to be indicated from a list of tools). For farmers who are members of a CIH, an appropriate question might be: "When was the last time you and other CIH members listened to and discussed the radio programme?" (to be indicated as either "within the last week"; "within the last month"; "over one month ago"; or "cannot remember". Such questions can be tested and refined in the forthcoming rounds of outcome monitoring surveys to help provide a more robust IRMP final evaluation.

160. Data on beneficiary numbers need to be compiled in a way that avoids double-counting. Two options are proposed (recognizing that there might be other, more appropriate methods) – either by linking all resilience activities to the Unified Beneficiary Registry (based on electronic ID cards), or ensuring that any beneficiary lists developed by partners always include other IRMP/resilience activities in which the beneficiary (and his/her household) participates. With the latter option, the M&E Unit within the CO would then need to compile and cross-check the beneficiary lists from the different partners using a reliable, unique identifier (e.g. ID card number of household head). WFP's beneficiary information and management platform, SCOPE, might be appropriate for this purpose.

161. More broadly, there is a need for a streamlined, systematic approach to outcome monitoring for resilience in which the same core indicators are used across all projects. The CO must agree on the core indicators to be used, with appropriate consultation with relevant donors and HQ units. In this regard, it should be noted that the 2019 Strategic Evaluation of WFP Support for Enhanced Resilience recommended that country offices should consider measuring differences in resilience outcomes using dedicated econometric analysis such as Resilience Index Measurement and Analysis II.

162. A theory of change relevant to the IRMP approach that can be 'nested' within the relevant 'steps' of the existing WFP Malawi Framework for Integrated Resilience (Annex 5) can help to improve both monitoring and coordination. If developed in a participatory manner (e.g. with key implementing partners and/or with key resilience programme officers within WFP, guided by an experienced facilitator), a theory of change can help to develop a for common understanding among resilience managers and team members, also partners and stakeholders and thus support improved integration and coordination. A theory of change is also helpful for monitoring and learning processes; a theory of change can be 'tested' through regular monitoring, using tools and outcome indicators developed to determine expected changes identified by the theory of change. A theory of change can also be helpful in the design of joint monitoring system. By re-visiting the theory of change on a regular (e.g. annual) basis and using the evidence generated from outcome analysis, actual changes can be determined and the theory of change can then be revised accordingly.

Steps to implement Recommendation 6	Priority	Timeline	Responsible
6.1 Realistic output and outcome targets should be included in the final year workplan for the IRMP project.	High	1 month	CO
6.2 CO and BSO resilience team members should meet with the relevant M&E team members to discuss and agree on the types of data needed for different purposes and identify the tools and systems needed to ensure that the required data are collected and managed in ways that allow them to be used for learning and decision-making, as necessary.	High	6 months	CO Resilience and M&E teams
6.3 Put in place the monitoring tools and systems agreed in Step 6.2 above.	Very high	8 months	CO M&E team
6.4 Adjust resilience outcome monitoring survey to include key questions needed for a more robust IRMP final evaluation	Very high	Immediately	CO M&E team, with support from Resilience Team
6.5 Agree on how to compile beneficiary numbers for layered resilience activities and test this.	Very high	3 months	CO M&E team, with support from Resilience Team
6.6 Agree on the core indicators to be used across all resilience projects for a more streamlined, systematic approach to outcome monitoring.	Very high	3 months	CO Resilience Team, with support from M&E team
6.7 Develop a theory of change for the IRMP programme (and/or for a future follow-on project), and ensure that this is used for the final evaluation of the programme	High	12 months	CO Resilience Team, with support from M&E team

163. **Recommendation 7: Improved targeting of climate services to enhance the overlap of activities implemented by the different partners at the GVH level.** This is necessary to increase the layering or combination of activities at the household level. In future, better monitoring systems (Recommendation 6) will be able to monitor the levels of overlap / layering at GVH and household levels.

Steps to implement Recommendation 7	Priority	Timeline	Responsible
7.1 Clear guidance provided to climate service implementing partners regarding the GVHs to target for climate service provision in on-going and future projects	High	10 months	CO
7.2 Regular monitoring to ensure that there is a high level of overlap / layering of activities at both GVH and household levels.	High	18 months and on-going	CO

164. **Recommendation 8: Assess the appropriateness and sustainability of the current weather-index insurance model in southern Malawi and explore alternative options**. A more detailed review of the current insurance model should be undertaken to determine its relevance and appropriateness to the context of southern Malawi, from the perspective of smallholder farmers. Alternative insurance

models, including a composite product that is able to respond to multiple risks, and their cost-effectiveness (from the perspectives of both the insurance provider and farmers) should be explored for the future, based on recent experiences in Malawi and elsewhere, including by partners involved in the BRACC project.

Steps to implement Recommendation 8	Priority	Timeline	Responsible
8.1 Review the current insurance model in comparison to alternative options in relation to the multiple risks faced by farmers, their ability to pay, and the willingness of the insurance sector to provide alternative models	High	10 months	CO
8.2 If deemed to be appropriate, design and pilot an alternative insurance model, based on the findings of the review in Step 7.1 above	High	18 months	CO and insurance provider

165. **Recommendation 9: Improved coordination and lesson-learning at district and national levels**. WFP structures for regional coordination for resilience activities already exist, but current district-level coordination structures for IRMP appear to vary among the three districts. Though the District Council is responsible for overall coordination of all aid and development, coordination among IRMP / resilience partners and stakeholders can be improved in two districts through regular (quarterly) meetings organized by the key IRMP / resilience NGO implementing partner (as currently occurs in Chikwawa district) to share information, enhance coordination, address challenges and learn lessons. In addition, a theory of change and joint monitoring (as in Recommendation 7 above) can also support programme-level coordination at district level through enhanced understanding of the ways in which the different IRMP components work together to generate outcomes and higher-level results.

166. Learning in relation to climate service provision at national level can be enhanced through the joint learning event proposed in Recommendation 2 above (Step 2.3), especially if this were to become an annual event.

Steps to implement Recommendation 9	Priority	Timeline	Responsible
9.1 Follow up with district partners to ensure that the monthly resilience coordination meetings are conducted and ensure that IRMP activities are discussed	High	Immediately, and on-going	CO
9.2 Follow up with national partners and stakeholders and other climate services projects to explore how to make the learning event proposed in Recommendation 2.3 into an annual learning event with Government leadership.	Medium	On-going	CO

167. **Recommendation 10: Regional, corporate and global learning on resilience programming**. Identify and document lessons on integrated resilience programming learned from the Malawi experience, and share these through internal and external fora to enhance WFP organisational learning and improvement in resilience programming on the one hand, and to contribute to wider knowledge and development on the other.

Steps to implement Recommendation 10	Priority	Timeline	Responsible
10.1 Identify and document emerging lessons on integrated resilience programming	Medium	On-going	CO, with support from RBJ

10.2 Identify internal and external fora through which to share emerging lessons in resilience programming	Medium	On-going	CO and RBJ
10.3 Share lessons through appropriate fora and provide feedback to CO on lessons and experiences from elsewhere	Medium	On-going	CO and RBJ

Annexes

Annex 1: Geographical coverage of IRMP and other resilience activities

Figure 7. Map showing Traditional Authorities (TAs) under Resilience activities

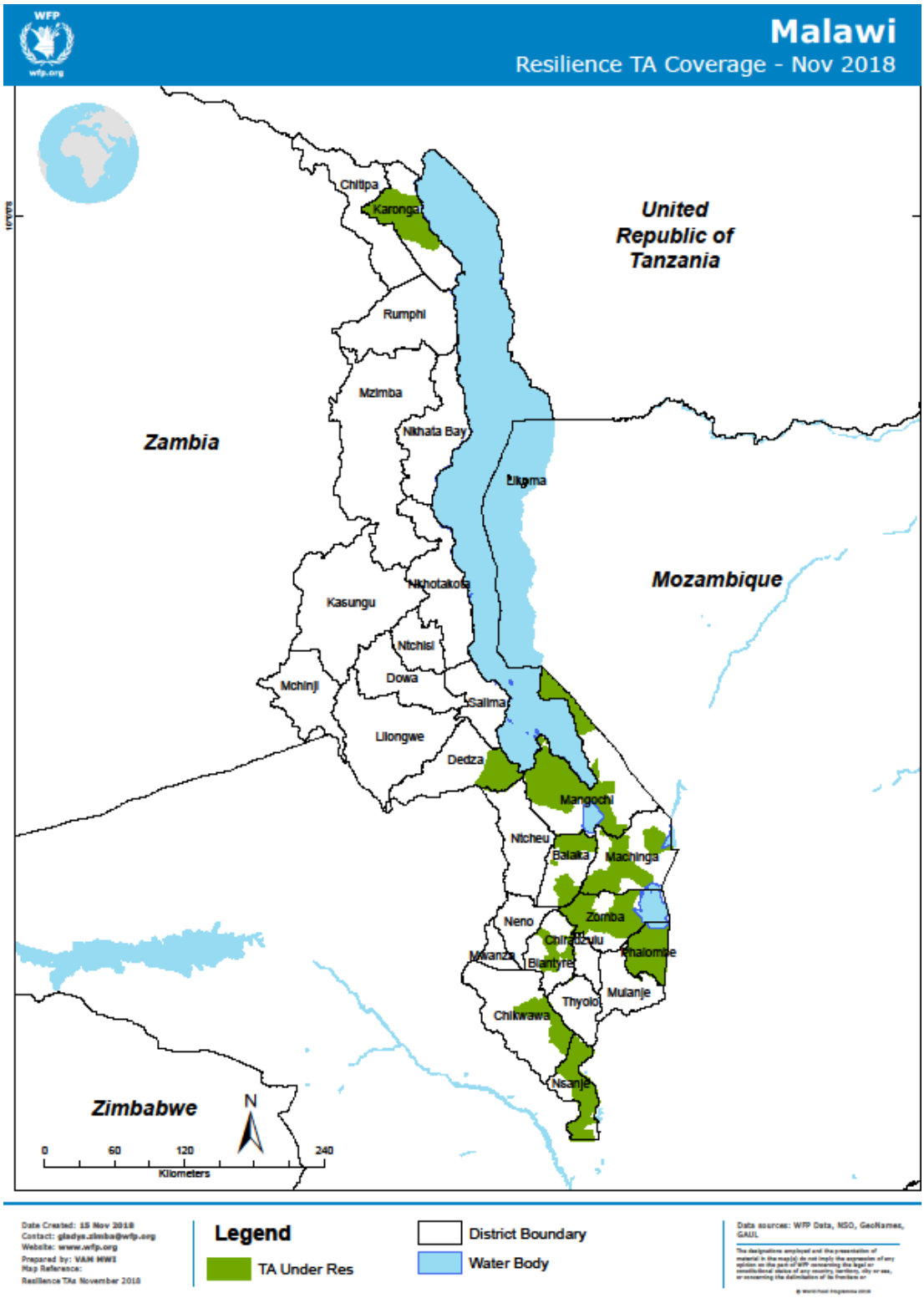


Table 7: WFP resilience activities by district, highlighting IRMP districts (2018)

District	FFA	Nutrition*	Micro credit	Savings	Insurance	Climate Services	P4P**	Donor and Programme / Project name
Balaka	x		x	x	x	x	x	• FFA: USAID, Germany, DFID and Japan • GFCS-APA: NORAD • R4: SDC
Blantyre	x	X		x	x	x	x	• FFA: USAID, Germany, DFID and Japan • IRMP: Flemish Government
Chikwawa	x	X		x	x	x		• FFA: USAID, Germany, DFID and Japan • IRMP: Flemish Government
Dedza	x						x	• FFA:
Karonga	x	X						N/A
Nsanje	x	X		x	x	x		• FFA: USAID, Germany, DFID and Japan
Phalombe	x	X					x	• FFA: USAID/DFID
Mangochi	x			x	x	x	x	• IRMP: Flemish Government • FFA: USAID, DFID
Machinga	x						x	• FFA: USAID, WFP internal Resources
Zomba	x	X		x	x	x	x	• GFCS-APA II: NORAD • FFA: USAID, Germany, USAID and Japan • R4: SDC

*There is little or no co-location with other components except for Zomba District in a few areas

**Nutrition activities are implemented in all the districts targeting all FFA beneficiaries. However, the districts indicated above receive funding from BMZ towards the implementation of nutrition sensitive activities

Source: Babetto (2018). R4/CS Malawi: BToR for HQ support mission, 16/07 to 03/08/2018

Annex 2: IRMP Project Details

Objectives: The overall, general objective of the IRMP is "To reduce food and income insecurity among vulnerable smallholder households in the context of increasing climatic risks and climate variability over the project cycle through delivery of integrated resilience interventions." There are three specific objectives:

1. To improve access to locally relevant weather and climate information for 40,000 food insecure households in three selected districts, through extension services, radio and short message service (SMS), to strengthen their capacities to adapt to increased climate variability and climate related shocks by 2019.

2. To enable food insecure households in three selected districts to access risk management mechanisms to cope with climate shocks by 2019.

3. To promote and facilitate access to financial services among food insecure households to invest and diversify their livelihood thereby making them more productive and climate smart by 2019.

Transfer modalities include insurance premiums.

Activities under Objective 1 include training for extension agents in the Participatory Integrated Climate Services for Agriculture (PICSA) approach, and the implementation of the PICSA approach among farmers. The PICSA approach involves: (i) the provision and consideration of climate and weather information (including historical records and forecasts)[1] with farmers; (ii) the joint analysis of information on crop, livestock and livelihood options and their risks by field staff and farmers; and (iii) the use of participatory tools to enable farmers to use this information in planning and decision-making for their own circumstances.

Complementing the PICSA approach, advisories and agro-climatic information tailored to each of the three districts are delivered via radio and information and communication technology (ICT) platforms through Interactive Weather and Climate Adaptation Radio Programming (IWCARP). Farmers can listen to weekly radio broadcasts (one new program and one repeat each week) through Community ICT Hubs,[2] each of which received a solar MP3 radio set from the IRMP. Each of the Community ICT Hubs has an average of 30 members who register their mobile phone contacts to be able to receive tailored weather, climate information and agricultural advice via SMS and recorded voice messages. The messages conveyed through IWCARP are developed by the National Agricultural Content Development Committee (NACDC).

[1] Data rescue, digitisation, analysis and development of climate products is a core activity in the PICSA process that is carried out before the PICSA Training of Trainers (ToT) workshop. Materials developed out of this process are then used for both the ToT workshop and in subsequent farmer trainings and interactions.

[2] In Mangochi District, 25 ICT Hubs are also Farmer Clubs that operate in collaboration with WFP Home Grown School Meals Programme (HGSM). The Famer Clubs supply food stuffs to primary schools participating in HGSM; by integrating HGSM and IRMP, farmers can receive agro-climatic information that can potentially help improve their production and the quality of farm produce they supply to the schools.

Examples of SMS messages sent to registered phone numbers

1. Farmers, let's plan on management of our livestock such housing as well as making and preserving feed. Consult your local extension worker or call 7111 on TNM or 8111 on Airtel for more advisory services
2. Every farmer should plan their activities well for this rain-fed farming season. Listen to Ulimi ndi Nyengo program on Zodiak radio. Every Friday 2:30 pm and Mondays 10:30 am
3. Knowing the short term forecasts helps a farmer to decide on how to protect crops or livestock from pests, parasites and diseases. Listen to weather segments in the Ulimi ndi Nyengo program on Zodiak radio. Fridays 2:30 pm and Mondays 10:30 am
4. Using water harvesting and storage technologies supports farming during dry spells. Consult your local extension worker for more advisory support
5. Based on this seasonal forecast, farmers are encouraged to grow drought tolerant and early maturing crops. Consult your local extension worker or call 7111 on TNM or 8111 on Airtel for more
6. Understanding the seasonal weather forecast can help to decide on how we can protect land and crops from diseases. Beep 0993449320 or 0884270888 to receive daily downscaled weather forecasts for your district.

Source: FRT Summary Progress Report for IWCARP Project, January to October, 2018

Activities under Objective 2 are the design and provision of index-based micro-insurance policy to participating farmers. The weather index defines the conditions (determined by the amount of rainfall received in specific time periods relating to the stages of crop growth) that must be fulfilled to trigger an insurance pay-out. Farmers can participate in the insurance scheme by providing an agreed number of hours of labour in the insurance for assets (IFA) programme. The 2017/18 season was adversely affected by prolonged dry spells and the Fall Army Worm infestation, and all farmers in Blantyre Rural District received insurance pay-outs.

IFA and FFA activities implemented in the IRMP project areas involve the construction of community assets that are designed to reduce disaster risk. Examples include swales,[3] water harvesting structures (i.e. shallow wells), and group vegetable gardens. The assets are constructed largely by the same farmers who also receive the climate services described above. IRMP takes a district-wide approach, targeting both farmers who are already registered for the FFA programme and those who are not registered for FFA. FFA participants willing to participate in the insurance scheme worked an extra 14 hours (one hour per day for 14 days, split into seven days each across two months) to receive the weather-index cover.

Activities under Objective 3 include the creation and training of Village Savings and Loan (VSL) groups, and financial education on business and entrepreneurship skills. In due course the, VSL members will also be able to access credit from micro-finance institutions.

Partners: The IRMP is funded by the Government of Flanders and implemented by a combination of NGO, government and private sector partners, as elaborated in Annex 3.[4] NGO partners include Farm Radio Trust (FRT), World Vision International (WVI), Concern Worldwide (CWW), Foundation

[3] A swale is a type of soil and water conservation structure that helps to conserve water in the soil and reduce run-off.
[4] Details about the partners have been put into an annex to preserve length requirements of the IR.

for Irrigation and Sustainable Development (FISD), Concern Universal Micro-Finance (CUMO), and the Malawi Red Cross Society (MRCS). Government partners include the Ministry of Agriculture, Irrigation and water Development (MoAIWD) / Department of Agriculture Extension Services (DAES), the District Agriculture Development Offices (DADO), the Ministry of Natural Resources, Energy and Mining / Department of Climate Change and Meteorological Services (DCCMS), Department of Disaster Management Affairs (DoDMA). Technical support is provided by the University of Reading (UoR), the Lilongwe University of Agriculture and Natural Resources (LUANAR), and the International Research Institute for Earth Sciences of Columbia University (IRI). The main private sector partner is National Insurance Company (known as NICO General Insurance). Many of the same partners are also involved in the implementation of complementary investments in climate services, including the GFCS adaptation programme, the R4 Rural Resilience Initiative and M-CLIME. Information about each of these projects is provided in Annex 5.

Funding: The Government of Flanders is the main donor for the IRMP. The total grant agreement is 2,500,000 EUR over three years. The latest financial statement available to the Evaluation Team covered the period up to 15th May 2018 and indicated a total expenditure of $683,067,[5] with a balance of $228,081, potentially representing an underspend of 19 - 25 percent. Financial information will be further explored during the course of the evaluation; the delayed start to project activities (in July 2017) is thought to be a major factor contributing to the apparent underspend. Based on the information available at the inception phase, there do not appear to be any budget revisions. The cost of the FFA activities is not included in the IRMP grant agreement and is funded by the United States Agency for International Development (USAID), the United Kingdom's Department for International Development (DFID), Germany's Federal Ministry of Economic Cooperation and Development (BMZ) and the European Commission's Humanitarian Aid Office (ECHO). Additional information about FFA activities is provided in Annex 5.

[5] This includes indirect support costs of 176,348 USD. It does not include the value of commitments at 827,904.67 USD.

Annex 3. Outcome and output indicator results

Table 8. Coping Strategies Index (Blantyre and Chikwawa Districts only)

Coping Strategies Index	Gender	June 2017 (Baseline) (N=409)	December 2017 (N=410)	March 2018 (N=445)	June 2018 (N=866)
% of households using neutral coping strategies	Male	52%	54%	-	-
	Female	46%	69%	-	-
	Total	50%	57%	33%	54%
% of households using stress coping strategies	Male	21%	20%	-	-
	Female	15%	10%	-	-
	Total	18%	18%	26%	23%
% of households using crisis coping strategies	Male	17%	16%	-	-
	Female	32%	11%	-	-
	Total	23%	15%	16%	12%
% of households using emergency coping strategies	Male	10%	11%	-	-
	Female	7%	10%	-	-
	Total	9%	10%	25%	11%

Table 9. Outcome indicator results for Specific Objectives 1, 2 and 3 (Blantyre and Chikwawa Districts only)

Indicators	Gender of HH head	June 2017* (N=409)	December 2017 (N=410)	March 2018 (N=415)	June 2018 (N=866)
Specific Objective 1					
% HHs within targeted communities using agro-climatic advice to make DRR, agro and/or livelihood related decisions (as a proportion of those who received agro-climatic advice)	Male	71%	71%	-	-
	Female	60%	71%	-	-
	Total	67%	71%	68%	74%
% of HHs within the targeted communities that receive seasonal climate services with agro-climatic advice	Male	53%	54%	-	-
	Female	46%	51%	-	-
	Total	50%	53%	75%	64%
Specific Objective 2					
% change in total HH assets*	Male				
	Female				
	Total				
% of HH purchasing insurance with cash (qualitative evidence but missing in outcome monitoring data)	Male	0	0	0	0
	Female	0	0	0	0
	Total	0	0	0	0
Specific Objectives 3					
% Targeted HH accessing credit	Male	36%	48%	-	-
	Female	31%	27%	-	-
	Total	34%	43%	47%	30%
Mean number of income sources	Male	1.64	1.64	-	-
	Female	1.51	1.51	-	-
	Total	1.59	1.61	2.3	2.5
% targeted HH who are a member of a formal/informal savings scheme	Male	26%	42%	-	-
	Female	21%	26%	-	-
	Total	24%	39%	47%	36%
% of HHs registered under mobile banking *(no mobile banking services provided)*	Male	0	0	0	0
	Female	0	0	0	0
	Total	0	0	0	0

* The indicator "% change in total assets" can better be presented in terms of "% change in *total value* of household assets". However, data on asset values was not included in the monitoring survey. As such, it is not possible to include this indicator.

Table 10. Planned vs. actual outputs: 2017

Output indicator	Blantyre			Chikwawa			Mangochi			Overall	
	Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual
Specific Objective 1: Improve access to climate and weather information for vulnerable communities to strengthen their capacities to adapt to increased climate variability and climate related shocks											
Result 1: Vulnerable communities have access to locally relevant climate and weather information.											
• Number of radio programmes aired on climate services	52	52	100%	52	52	100%	52	52	100%	156	156
• Number of extension workers placed within target communities (disaggregated by district)	49	49	100%	42	42	100%	00	00	00	156	156
• Number of SMS sent on climate services		NA			NA			NA			NA
• % of HHs within the targeted communities that receive seasonal climate services with	Farm Radio SMS	10% 35% 1.14%			32% 29% 0%						15% 33% 0.84%

	agro-climatic advice, disaggregated by source (i.e. farm intermediaries, radio advisories, and SMS)											
Result 2: Extension Workers capacity to access, understand, and deliver locally-relevant climate information and agromet advisories to farmers strengthened.												
	• Number of extension workers trained in PICSA (disaggregated by district and by gender)	49	30M; 19F (49)	100%	42	34M; 8F (42)	100%	0	0	0	91	91 (27F 64M)
Specific Objective 2: Increase access of smallholder farmers to risk mitigation mechanisms to cope with climate shocks												
Result 1: Index-based micro-insurance products designed and made available to households.												
	• Number of farmers insured	2000	2000	100%	0	0	0	0	0	0	2000	2000
	• Number of HHs covered by a programme-subsidized insurance policy											
Result 2: Insured participants are able to transfer drought risk to the market, receive timely compensation in case of a shock event, and limit the use of negative coping strategies												
	• Value of pay-outs										MK76,356,026.17	MK76,356,026.17
Result 3: Physical assets built under insurance for assets to reduce the impact of climate shocks on vulnerable households and promote improved agricultural productivity.												

	• Number of assets built, restored or maintained by targeted households and communities, by type and unit of measure[1]	Swales: 314km S.Wells: 55	Swales: 314km S.Wells: 55	100%	0	0	0	0	0	0	Swales: 314km S.Wells: 55	Swales: 314km S.Wells: 55 55
	Specific Objectives 3: Strengthen capacities of smallholder farmers to invest and diversify their livelihoods, making them more productive and climate resilient.											
	Result 1: Access to Village Savings & Loans and formal credit services provided to smallholder farmers.											
	• % targeted HH who are a member of a formal/informal savings scheme		25%			20**%**						23%
	Result 3: Financial literacy of participants strengthened to better access and benefit from financial services (both formal and informal).											
	• Number of VSL participants trained in financial literacy, disaggregated by gender	566 (136M; 410F)	566 (136M; 410F)	100 %	0	0	0	0	0	0	566 (136M; 410F)	566 (136M; 410F)
	Result 4: Integrated mobile services tested and made available in selected and appropriate locations.											

[1] Assets created under insurance component by participants in respective districts is a summation of work by all participants insured i.e. IRMP plus participants funded under DFID.

	• % of HHs registered under mobile banking		0			**0**			0			0
Result 5: Capacities of key national and district stakeholders strengthened through targeted and tailored trainings on the delivery and management of integrated risk management services, index-based micro-insurance, savings, and credit.												
	• Number of partners trained in integrated risk management services.		6		0	0	0	0	0	0		6
	• Number of technical assistance sessions provided by type		7 trainings		0	0	0	0	0	0		7

Table 11. Planned vs. actual outputs: 2018

	Output indicator	**Blantyre**			**Chikwawa**			**Mangochi**				
		Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned		
Specific Objective 1: Improve access to climate and weather information for vulnerable communities to strengthen their capacities to adapt to increased climate variability and climate related shocks												
Result 1: Vulnerable communities have access to locally-relevant climate and weather information.												
	• Number of radio programmes aired on climate services	52	55	105%	52	55	105%	52	55	105%	56	165
	• Number of extension workers placed within target communities (disaggregated by district)	49	49	100%	42	42	100%	00	00	00	92	92
	• Number of SMS sent on climate services		NA			NA			NA			NA
	• % of HHs within the targeted communities that receive	farm intermediaries	33%			49%			43%			42%

	Output indicator	**Blantyre**			**Chikwawa**			**Mangochi**				
		Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned		
	seasonal climate services with agro-climatic advice, disaggregated by source (i.e. farm intermediaries, radio advisories, and SMS)											
		Radio		39%		45%			45%			44%
		SMS										0.47%
Result 2: Extension Workers capacity to access, understand, and deliver locally-relevant climate information and agromet advisories to farmers strengthened.												
	• Number of extension workers trained in PICSA (disaggregated by district and by gender)	49	30M; 19F (49)	100%	42	34M; 8F (42)	100%	46	32M; 14F (46)	100%		
Specific Objective 2: Increase access of smallholder farmers to risk mitigation mechanisms to cope with climate shocks												
Result 1: Index-based micro-insurance products designed and made available to households.												
	• Number of farmers insured		2,171			1000			1000		4,171	4,171
	• Number of HHs covered by a programme-		2,171			1000			1000		4,171	4,171

	Output indicator	**Blantyre**			**Chikwawa**			**Mangochi**				
		Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned		
	subsidized insurance policy											
Result 2: Insured participants are able to transfer drought risk to the market, receive timely compensation in case of a shock event, and limit the use of negative coping strategies												
	• Value of pay-outs	0	0	0	0	0	0	0	0	0	0	0
	• Number of farmers insured											
Result 3: Physical assets built under insurance for assets to reduce the impact of climate shocks on vulnerable households and promote improved agricultural productivity.												
	• Number of assets built, restored or maintained by targeted households and communities, by type and unit of measure	Swales: 652m Veg. garden: 4	Swales: 652m Veg. garden: 4			NA			NA			
Specific Objectives 3: Strengthen capacities of smallholder farmers to invest and diversify their livelihoods, making them more productive and climate resilient.												
Result 1: Access to Village Savings & Loans and formal credit services provided to smallholder farmers.												
	• % targeted HH who are a member of a		37%			35%			33%			35%

	Output indicator	**Blantyre**			**Chikwawa**			**Mangochi**				
		Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned		
	formal/informal savings scheme											
Result 3: Financial literacy of participants strengthened to better access and benefit from financial services (both formal and informal).												
	• Number of VSL participants trained in financial literacy, disaggregated by gender	5367 (1612M; 3755F)	5367 (1612M; 3755F	100%	3456 (1025M; 2431F)	3456 (1025M; 2431F	100%	3427 (683M; 2744F)	3427 (683M; 2744F	100%	12250 3320M 8930F	12250 3320M 8930F
Result 4: Integrated mobile services tested and made available in selected and appropriate locations.												
	• % of HHs registered under mobile banking	0	0	0	0	0	0	0	0	0	0	0
Result 5: Capacities of key national and district stakeholders strengthened through targeted and tailored trainings on the delivery and management of integrated risk management services, index-based micro-insurance, savings, and credit.												
	• Number of partners trained in integrated risk management services		14			14			14			42

	Output indicator	**Blantyre**			**Chikwawa**			**Mangochi**				
		Planned	Actual	% Actual vs planned	Planned	Actual	%Actual vs planned	Planned	Actual	%Actual vs planned		
	• Number of technical assistance sessions provided by type		7 trainings			7 trainings			7 trainings			21

Annex 4: IRMP Logical Framework

Changes are indicated in red. Footnotes contain comments from the Evaluation Team.

INTERVENTION LOGIC	VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	IMPORTANT ASSUMPTIONS
General Objective Reduce food and income insecurity among vulnerable smallholder households in the context of increasing climatic risks and climate variability by 2019 through delivery of integrated resilience interventions	• Food Consumption Score • Coping Strategies Index • % Change in number of income sources • % Change in HH expenditure • % of HH expenditure on food	End of project reports, Evaluation report, Baseline/Outcome Monitoring Survey	Sustained funding to ensure adequate provision of food and timely programme implementation Continued government/stakeholder support for programme activities
Specific Objective 1 Strengthen the capacities of vulnerable communities to adapt to increased climate variability and climate related shocks by improving their access to climate and weather information	• % HHs within targeted communities using agro-climatic advice to make DRR, agro and/or livelihood related decisions	Project reports Baseline/Outcome Monitoring Survey	Participants apply information and agro-climatic advice received via relevant platforms to their livelihoods
Result 1 Vulnerable communities have access to locally-relevant climate and weather information.	• Number of radio programmes aired on climate services • Number of extension workers placed within target communities (disaggregated by district)	Partner Reports Baseline/Outcome Monitoring Survey	Participants have access to technologies such as radios and mobile phones Participants are literate and can understand climate/weather information disseminated

	• Number of SMS sent on climate services • % of HHs within the targeted communities that receive seasonal climate services with agro-climatic advice, disaggregated by source (i.e. farm intermediaries, radio advisories, and SMS)		Information and agro-climatic advice from extension workers trickles down to participants
Activities • Develop relevant platforms (Radio, SMS, Extension worker training) to disseminate weather and climate information to vulnerable communities.			
Result 2 Extension Workers capacity to access, understand, and deliver locally-relevant climate information and agromet advisories to farmers strengthened.	• Number of extension workers trained in PICSA (disaggregated by district and by gender)	Workshop reports, monthly monitoring reports from extension workers, end of season reports from farmers.	Extension workers are available and willing to undergo PICSA training Historical climate information available for relevant districts
Activities * • Train Extension Workers in Participatory Integrated Climate Service for			

Agriculture (PICSA) Training of Trainers (ToTs) • Conduct Planning and Review (P&R) workshop to collectively interpret the seasonal climate forecasts and provide guidance to extension workers			
Specific Objectives 2 Build the resilience of smallholder farmers to cope with climate shocks by increasing their access to risk mitigation mechanisms	• % change in total HH assets • % of HH purchasing insurance with cash • Community asset score	Partner Reports Baseline/Outcome Monitoring Survey	FFA funding available for risk reduction activities Partners provide necessary support to communities to identify and implement risk reduction activities
Result 1 Index-based micro-insurance products designed and made available to households.	• Number of farmers insured • Number of HHs covered by a programme-subsidized insurance policy	Workshop reports Partner reports	Stakeholders are in agreement to finalise / develop the index-based insurance
Activities • Develop and provide an index-based micro-insurance product to participants of asset creation activities. • Raise awareness to encourage greater			

participation in index-based micro-insurance.			
Result 2 Insured participants are able to transfer drought risk to the market, receive timely compensation in case of a shock event, and limit the use of negative coping strategies	• Value of pay-outs • Number of farmers insured	End-of-project reports Output monitoring survey	Participants are willing to sign up for weather-based insurance Participants paying a substantial amount of premium Technology adequately capturing / monitoring the rainfall data
Activities • Installation of rain gauge and monitoring of rainfall			
Result 3 Physical assets built under insurance for assets to reduce the impact of climate shocks on vulnerable households and promote improved agricultural productivity.	• Number of assets built, restored or maintained by targeted households and communities, by type and unit of measure	Partner Reports Monthly monitoring reports	Participants are committed in the implementation of asset creation activities Communities/participants have the capacity with support to maintain, protect and further enhance asset created Continued funding is available for FFA ration.
Activities			

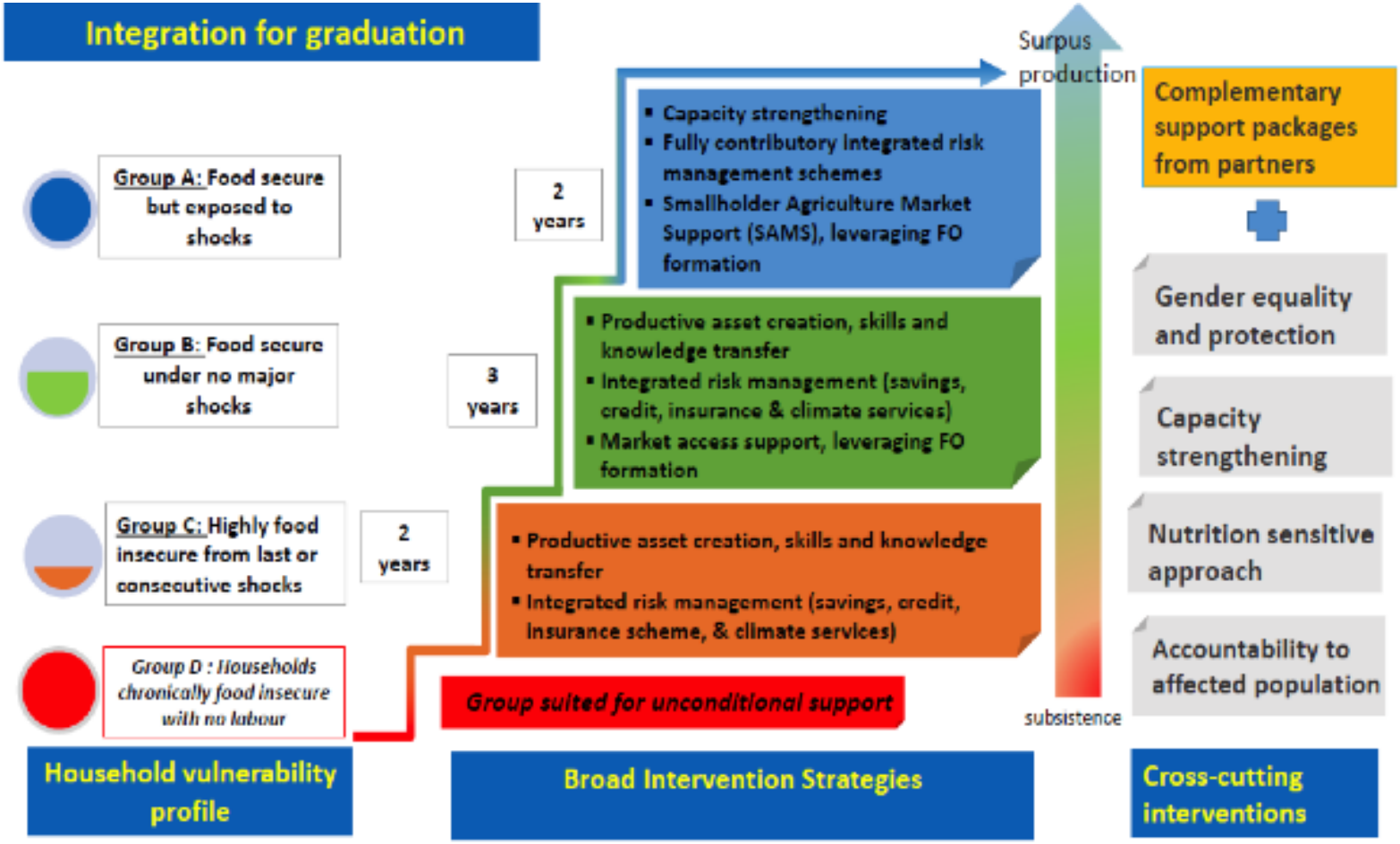
• Mobilize communities to implement asset-creation activities			
Specific Objectives 3 Strengthen capacities of smallholder farmers to invest and diversify their livelihoods, making them more productive and climate resilient.	• % Targeted HH accessing credit • % Change in number of income sources	Partner reports	Participants apply knowledge/skills from trainings to their professional activity Credit provided to participants is invested in livelihood diversification activities and not spent
Result 1 Access to Village Savings & Loans and formal credit services provided to smallholder farmers.	• % targeted HH who are a member of a formal/informal savings scheme	Partner Reports Baseline/Outcome Monitoring Survey	VSL groups are meeting the adequate level of savings Enough people volunteer to participate in VSL groups Group members fulfil the VSL groups' minimum requirements
Activities • Facilitate the creation of Village Savings & Loans Groups • Link targeted households to micro-finance institutions to access credit.			

Result ~~23~~ Financial literacy of participants strengthened to better access and benefit from financial services (both formal and informal).	• Number of VSL participants trained in financial literacy, disaggregated by gender	Partner reports Training reports	People will attend the trainings VSL groups has members that are literate (comfortable with reading and writing skills)
Activities • Facilitate trainings for VSL groups on financial literacy and business skills			
Result ~~34~~ Integrated mobile services tested and made available in selected and appropriate locations.	• % of HHs registered under mobile banking	Outcome monitoring survey	The technology needs to be available and accessible in remote locations in order for it to be functional. People willing to uptake this new mobile banking scheme
Activities • Explore the potential of using mobile banking to facilitate VSL activities and their linkages to microfinance providers. • Explore the possibility of making insurance payouts through the mobile platform, and			

support of the saving and credit activities of the programme.			
Result ~~4~~5 Capacities of key national and district stakeholders strengthened through targeted and tailored trainings on the delivery and management of integrated risk management services, index-based micro-insurance, savings, and credit.	• Number of partners trained in integrated risk management services • Number of technical assistance sessions provided by type	Training reports	National and district stakeholders attend trainings and apply knowledge gained in delivery and management of integrated risk management, index-based microinsurance, savings, and credit, and further provide support to communities to implement and monitor activities.
Activities • Conduct trainings to national and district partners.			

Annex 5: Integrated Resilience Approach

Figure 3. WFP Malawi's Integrated Resilience Framework



Source: WFP Malawi CO Resilience Team, reproduced in Annex 17 of the *Strategic Evaluation of WFP Support for Enhanced Resilience* (2019)

Annex 6: Other related Resilience interventions

Food For Assets (FFA) is a multi-year programme designed to support communities in reducing their vulnerability to disasters and chronic food insecurity through the creation and maintenance of productive community assets. The goal is to build resilience over the long term by improving the capacity of food insecure households to increase their own food production and maximize food utilization, reduce risk, and promote better natural resource management and agricultural practices amongst the food insecure households. FFA is one of the integrated risk management tools included in the IRMP, which targets those who are already beneficiaries of the FFA programme, among others. FFA activities in Blantyre Rural, Chikwawa and Mangochi Districts started in 2017, prior to the start of the IRMP. FFA activities in Blantyre Rural District involve cash only; those in Chikwawa and Mangochi Districts involve cash and food.

The Global Framework for Climate Services (GFCS) was established in 2011 as a global, multi-stakeholder framework to reduce the vulnerability of society to climate-related hazards through better provision of climate services to inform decision making across a number of different sectors. Under the **GFCS Adaptation Programme in Africa (APA)** (led by the World Meteorological Organization), WFP was a core partner with the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) for the Phase I pilot projects in Malawi and Tanzania (2014-2017). The GFCS APA project in Malawi is now in its second phase (2018-2020). APA targets 3 main sectors: Health (WHO as a lead agency), Agriculture (WFP as a lead agency) and DRR (MRCS as a lead agency). The Agricultural and Food Security component of GFCS-APA is implemented in Balaka and Zomba only and provided many lessons that were used in the design of the IRMP; the DRR component is implemented in Nsanje and Lilongwe by MRCS. GFCS targets four outcomes: health, agriculture, DRR and climate services. GFCS also uses the PICSA approach for climate service provision. IRMP is working together with GFCS on at least two national-level activities: (i) to support DAES (with support from the M-CLIMES program) to include a curriculum on climate services within the topics taught by the Lilongwe University of Agriculture & Natural Resource (LUANAR); (ii) to establish the National Framework for Climate Services (NFCS)[1], for which the Department of Climate Change and Meteorological Services (DCCMS) provides the secretariat. Malawi initiated the process of developing the NFCS during Phase I of the GFCS APA. An evaluation of the GFCS climate services interventions was completed in May 2017 by Statistics for Sustainable Development and Cramer-Njihia Consultants.[2]

The R4 Rural Resilience Initiative is currently active in Malawi, Ethiopia, Senegal and Zambia; the initiative is also being piloted in Kenya and Zimbabwe. R4 provides smallholder farmers with an integrated package of four risk management strategies: disaster risk reduction, risk transfer (weather index insurance), risk reserves (savings) and risk-taking (access to credit). As such, it is a mirror-image of IRMP activities, though IRMP provides additional climate services. IRMP activities funded by the Government of Flanders are reported under the R4 Annual Report[3]: IRMP-supported activities are implemented in Blantyre, Chikwawa and Mangochi, whereas SDC-funded activities are implemented in Balaka and Zomba Districts. From 2019, new funding from the Department for International Development (DFID) will also allow implementation of R4 in the district of Phalombe. In Zomba, R4 sought to foster integration with WFP's Smallholder Agricultural Market Support (SAMS)[4], aiming to support farmers in gradually shifting to commercial activities through

[1] NFCS is a replication of the GFCS at national level and is also aligned with the Paris agreement, as well as the National Adaptation Plan (NAP). Establishment of the NFCS is key to improved risk management through the development and use of climate information and services that are based on country contexts to inform coordinated and integrated action, decision and policy making.
[2] Statistics for Sustainable Development and Cramer-Njihia Consultants, 2017. Evaluation of Climate Services Interventions in the GFCS Adaptation Programme for Africa: Beneficiary Assessment. Final Evaluation Summary Report. Prepared for the World Food Programme and CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
[3] WFP & Oxfam America, 2019: R4 Rural Resilience Initiative Annual report, January - December 2018, available at https://www1.wfp.org/publications/2018-r4-rural-resilience-initiative-annual-report
[4] Smallholder Agricultural Market Support (SAMS) is WFP's flagship program connecting smallholder farmers to markets.

which they can then cover the cost of their insurance premiums. The coordination between SAMS and R4 is expected to provide lessons learnt on integration and graduation for WFP's resilience interventions.

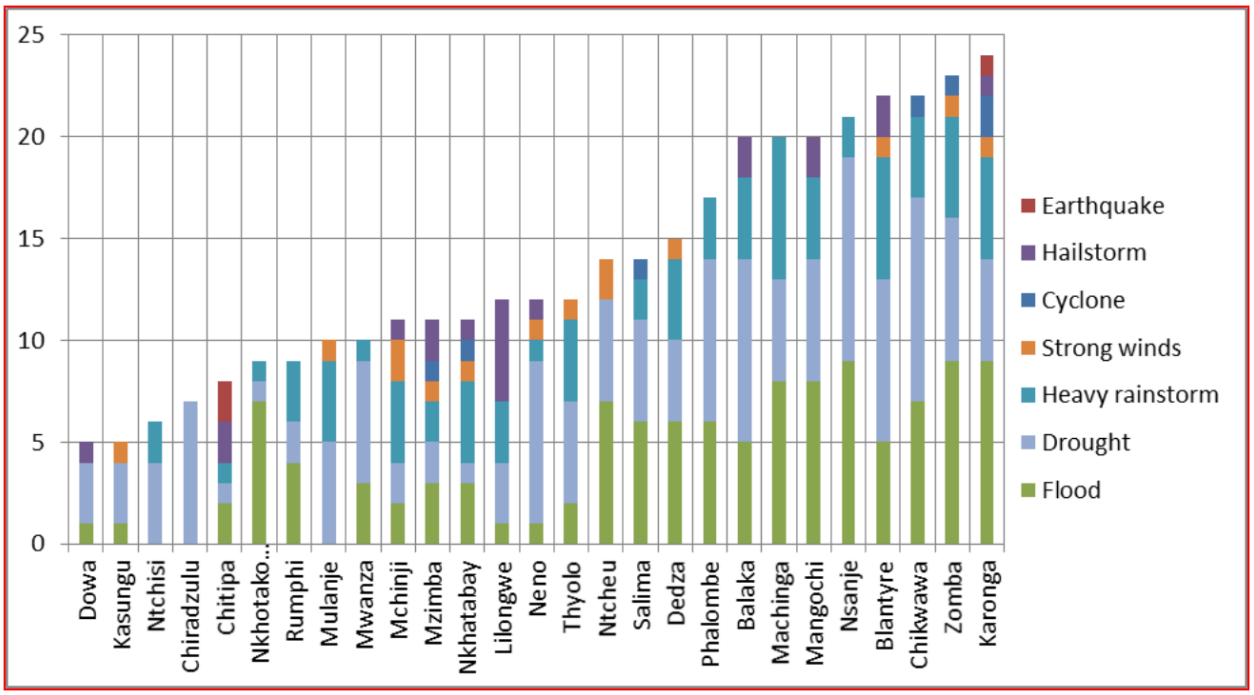
Building Resilience and Adaptation to Climate Change (BRACC) funded by the UK Department for International Development (DFID).

The GCF-funded **"Scaling up the use of modernized climate information and early warning systems in Malawi" (M-CLIMES) Project** is led by the Government of Malawi and UNDP. The project focuses on the technical, financial capacity, and access barriers related to weather and climate information (CI). These barriers are being addressed by enhancing the hydro-meteorological capacity for early warnings (EWs) and forecasting; developing and disseminating tailored products for different actors (including smallholder farmers and fishers); and strengthening capacities of communities to respond to climate-related disasters. M-CLIMES uses the PICSA approach to develop and disseminate tailored weather/climate based agricultural advisories for 14 food insecure districts, including Chikwawa district. Within Chikwawa, M-CLIMES and IRMP target different Extension Planning Areas (EPAs), and there have been discussions about collaborating on refresher PICSA sessions, Planning and Review Days, and joint monitoring visits.

'**Improving Preparedness to Agro-Climatic Extremes in Malawi' (IPACE-Malawi)** is a research project (October 2018 - July 2020) led by the University of Leeds in collaboration with UK Met, DCCMS, LUANAR and Malawi Red Cross that is will contribute to improving the forecasting and delivery of agriculture-specific weather information to improve preparedness of farmers' and humanitarian/disaster response organisations. Specifically, IPACE-Malawi aims to: (1) identify critical agro-climatic drought and flood indicators in three districts of central and southern Malawi; (2) test the skill of short term to seasonal forecast tools in simulating these indicators; and (3) co-design agricultural climate services based on these indicators/forecast tools. Intrinsic to the design and implementation of the project is a commitment to cross-institutional capacity building. This work builds on existing work on climate impacts and adaptation in Malawi and will feed into both new climate service innovations and the improvement of existing work on forecast-based financing.

The IFAD-financed **Programme for Rural Irrigation Development (PRIDE, 2015-23)** aims to enhance the resilience of rural communities to food insecurity and adverse effects of climate change in the northern and the southern regions of Malawi. PRIDE focuses on the development of climate-smart land and water management systems for the smallholder farmers engaged in rainfed agriculture and cultivating on irrigated land. It is strengthening the capacity of Water Users' Association to manage, operate and maintain irrigation schemes for appropriate land and water governance, and is also building the capacity of smallholder producers through farmer business schools so they can take advantage of market opportunities. Enhanced access to weather information, irrigation, adapted agricultural technology and remunerative markets will improve smallholder's income up to eightfold and build their resilience to adverse effects of climate change. PRIDE is reportedly interested in adopting the PICSA approach.

Annex 7: Frequency of Shocks by District, 2000-13



Source: National Resilience Plan

Annex 8: Expenditure to Date and Budget Allocations

Table 12. Summary Financial Statement for the First and Second Tranches (up to 30 April 2019)

	Received	Expenditures including commitments at 30/04/19	Balance
Direct implementation	**1,721,902.67** 765,584.68 727,542.99 228,775.00	**1,388,744.27** 227,093.43 765,584.68 396,066.16	**333,158.40** 1,681.57 0.00 331,476.83
Overheads	166,291.33		
Total	**1,888,194.00**	**1,388,744.27**	**333,158.40**

Source: Donor Report

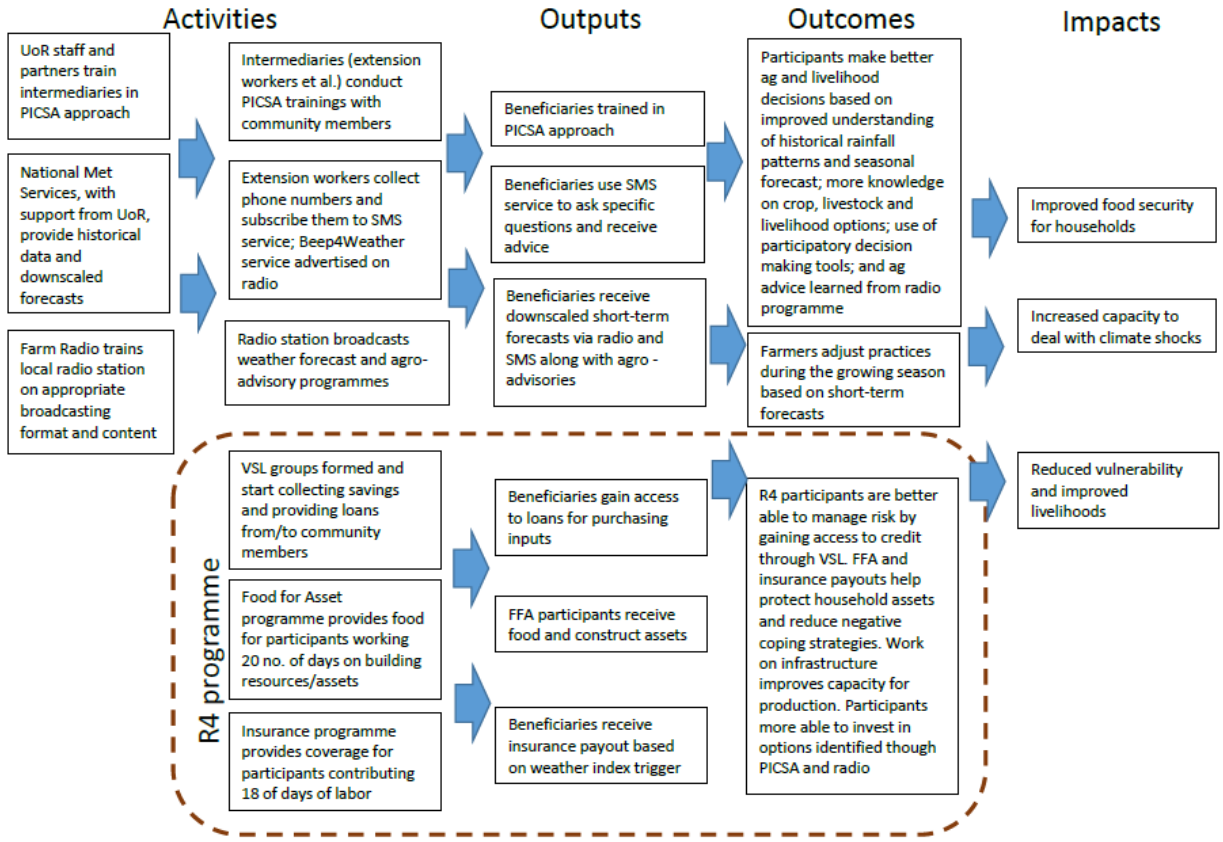
Table 13. IRMP Budget summary

Item	Year 2017	Year 2018	Year 2019	Total for 3 years	**%age**
Strategic Objective 1: Climate services	295,057	340,680	317,964	953,716	**37.80**
Strategic Objective 2: Risk mitigation mechanisms	168,319	142,294	115,981	426,594	**16.91**
Strategic Objective 3: Strengthening capacities to invest and diversify their livelihoods	33,601	35,281	19,680	88,562	**3.51**
Staff costs	78,752	82,689	86,824	248,265	**9.84**
Meeting facilities and supplies	5,145	7,001	7,351	19,497	**0.77**
Monitoring, Evaluation, Assessments (including WFP HQ support)	200,030	176,404	196,801	476,632	**18.89**
Recurring expenses and other direct costs	29,296	30,760	32,298	92,355	**3.66**
TC/IT equipment / Equipment and suppliers	41,087	15,898	8,867	65,852	**2.61**
Travel and transport costs	47,986	50,385	52,905	151,276	**6.00**
Total costs	**899,273**	**881,392**	**838,671**	**2,522,749**	100

Source: Donor Report

Annex 9: GFCS Impact Pathway

Figure 8: Impact pathway diagram developed for the GFCS project



Source: Stats4SD & Cramer-Njihia Consultants, 2017

Annex 10: Bibliography

Government of Malawi (2014): National Plan of Action to Combat Gender-Based Violence in Malawi 2014–2020.

Government of Malawi (2015): National Disaster Risk Management Policy.

Government of Malawi (2016): National Agriculture Policy.

Government of Malawi (2016): National Climate Change Management Policy, Ministry of Natural Resources, Energy and Mining Environmental Affairs Department, June 2016.

Government of Malawi (2017): The Malawi Growth and Development Strategy (MGDS) III: (2017-2022): Building a Productive, Competitive and Resilient Nation (November 2017).

Government of Malawi (2018): National Agricultural Investment Plan (NAIP).

Government of Malawi (2019): National Meteorological Policy.

Longley et al, (2018). Mid-Term Evaluation of Zambia Country Programme 200891 2016-2020. Final Evaluation Report. July, 2018

Republic of Malawi (2018): Malawi National Social Support Programme II (MNSSP II), March 2018.

National Statistical Office (2018): Malawi Population and Housing Census Preliminary Report, December 2018

National Statistical Office and ICF. (2017). 2015-16 Malawi Demographic and Health Survey Key Findings. Zomba, Malawi, and Rockville, Maryland, USA. NSO and ICF.

National Statistical Office (2014): 2013 Malawi Labour Force Survey report.

Poskitt, Sam, Graham Clarkson and Peter Dorward (2019). Evaluation results of the effects of PICSA on smallholder farmers' decision-making and livelihoods in three districts of Malawi. Report for IRMP, World Food Program, Malawi. University of Reading.

Republic of Malawi (2019): Floods Response Plan and Appeal (March-May 2019)

Statistics for Sustainable Development (Stats4SD) and Cramer-Njihia Consultants (2017). Evaluation of Climate Services Interventions in the GFCS Adaptation Programme for Africa: Beneficiary Assessment. Final Evaluation Summary Report. Prepared for WFP and CCAFS.

World Bank (2018): Malawi Economic Monitor- Investing in Girls' Education

WFP (2019): Malawi Country Strategic Plan (2019–2023)

WFP (2018): Systemic Food Assistance WFP's Strategy for Leveraging Food Assistance to Improve Food System Performance. Available at https://docs.wfp.org/api/documents/WFP-0000064159/download/

WFP (2017): WFP policy on Disaster Risk Reduction and Management

WFP (2017): WFP Climate Change Policy

WFP (2015): Gender Policy 2015–2020.

WFP (2009): Policy on Capacity Development.

List of Acronyms

APA	Adaptation Programme for Africa
ASWAp	Agriculture Sector Wide Approach
BMZ	Federal Ministry of Economic Cooperation and Development (Germany)
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CD	Country Director
CO	Country Office
CSP	Country Strategic Plan
CUMO	Concern Universal Micro-Finance
CWW	Concern Worldwide
DAC	Development Assistance Committee
DADO	District Agriculture Development Offices
DAES	Department of Agriculture Extension Services
DCCMS	Department of Climate Change and Meteorological Services
DCD	Deputy Country Director
DE	Decentralised Evaluation
DEQAS	Decentralised Evaluation Quality Assurance System
DoDMA	Department of Disaster Management Affairs
DFID	Department for International Development (United Kingdom)
DRR	disaster risk reduction
EC	Evaluation Committee
ECHO	European Commission's Humanitarian Aid Office
EM	Evaluation Manager
EPA	Extension Planning Area
EQ	evaluation question
ER	evaluation report
ERG	Evaluation Reference Group
ET	Evaluation Team
EUR	Euro
FAO	Food and Agriculture Organisation of the United Nations
FFA	Food for Assets
FGD	focus group discussion
FISD	Foundation for Irrigation and Sustainable Development
FRT	Farm Radio Trust
GCF	Green Climate Fund
GDP	gross domestic product
GEWE	gender equality and women's empowerment
GFCS	Global Framework for Climate Services
HDI	Human Development Index
HGSM	Home Grown School Meals Programme
HHM	households headed by men
HHW	households headed by women
HIV/AIDS	human immunodeficiency virus / acquired immunodeficiency syndrome

HQ	headquarters
ICT	information and communication technology
IFA	Insurance for Assets
IR	inception report
IRI	International Research Institute for Earth Sciences of Columbia University
IRMP	Integrated Risk Management and Climate Services Programme
IWCARP	Interactive Weather and Climate Adaptation Radio Programming
KII	key informant interview
LUANAR	Lilongwe University of Agriculture and Natural Resources
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
M-CLIME	Modernised Climate Information and Early Warning Systems
M&E	monitoring and evaluation
MGDS	Malawi Growth and Development Strategy
MNSSP	Malawi National Social Support Programme
MR	management response
MRCS	Malawi Red Cross Society
NACDC	National Agricultural Content Development Committee
NAIP	National Agriculture Investment Plan
NGO	non-governmental organisation
NICO	National Insurance Company
NORAD	Norwegian Agency for Development Cooperation
NSSP	National Social Support Policy
OECD	Organisation for Economic Cooperation and Development
OEV	Office of Evaluation
OSZIR	Climate and Disaster Risk Reduction Programmes Unit (WFP)
PICSA	Participatory Integrated Climate Services for Agriculture
P&R	Planning and Review
QA	Quality Assurance
QS	Quality Support
RB	Regional Bureau
REO	Regional Evaluation Officer
SAMS	Smallholder Agricultural Market Support
SDC	Swiss Agency for Development Cooperation
SMART	specific, measurable, attainable, relevant, and time-bound
SMS	short message service
SOP	Standard Operating Procedure
TL	team leader
ToT	Training of Trainers
TOR	Terms of Reference
UN	United Nations
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UoR	University of Reading
USAID	United States Agency for International Development
USD	United States dollars

VSL	Village Savings and Loan
WFP	World Food Programme
WVI	World Vision International

[Place, Month
https://docs.wfp.org/api/documents/cdcbe4be57914c65b0dbcbd201196ab6
/download/and Year. Report number]

[Name of commissioning Office]
[Link to the website]

WFP
World Food Programme